

**Gordon Institute
of Business Science**
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**The influence of social capital, networks and trust in
investor decision-making: A framework to
understand the entrepreneurial environment**

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Abstract

The research was undertaken to create a better understanding of the entrepreneurial decision-making environment. Discovering potential business or investment opportunities is imperative for the entrepreneur in an environment where access to private information relies on its transfer between individuals. The aim was to hypothesise a clearer understanding of how the key elements of social capital, networks and trust in the entrepreneurial environment influence potential investors in their evaluation of the financial markets when arriving at investment decisions. The need for the research was driven by the value it would add to entrepreneurs in the context of advancing their businesses. As well as to investment professionals, who strive to appeal to and create solutions for the entrepreneurial sector, with the goal of managing their wealth.

The researcher implemented a deductive research approach where tests were conducted based on the primary constructs, taking into account a review of the literature and the proposed hypotheses. A quantitative and cross-sectional design was adopted in an explanatory study which investigated the causal relationships between key variables. The research could therefore be seen as a quasi-experimental design where data from 219 respondents was collected and a complete, useable sample of 199 respondents was analysed.

Entrepreneurs and investment professionals are able to use the model (Figure 12) which emerged from the findings. This conceptual framework summarises the core findings and depicts the inter-connectedness of the primary constructs and the factors that influence them. Social capital, networks and trust exist in a social ecosystem, which provides insight into how these major elements interact to influence decision-making. The outcome of this research could aid potential investors to interpret the social influences in the entrepreneurial environment when making decisions. Investment professionals could also have a unique insight into the influencing factors in entrepreneurial decision-making and adopt appropriate strategies to influence decisions accordingly.

Keywords

Social capital, networks, trust, decision-making, entrepreneur, influence

Declaration

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

Date: _____

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Table of Contents

Chapter 1: Introduction to the Research Problem	1
1.1. Research overview	1
1.2. Current academic understanding	2
1.3. Business Context	4
1.4. Research aim	7
1.5. Definitions	9
Chapter 2: Literature Review	10
2.1. Overview	10
2.2. The investor and the entrepreneur	10
2.2.1. Introduction to the investor and entrepreneur	10
2.2.2. The entrepreneur and non-entrepreneur	11
2.2.3. Experience in the entrepreneurial environment	11
2.2.4. Risk perception in relationships	12
2.3. Overview of Social capital and trusted networks	14
2.4. Social capital	15
2.5. Networks and structural holes	16
2.6. Trust	18
2.6.1. Introduction	18
2.6.2. Entrepreneurial and individual trust	18
2.6.3. Trusted decisions	19
2.7. Decision-making	20
2.7.1. Overview	20
2.7.2. Entrepreneurs	20
2.7.3. Experience and perceptions	21
2.7.4. Rationality	23
2.8. Influence and biases	24
2.8.1. Psychological biases	24
2.8.2. Emotions and feelings	25
2.8.3. Overconfidence and control	26
2.8.4. Representativeness and self-efficacy	27
2.9. Conclusion	27
2.9.1. Entrepreneurs	27
2.9.2. Decisions	28
2.9.3. Social capital, networks and trust	29
Chapter 3: Research questions and hypotheses	31

3.1.	Research questions _____	31
3.1.1.	Research question 1 _____	31
3.1.2.	Research question 2 _____	31
3.1.3.	Research question 3 _____	31
3.1.4.	Research question 4 _____	31
3.1.5.	Research question 5 _____	31
3.1.6.	Research question 6 _____	31
3.2.	Hypotheses _____	32
3.2.1.	Hypothesis 1 _____	32
3.2.2.	Hypothesis 2 _____	32
3.2.3.	Hypothesis 3 _____	32
3.2.4.	Hypothesis 4 _____	32
3.2.5.	Hypothesis 5 _____	32
3.2.6.	Hypothesis 6 _____	32
3.3.	Conclusion _____	32
Chapter 4: Research Methodology _____		34
4.1.	Introduction _____	34
4.2.	Research design _____	34
4.3.	Sample _____	35
4.3.1.	Unit of analysis _____	35
4.3.2.	Sampling method and size _____	35
4.4.	Data collection tools _____	36
4.4.1.	Validity and reliability _____	36
4.4.2.	The questionnaire _____	39
4.4.3.	Pre-testing the questionnaire _____	42
4.5.	Data gathering process _____	43
4.6.	Data analysis _____	44
4.6.1.	Data preparation _____	44
4.6.2.	Assumptions _____	44
4.7.	Limitations _____	44
4.7.1.	Introduction _____	44
4.7.2.	Resource limitations _____	45
4.7.3.	Design flaw limitations _____	45
4.8.	Summary and depiction of instruments used _____	47
4.8.1.	Email sent to respondents: _____	47
4.8.2.	Questionnaire _____	48
Chapter 5: Results _____		52

5.1.	Introduction	52
5.2.	Description of the sample	52
5.2.1.	Descriptive statistics of the respondents	52
5.2.2.	Descriptive statistics of the primary constructs	55
5.3.	Statistical results per hypothesis	56
5.3.1.	Entrepreneurship	56
5.3.2.	Invested in the financial markets	57
5.3.3.	Demographic and descriptive statistics	58
5.3.4.	Primary constructs of social capital, networks and trust	61
5.4.	Conclusion	66
Chapter 6: Discussion of Results		67
6.1.	Introduction	67
6.2.	Identifying the entrepreneur	67
6.3.	Demographic details	67
6.4.	Research question 1	69
6.4.1.	Analysis of the data	69
6.4.2.	Review of the literature	69
6.4.3.	Conclusion	70
6.5.	Research question 2	71
6.5.1.	Analysis of the data	72
6.5.2.	Review of the literature	72
6.5.3.	Conclusion	73
6.6.	Research question 3	74
6.6.1.	Analysis of the data	74
6.6.2.	Review of the literature	75
6.6.3.	Conclusion	76
6.7.	Analysis of the primary constructs	77
6.8.	Research question 4	77
6.8.1.	Analysis of the data	77
6.9.	Research question 5	77
6.9.1.	Analysis of the data	78
6.10.	Research question 6	78
6.10.1.	Analysis of the data	78
6.11.	Review of the literature for research questions 4, 5 & 6	79
6.11.1.	Overview of social capital, networks and trust	79
6.11.2.	Social capital	80
6.11.3.	Networks	80

6.11.4. Trust	81
6.12. Conclusion for research questions 4, 5 & 6	82
6.13. Model	83
Chapter 7: Conclusion	86
7.1. Principal findings	86
7.2. Implications for management	88
7.3. Contribution to the body of knowledge	89
7.4. Limitations of the research	89
7.4.1. Introduction	89
7.4.2. Resource limitations	89
7.4.3. Design flaw limitations	90
7.5. Suggestions for future research	92
References	94
Appendices	98
Appendix 1 – Ethical clearance approval letter	98
Appendix 2 – Questionnaire from SurveyMonkey®	99
Appendix 3 – Histograms showing primary construct distributions	105
Appendix 4 – Research question 1: Entrepreneur and non-entrepreneur with respect to primary constructs	106
Appendix 5 - Demographic statistics: Gender	107

Table of Figures

Figure 1: Scree plot diagram	37
Figure 2: Entrepreneurship	53
Figure 3: Age	53
Figure 4: Gender	53
Figure 5: Years of work experience	54
Figure 6: Education	54
Figure 7: Years in current industry	54
Figure 8: Years at current organisation	54
Figure 9: Invested in the financial markets	55
Figure 10: Years of experience in the financial markets	55
Figure 11: Organisational membership	55

Figure 12: Model – Influencing factors in entrepreneurial decision-making	83
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Table of Tables

Table 1: Eigenvalues establishing constructs	38
Table 2: Rotated component matrix indicating constructs	38
Table 3: Three primary constructs depicting questions from survey which relate to each construct	39
Table 4: Referenced sources of journals for the development and adaption of questions for the questionnaire.....	41
Table 5: Descriptive statistics for social capital, networks and trust	56
Table 6: T-test for entrepreneurship	57
Table 7: Invested in the financial markets for primary constructs.....	58
Table 8: T-test for trust when invested in the financial markets	58
Table 9: Oneway ANOVA for age on social capital.....	59
Table 10: Tukey comparison for age	60
Table 11: Spearman’s rank correlation coefficient for age and years of work experience	61
Table 12: Pearson’s Chi-Square test for age and years of work experience	61
Table 13: Social capital regression summary	62
Table 14: Social capital predictors.....	62
Table 15: Social capital collinearity diagnostics	63
Table 16: Networks regression summary	63
Table 17: Network predictors.....	64
Table 18: Networks collinearity diagnostics	64
Table 19: Trust regression summary	65
Table 20: Trust predictors.....	65
Table 21: Trust collinearity diagnostics.....	66

Chapter 1: Introduction to the Research Problem

1.1. Research overview

The characteristics of entrepreneurs could play a key role in understanding financial decision-making as they play the role of the primary decision makers in their businesses (Seghers, Manigart, & Vanacker, 2012). The purpose of the research is therefore, to create a better understanding and gain insight into the entrepreneurial environment and what influencing social factors, specifically social capital, networks and trust, affect decision-making. The research unpacks these core social elements to better understand how they interact with each other as well as whether there are external dynamics which influence them.

The central theme and contribution to the literature of this study is to create a clearer understanding of how the key elements of social capital, networks and trust (the primary constructs) influence potential investors in their evaluation of the financial markets to arrive at personal investment decisions. Therefore, this study takes into account the interrelationship of social capital, networks and trust, as well as considering external factors which influence these factors, and how they create an environment that enables the flow of information and opportunities that can lead to effective decision-making.

The researcher analysed whether there were differences between entrepreneurs and non-entrepreneurs with respect to the primary constructs. It was also investigated as to whether individuals who had made the decision to invest in the financial markets had higher levels of social capital, networks and trust. This was done to establish the scope of the research. The predictors of these three primary constructs were also reviewed to gain insight into how the primary constructs could be influenced.

The motivation for the research is derived from the promising value that could be created through a better understanding of how individuals make decisions in a social context. Knowing what the influential variables are can necessitate a framework in which an individual could operate to maximise the potential of an effective decision. This directly applies to entrepreneurs who would like to expand their business interests. It also considers investment professionals who wish to attract business from entrepreneurs or other groups where the influence of the primary constructs are strong. The investment professionals will then be better positioned to operate effectively in an

environment, where they are able to influence the investment decision of their potential clients.

The areas of study are social sciences and behavioural psychology. This study has been conducted in South Africa.

1.2. Current academic understanding

As a study of entrepreneurship shows how important social capital is in pursuing entrepreneurial goals through taking advantage of personal social affiliations and network strategies, the researcher has investigated social capital and, as the literature will show, the connected social elements of networks and trust (Hoang & Antoncic, 2003).

Social capital, networks and trust are interlinked constructs and form the core of this study as they relate to decision-making and the entrepreneur. Social capital should be understood as the goodwill which is created out of an individual's networks (Adler & Kwon, 2002; Claro & Laban Neto, 2009). In these networks, strong ties are developed with high levels of trust and these allow for the flow of detailed information, which drives decision-making (Gulati, 1998; Rowley, Behrens, & Krackhardt, 2000 cited in De Carolis & Saporito, 2006). This provides the foundation of the interrelationship of the primary constructs, from which this study is formulated.

Entrepreneurs operate in an environment where imperfect competition exists in the market. Social capital allows for opportunities in these conditions and has been described as a resource which provides a higher rate of return on investments (Burt, 1992 cited in De Carolis & Saporito, 2006). Importantly, if networks are also taken into account, it has been shown that entrepreneurs are able to obtain access to private information through key relationships with individuals or organisations (Podolny, 1994).

Social capital allows for entrepreneurs to increase their personal feelings of control and to believe more in their own abilities. Through networks, they further believe that they can make their business ideas a reality (De Carolis, Litzky, & Eddleston, 2009). Therefore, through social capital, as shown above, entrepreneurs are able to garner influence and non-public information, which are both vital in creating business opportunities (Shane & Venkataraman, 2000; Burt, 1992 cited in De Carolis & Saporito, 2006).

However, entrepreneurs need to be able to effectively assess their environment when looking for opportunities (Hayek, 2012). Without the required knowledge, entrepreneurs may often make ineffectual decisions when considering financial investment options

and the ability of an entrepreneur to negotiate or price their investments is reduced (Seghers et al., 2012; Van Auken, 2001). Therefore, the flow of knowledge and information is key in decision-making and the primary constructs are vital in facilitating this.

Entrepreneurs distinguish themselves from non-entrepreneurs through the way they assess opportunities and it is their personal perceptions which could be mistaken for a greater risk tolerance (Norton & Moore, 2002). Importantly, entrepreneurs differ from non-entrepreneurs in their decision-making process because of the different heuristics which are formed out of unique situations (Endres & Woods, 2006). It should be noted that the heuristics of entrepreneurs tend to rely on personal experiences and small, non-random samples to aid in their decision-making (Busenitz & Barney, 1997 cited in De Carolis & Saporito, 2006). Consequently, a study of the influencing factors which affect an entrepreneur's decision-making is important in understanding their behaviour.

Entrepreneurs face a lot of uncertainty in their environment and, with greater market uncertainty, entrepreneurs will deal with others with whom they have existing relationships or those who are of a similar status; hence the importance of social capital and networks (Podolny, 1994). In uncertain markets and troubled times, entrepreneurs need to rely heavily on the information they receive from their trusted networks; hence, understanding more about their social dynamics is paramount to unveiling the methods to promote their success. Entrepreneurs in trust-based relationships have the propensity to over-estimate the probability of positive outcomes and thus tend to start from a position of trust with a counterparty (Bell, Oppenheimer, & Bastien, 2002). This could be severely detrimental to their success if the trust is abused or misplaced. Therefore, trust requires the support of a strong network and social capital. With this in mind, it is also important for entrepreneurs to trust others, or to act as trustees in order to grow their network and to better influence individuals to support the goal of the entrepreneur with respect to value creation and success (Goel & Karri, 2006). Thus, there would seem to be a high level of connectedness between social capital, networks and trust.

Due to perceptions and beliefs, a person is biased in their investment decision behaviour and will, by implication, decide to take a course of action influenced by the biases (Sahi, Arora, & Dhameja, 2013). As indicated, entrepreneurs are heavily influenced by their networks and the social capital which is derived from them. Research has shown that affect also has an influence on decision-making and thus a person's emotions and feelings need to be accounted for (Isen, 1993; Isen & Labroo, 2003 cited in Baron, 2008). So one can conclude that affect can at times outweigh

rational thoughts in other cognitive processes and decision-making (Cohen, 2005 cited in Baron, 2008).

In line with this, decisions often differ from the most optimal rational choices, because internal standards, which are used to support those decisions, are created based on a person's individual cognitive limitations or values and beliefs (Sahi et al., 2013). The flaws of an investor's mind are not revealed through biases, but rather the design of the investor's mind, where the biases provide a lens into the decision maker's thought process (Sahi et al., 2013). Understanding the entrepreneurial environment could illuminate the source of the biases that influence decisions in a social context. The following sections expand on the business case for this research as well as the aim, keeping in mind the key points raised in the literature.

1.3. Business Context

The personal catalyst for the study can be associated with the experience of the researcher in the wealth management industry, where it is common to find that high net worth individuals (HNWIs) who are entrepreneurial will, in many instances, prefer to invest in their own business or new business ventures over which they have a level of control or personal knowledge, rather than diversify their portfolio into the financial markets. The accepted definition of a HNWI is a person who has net assets over US\$1 million which excludes their primary residence (New World Wealth, 2015).

At the end of 2014, South Africa had approximately 46,800 HNWIs, which is the highest in Africa. These HNWIs have 31% of South Africans' individual wealth, which equates to US\$184 billion and the number of HNWIs are forecast to grow by 19% over the next three years (New World Wealth, 2015). In a recent article in the Business Day, it was highlighted that the wealth management industry has become more competitive in recent times due to new entrants to manage the wealth of South Africa's high net worth individuals and, as mentioned, while high growth in this market is expected, there are only a finite number of potential clients in South Africa (Jones, 2015). Due to these high levels of competition, any advantage in better understanding a potential client, their environment and how decisions are influenced, would be very valuable to investment professionals in being able to manage more of the individual wealth in the country.

The growth in investments allocated to cash and bonds between 2007 and 2014, which are relatively secure asset classes, have been the highest for individual investors (New World Wealth, 2015). The next highest growth has been in business interests, indicating the prevalence of entrepreneurial activity in recent times and the wealth

generative potential of investing in a business. However, the top performing asset classes over the same period were equities and real estate (New World Wealth, 2015). The above misalignment between the allocation of capital and the most appropriate asset class clearly indicates the need for professional advice and a better understanding of the investor to provide the appropriate asset allocation and diversification of their holistic portfolios.

To support this, The 2015 South Africa Wealth Report shows that the growth in the wealth of HNWI's has been as a result of the growth in the local stock market over the review period between 2007 and 2014. Furthermore, South Africans traditionally tend to be under-diversified when investing and the consistent offshore allocation of only 20% of HNWI's portfolios over the last 8 years demonstrates this (New World Wealth, 2015). This is in part due to historical exchange control constraints which have slowly been relaxed but also leads the researcher to believe that investors prefer to invest in what they are familiar with and familiarity is promoted through personal knowledge biases (New World Wealth, 2015).

South Africa has been home to some of the highest regarded entrepreneurs in the world (Mungadze, 2015). Elon Musk is an obvious example - however, looking to the future, South Africa has to create an environment which fosters entrepreneurial opportunities for new entrepreneurial talent. More entrepreneurial activity would drive growth and create much needed employment in the country (Herrington, Kew, & Kew, 2012). Key to South Africa's future could also lie in unlocking greater social entrepreneurship, which would promote more sustainable long-term growth. Mr Benton, who is the chair of the Global Social Entrepreneur Network and a founding director of UK's Capita Group, believes that this is possible given the talent that South Africa has in the entrepreneurial space (Mungadze, 2015). This provides the burning platform to necessitate a greater understanding of the entrepreneurial environment and how the decision-making of entrepreneurs is influenced by the core social factors of social capital, networks and trust.

When creating a solution for entrepreneurs, The Brooks Group, a leading United States sales training firm, recommends that advisors specifically identify a different strategy (The Brooks Group, 2015). The character and individualistic traits of the entrepreneur should be taken into account as entrepreneurs demand solutions or products which are tailored to their specific needs. Furthermore, the solution needs to reduce the complexity for the entrepreneur, not strain their company's resources or take up the personal time of the entrepreneur. One of the main themes that the training firm advises is that entrepreneurs and their businesses should be viewed as one and the

same; you cannot separate the two (The Brooks Group, 2015). This establishes the situational theme for understanding the decision-making of an entrepreneur and what important factors need to be taken into account to provide an appealing opportunity.

A prevailing trend is that HNWIs are increasingly moving assets out of their business interests and diversifying into other asset classes (New World Wealth, 2015). This creates an opportunity for the wealth management industry to advise on the newly investable assets. However, the difficulty is to understand how the investor, or entrepreneur in this case, will make his or her investment decision and what influence the environment will have on him or her. The same applies to entrepreneurs themselves, where they will need to know how to best assess their environment in order to make the best decision with their wealth.

The International Data Corporation (IDC) published a white paper on the effect of trusted networks and the positive influence that social media has on potential buyers when they are able to access public platforms (e.g. LinkedIn) and also know that others within their trusted professional networks have made the same purchase decision, given the decision is made public. This affects their buying process and changes the sales dynamic and the role of the salesperson (International Data Corporation, 2014). The Global Entrepreneurship Network, an international network of entrepreneurs, has been established to attempt to promote entrepreneurship and link entrepreneurs from all around the world to create a global entrepreneurial ecosystem (Global Entrepreneurship Network, 2015). A great practical example of the power of a network was when New York City's technology industry was driven by entrepreneurs who formed a network of the top technology founders. They reinvested their success into others to accelerate the growth of the industry and make it a world leader (Endeavor, 2014). This provides practical evidence that entrepreneurs do not operate in isolation, but rely on their networks for assistance in making acquisition decisions. Also, this illustrates that the role of the investment professional is to take cognisance of the networks in which the potential investor operates and adopt a strategy on how to best leverage off them.

Understanding more about the rationale of the investor when allocating capital to unlisted investments or new business ventures would provide valuable insight to those in the financial services industry. For entrepreneurs, better knowledge of the social elements which influence their environment could equip them to make more informed decisions and effectively take advantage of opportunities. The aim of the research is discussed in more detail below.

1.4. Research aim

Entrepreneurs can often find themselves in a daunting situation, having to run their own business and feeling isolated in an environment that is highly competitive. The better they can understand how to successfully operate in this environment and positively associate with others, the more likely it is that they will make effective decisions to maximise positive outcomes. Investment professionals face a similar challenge when attempting to convince potential investors of the merits of investing in the financial markets when these potential investors are part of a close, entrepreneurial network. The aim for the investment professional is to be able to have the tools and knowledge so that he or she is in a position to most appropriately offer a solution to the investor. In all instances, this requires the awareness of social capital, networks and trust in the context of the entrepreneurial environment, and how these constructs influence decision-making.

This research therefore aims to address topics of interest which revolve around social capital, networks and trust. Firstly, the researcher investigates whether entrepreneurs in South Africa have greater levels of social capital, stronger networks and more developed trusted relationships than non-entrepreneurs. This takes into account the already established higher levels of self-efficacy an entrepreneur has and the different environments in which they operate.

Secondly, the researcher investigates whether there are external factors which have an influence on social capital, networks and trust. The interrelationship between the primary constructs is also explored to assess whether they influence each other. This is done to establish whether there are any potential predictors to the primary constructs which could be used as levers to increase the final potential effect on the decision of an individual, and more specifically entrepreneurs.

As the extant research indicates, entrepreneurs would rather focus their investment capital on the potential investments in imperfect markets (Burt, 1992 cited in De Carolis & Saporito, 2006). Therefore, it would also be informative to measure whether there is a positive relationship between individuals who do not invest in the financial markets and the primary constructs, which are expected to be more prevalent in entrepreneurs. The researcher proposes that, not only should the level of social capital be higher for entrepreneurs, but where social capital is higher, there could consequently be lower investments in the financial markets, as entrepreneurs would rather allocate investment capital to personal entrepreneurial ventures or those within their networks than the financial markets, where they have less influence and control. Trust is a broader social

element and it would be expected to be a requirement when investing in the financial markets.

Entrepreneurs do not do business as usual, due to the varying situations in which they need to operate and how they need to be able to take advantage of various opportunities. By often having to create these opportunities themselves, entrepreneurs might feel hesitant to trust an organisation to manage their wealth, which is the direct result of their own efforts (Hayek, 2012). Further investigation should therefore be undertaken as to how entrepreneurs perceive their environment with respect to social capital in the context of their networks, and this should allow for better education of entrepreneurs' decision-making and when they should be encouraged or cautioned (Hayek, 2012). Given this literature, the research investigates the social environment of the entrepreneur to establish a clearer understanding of how the primary constructs interact in this environment and influence decision-making.

The extant literature goes on to show that it is essential to understand the motivations, emotions and goals of an individual within the context of the situation, in order to understand cognitive processing and outcomes (Arora, Haynie, & Laurence, 2013). The researcher believes that an exploration into the way investors behave when considering the social capital, which is developed through their networks and built on a level of trust, would therefore prove valuable.

Once again, all investors rely on their trusted networks, feeling comfortable that the advice received and the decisions made are collectively shared by fellow investors, irrespective of the outcome. As a result, investors end up increasing the chances of making losses, or getting lower than the expected returns, because of the reluctance to diversify their holistic portfolios correctly (Agrawal, 2012). This accentuates the need for the researcher to evaluate the decision-making of the investor in the context of social capital, networks and trust. The above literature also shows the presence of trust and networks for entrepreneurs and non-entrepreneurs (deemed to be investors), which could indicate that commonalities exist between the two groups when considering the primary constructs. The advisors role with an entrepreneur or any potential investor is to better understand the decision-making of the individual so that the investment professional can position their solution in a way which appeals to the investor.

This study aims to look through that lens at the social primary constructs in the entrepreneurial environment to create a clearer understanding of the relationship and connectedness of social capital, networks and trust. Through the creation of a model,

the researcher hopes to create a better understanding of how decisions are made and more importantly, how they could potentially be influenced in a social context.

1.5. Definitions

The scope of the research is bound by the following definitions:

Entrepreneur – “Individuals who recognise and exploit new business opportunities by founding new ventures” (Baron, 2008; Shane & Venkataraman, 2000 cited in Podoyntsyna, Van der Bij, & Song, 2012, p 328). This definition supports the research objectives, as the aim is to better understand individuals who have existing ventures or who are willing to create new prospects for generating wealth.

Non-entrepreneur – All individuals who are not included in the entrepreneurial definition. These would normally constitute employees/managers in a corporate. Note that ‘people’, ‘individuals’ or ‘investors’ refers to entrepreneurs and non-entrepreneurs collectively (i.e. the entire population).

Networks – In the context of this research, networks consists of a set of actors with relationships that link them, where information exchange takes place and trust exists (Hoang & Antoncic, 2003).

Social capital – A resource in the context of business and could be understood as the goodwill that is created out of an individual’s network of social relationships. It allows for the flow of information, solidarity and a level of influence from the perspective of the entrepreneur (Adler & Kwon, 2002; Claro & Laban Neto, 2009).

Trust – For the purpose of this research, trust is based at an individual level and therefore can be defined as interpersonal trust, which is “an individual’s belief about the integrity and dependability of another” (Ferrin, Dirks, & Shah, 2006, p. 871). Trust in a network results in a reliance on a tight circle of existing relationships and could be understood as a result of social capital (Coleman, 1988 cited in De Carolis & Saporito, 2006; Anderson & Jack, 2002). Hence, in the context of the above, trust can be viewed as a foundation of a network and social capital.

Chapter 2: Literature Review

2.1. Overview

A key initial step in the entrepreneurial process is to have the ability to properly assess the environment when looking for opportunities (Hayek, 2012). However, entrepreneurs may often make suboptimal financial decisions, due to their limited knowledge of the financial alternatives which are available to them (Seghers et al., 2012). And it has been shown that the limited knowledge which entrepreneurs have of these financial alternatives puts them in a position where they are disadvantaged when it comes to their ability to price and negotiate investments (Van Auken, 2001).

This literature review focuses on the environment for entrepreneurs and non-entrepreneurs and takes into account the primary constructs of social capital, networks and trust which investors are exposed to and how it influences decision-making.

Investment behaviour describes how investors “allocate the surplus financial resources to various instruments” and “consists of why they invest, where and how they get information, what factors they use to evaluate, who influences them on choice of investment and how they act after investment” (Kasilingam & Jayabal, 2008 cited in Kasilingam & Sudha, 2010, p. 17). Further insight into factors that influence investment behaviour would therefore be valuable.

Therefore, the literature review elaborates on what constitutes an entrepreneur for the purposes of this research; the environment in which the entrepreneur operates, including social capital, networks and the trust that develops; how these affect the decisions which are made with a focus on investment, taking into account the biases or heuristics that influence that decision-making process.

2.2. The investor and the entrepreneur

2.2.1. Introduction to the investor and entrepreneur

Entrepreneurs are defined as “individuals who recognise and exploit new business opportunities by founding new ventures” (Baron, 2008; Shane & Venkataraman, 2000 cited in Podoyntsyna, Van der Bij, & Song, 2012, p 328). This definition supports the research objectives, as the aim is to better understand individuals who have existing ventures or who are willing to create new prospects for generating wealth.

Therefore, entrepreneurs need not necessarily just be people who own their own business. For the purpose of this study, they included those individuals who partook in

new business ventures and actively sought out opportunities to create wealth. It is important to understand why entrepreneurs pursue these opportunities and the cognitive approach they have in evaluating them (Podoyntsyna et al., 2012).

2.2.2. The entrepreneur and non-entrepreneur

When framing a decision, extant literature shows that heuristics are created and formed out of unique situations and therefore you could expect entrepreneurs and non-entrepreneurs to behave differently in the decision-making process (Endres & Woods, 2006). The differences between entrepreneurs and non-entrepreneurs have been said to be related to cognition, which encompasses a person's beliefs and values, mental processes and cognitive styles (Sánchez, Carballo, & Gutiérrez, 2011). Therefore, entrepreneurs distinguish themselves from non-entrepreneurs through the way they assess opportunities and it is their personal perceptions which could be mistaken for a greater risk tolerance (Norton & Moore, 2002).

Non-entrepreneurs could be viewed as career professionals and are often also classed as managers in a corporate environment (McGrath, MacMillan, & Scheinberg, 1992; Stewart & Roth, 2001). Importantly, in the context of this review, non-entrepreneurs were considered to have not undertaken, or planned to have undertaken business ventures as per the definition stated above.

For the purposes of this literature review, further exploration was done on entrepreneurs as the core variable of interest and the environment in which they operate and make decisions.

2.2.3. Experience in the entrepreneurial environment

Entrepreneurs operate in an environment where uncertainty is the norm and decisions need to be made with limited information. Therefore, they tend to rely on personal experiences and small, non-random samples to aid in their decision-making (Busenitz & Barney, 1997 cited in De Carolis & Saporito, 2006). It has, however, been shown that as entrepreneurs gain more experience in starting new ventures, their risk perceptions change substantially as the entrepreneurs become more adept. This change in perception or risk creates a higher tolerance of risk when compared to a novice entrepreneur or non-entrepreneur (Podoyntsyna et al., 2012). The researcher proposes that this could be due to entrepreneurs developing social capital and trust in their networks or may indicate that entrepreneurs are able to adapt and change their perceptions through learning and experience.

Although entrepreneurs might not have an understanding initially of a certain area, learning theory suggests that an individual will actively seek out information on a topic on which they are not knowledgeable (Cohen & Levinthal, 1990). More experienced entrepreneurs however can become stuck in terms of certain ways of thinking and therefore might not recognise that their environment has changed and that they need to make changes (Shepherd, Zacharakis, and Baron 2003; Starr and Bygrave 1991 cited in Seghers et al., 2012).

As the entrepreneurial process unfolds, the entrepreneurial tasks also change significantly and are extremely varied (Baron, 2006 cited in Podoyntsyna *et al.*, 2012). Compounding this, the environments in which entrepreneurs operate are filled with rapid change and are highly unpredictable (Lichtenstein, Dooley, & Lumpkin, 2006 cited in Podoyntsyna *et al.*, 2012). Entrepreneurs face a lot of uncertainty in their environment, and it has been shown that with greater market uncertainty, organisations will deal with others with whom they have existing relationships, which speaks to the importance of social capital and networks. And the greater the level of uncertainty, the more organisations will look to find others who are of similar status (Podolny, 1994). This further reinforces that familiarity is an important concept when doing business and leads to section 2.3 on how entrepreneurs operate within networks.

Therefore, although entrepreneurs need to readily adapt to their environment given the changing global landscape, the researcher proposes that entrepreneurs should be more adept at making the necessary changes when compared to non-entrepreneurs. This is because they are more in tune with their environment due to supposed greater levels of social capital and trust within their networks.

It is inferred that entrepreneurs have a high internal locus of control as they feel that they control their own lives and “it rests in their own hands” (Rotter, 1966 cited in Kasilingam & Sudha, 2010, p. 18). And by implication, they fall into the bracket of people who trust their own intuition and judgment when it comes to making investment decisions for their own money (Sahi et al., 2013). Entrepreneurs are also often faced with financial constraints in terms of raising the necessary financing. This has an impact on their ability to borrow or leverage themselves, which results in them having to depend on their own wealth when investing or saving (Quadrini, 2009).

2.2.4. Risk perception in relationships

Entrepreneurs will experience high levels of failure rates, which could be a symptom of the over optimism which they experience. However, another trait of entrepreneurs is their resilience as they tend to persist more in their ventures regardless of the

successful probability of the task at hand (Hayek, 2012). This is important because it sets the scene for the character of the typical entrepreneur and how they seek out solutions to the problems they encounter. To emphasise this fact, entrepreneurs in trust-based relationships have the propensity to over-estimate the probability of positive outcomes and hence tend to start from a position of trust with a counterparty (Bell et al., 2002). Therefore, as this research report aims to investigate, entrepreneurs could well be susceptible to greater influence from their trusted relationships when making decisions, when compared to non-entrepreneurs.

An argument is made that it is more the risk perception and less the risk propensity of entrepreneurs which leads them to attempt to exploit opportunities (Palich & Bagby, 1995 cited in De Carolis & Saporito, 2006). Sahi et al. (2013) echoes this point of view, which can be linked to entrepreneurs, stating that objective standards are often not used by people to reference themselves against, but rather they do so against some internal standard (Cummins and Nistico, 2002 cited in Sahi et al., 2013). Through this sense of control, it could be assumed that entrepreneurs measure themselves and perceive risk on an individual basis and thus differently to theoretical or market norms.

Entrepreneurs have been found to have a higher level of self-efficacy with respect to risk-taking and innovation when compared to managers and non-founding entrepreneurs (Hayek, 2012). This could be linked to successes of entrepreneurs as people with high self-efficacy work harder, participate more readily, achieve at a higher level and persist for longer on a given task (Arora et al., 2013). In turn, when presented with a new opportunity, a nascent entrepreneur will pursue it regardless of whether he or she thinks they have the requisite skills (Arora et al., 2013). It was also found that inventors with a higher level of self-efficacy were more likely to start their own ventures, while those with lower self-efficacy preferred to be employed in established firms, demonstrating again the strong link between entrepreneurial behaviour and self-efficacy (Arora et al., 2013).

The self-efficacy tendency of entrepreneurs also leads them to thinking that they can control the outcome in the behaviour of the people who they trust. This reinforces their perception that they can predict the potential possibilities, which would be a result of the trusted relationship (Goel & Karri, 2006). Connected to this, is that it is also important for entrepreneurs to trust others, or to act as trustees in order to grow their network, and also to better influence individuals to support the goal of the entrepreneur with respect to value creation and success (Goel & Karri, 2006). Goel and Karri therefore raised an important aspect of the proposed research for this study regarding the influence of networks and trust on the entrepreneur. It is proposed that, given the

evidence above, entrepreneurs would have greater levels of social capital, stronger networks and higher trusted relationships than non-entrepreneurs, taking into account the greater level of self-efficacy which exists for entrepreneurs.

2.3. Overview of Social capital and trusted networks

Networks comprise of social capital, which is essentially the resources, relational or structural, which are available to the members of that network (Bhagavatula, 2009). Through social capital, entrepreneurs are also able to learn about different investment options (Hsu, 2007). This is important when considering the multitude of investment solutions available in the market. Furthermore, gaining the required knowledge of financial alternatives is positively associated with having a strong network in the financial community (Seghers et al., 2012). And importantly, it has been shown that entrepreneurs are able to obtain access to private information through key relationships with individuals or organisations (Podolny, 1994). This can lead to network synergy where multiple networks are combined to form joint effects, which are greater than those of the sum of individual effects (Gonzalez, Claro, & Palmatier, 2014). The research proposes that the network synergy for entrepreneurs may create a setting where investment decisions can be more easily influenced.

There is extensive supporting research indicating the importance of networks, and the social capital which they contain, which lead to the creation of new ventures (Aldrich & Zimmer, 1986 cited in De Carolis & Saporito, 2006). Social capital has been viewed as a resource which brings a higher rate of return on investments because of the imperfect nature of the competition, as certain entrepreneurs will be exposed to opportunities, while others will not (Burt, 1992 cited in De Carolis & Saporito, 2006). And as the literature has shown, entrepreneurs are equipped to make decisions to attempt to take advantage of those opportunities. Therefore it is proposed that entrepreneurs could be better positioned to make decisions in the context of a network.

The substance of the network relationships within a collective, and the impact of that collective's internal ties, creates an insight into bonding social capital (Adler & Kwon, 2002; Leanna & Van Buaren, 1999 cited in De Carolis & Saporito, 2006). Social capital can therefore be viewed, in an entrepreneurial context, as the resources and goodwill which emanates from an individual's network of social relationships, and is the consequence of influence, solidarity and information to which the entrepreneur is exposed (Adler & Kwon, 2002). The breadth and depth of an entrepreneur's social networks can also be supported by the positive ability of the entrepreneur to further develop them (Nahapiet & Ghoshal, 1998 cited in Baron, 2008).

As the above overview demonstrates, a dynamic link exists between social capital and networks. The two constructs are further discussed below where the relation between the two is further validated.

2.4. Social capital

By its nature, social capital has some form of structure, which is created by the people involved, and it is productive in that goals can be achieved through its use. Therefore it should be defined as a resource in the context of business and could be understood as the goodwill which is created out of an individual's network of social relationships. It allows for the flow of information, solidarity and a level of influence from the perspective of the entrepreneur (Adler & Kwon, 2002; Claro & Laban Neto, 2009). Social capital will therefore be decreased should non-cooperative behaviour reduce the flow of resources and information (Anderson & Jack, 2002). And the researcher proposes that through the reduction of social capital and hence information, the decision-making ability to invest will decrease.

Social capital links individuals into networks and therefore can be viewed from a structural perspective as bridging the gaps between individuals. The strength of these bridges are up to the individuals themselves and the better the connection, the stronger the potential flow of resources and information (Anderson & Jack, 2002). This bridging relationship relates to an emphasis on external relationships, where the outcomes are related to other actors in social networks and the role they play (Adler & Kwon, 2002). On the other hand, internal relationships are referred to bonding. These entail internal relationships within the collective organisation, which provide for the cohesive working environment required to achieve the collective goals of the group (Adler & Kwon, 2002). Hence, non-entrepreneurs would still be able to develop a form on internal social capital within their organisations. This could lead to the difference in social capital between non-entrepreneurs and entrepreneurs being difficult to measure.

Social capital helps explain individual's success as they can be seen to use their resources, including their networks, for their personal benefit (Adler & Kwon, 2002). Investors have the ability to learn about finance alternatives through social capital, and it therefore plays an important role in how they formulate their investment decision (Hsu, 2007). Social capital has been further described as a resource which provides a higher rate of return on investments, as it allows for opportunities when imperfect competition exists in the market. This kind of environment is especially prevalent for entrepreneurs (Burt, 1992 cited in De Carolis & Saporito, 2006). Entrepreneurs might then steer clear of investing in the financial markets which are more capital intensive

and promote perfect competition. They might rather focus their investment capital on the potential investments in an imperfect market. Therefore it would be interesting to measure whether there is a positive relationship between individuals who do not invest in the financial markets and social capital, which is expected to be more prevalent with entrepreneurs. This forms part of the scope of this research and will be investigated further.

Social capital is particularly relevant in that it provides entrepreneurs the opportunity to improve their knowledge of investment alternatives and reduces their potential knowledge gaps, especially when the network in which they operate has financial experts to whom the entrepreneur can turn to for advice (Seghers et al., 2012). Trustworthiness is linked to social capital, as extant literature shows that social capital is a source of trust (Claro & Laban Neto, 2009). Thus trust is also an important construct, which is explored and tested in this study.

Another important characteristic of social capital, in the context of this research, is influence through obligations that are acquired by individuals which can be leveraged at an optimal time (De Carolis et al., 2009). This reinforces the power of social capital in the entrepreneurial setting, where entrepreneurs will feel obliged to support each other if the levels of social capital are high. As a result, the researcher proposes that, not only should the level of social capital be higher for entrepreneurs, but where social capital is higher, there could consequently be lower investments in the financial markets as entrepreneurs would rather allocate investment capital to personal entrepreneurial ventures or those within their networks.

Social capital has been strongly linked to the illusion of control in entrepreneurs, which links social capital to cognitive behavioural theory. An entrepreneur's cognitive characteristics are further shaped by the social capital which develops in a network (De Carolis et al., 2009). Furthermore, social capital should be seen as a feature of a network, as it is embedded in network relationships and aids in the understanding of networks (Anderson & Jack, 2002). Thus, networks have been reviewed as a primary construct in the theme of this study. The applicable literature on networks is discussed in the following section.

2.5. Networks and structural holes

Social capital allows for entrepreneurs to increase their personal feelings of control and to believe more in their own abilities. Through networks, they further believe that they can make their business ideas a reality (De Carolis et al., 2009). Therefore, through social capital, as shown above, entrepreneurs are able to garner influence and non-

public information, which are both vital in creating opportunities (Shane & Venkataraman, 2000; Burt, 1992 cited in De Carolis & Saporito, 2006). This influence and information are also referred to in the literature as structural holes. This may increase the frequency of overconfidence because of the perceived greater access to the information and market-timing, due to relationships which provide the flow of non-public and valuable information (Burt, 1992, 1997 cited in De Carolis & Saporito, 2006).

Structural holes occur when some members in a group are not aware of other members, because there are gaps in the flow of information between clusters of connected members in the group. The key is to be the individual who is able to connect the structural holes, and in turn these relationships will lead to a large competitive advantage (Claro & Laban Neto, 2009). These structural holes also allow the entrepreneur to adopt different strategies and roles with different groups in an attempt to generate greater buy-in, and also foster a level of control. It is therefore imperative that an investor or entrepreneur understand what kind of network they are operating in and have accurate perceptions of their networks. If not, they could potentially be completely misguided and end up implementing inappropriate strategies (Claro & Laban Neto, 2009). The researcher therefore suggests that networks are stronger between entrepreneurs when compared to non-entrepreneurs, given their reliance on them for the success of their businesses. And as entrepreneurs become more experienced, so their networks should be of more importance to them.

Building on the above, further influence is created through obligations, which are accumulated from others in the network. Entrepreneurs are then able to leverage these commitments at a later stage. Informal disconnected networks (structural holes) allow entrepreneurs to decide who will gain from the disconnection, and therefore they are able to position themselves strategically in negotiations (Burt, 1992 cited in De Carolis & Saporito, 2006). Networks which enable social transactions can also play an important role in acquiring resources at lower prices, which is applicable in negotiations (Elfring & Hulsink, 2003). This is of course important when doing business in a competitive environment.

In these networks, strong ties are developed with high levels of trust, and these allow for the flow of detailed information (Gulati, 1998; Rowley, Behrens, & Krackhardt, 2000 cited in De Carolis & Saporito, 2006). Entrepreneurs then develop a common foundation of looking at the world in their networks. This is further supported by interpersonal attraction theory which postulates that people with similar beliefs are attracted to each other and therefore reinforce their shared set of behaviours, values and attitudes (Byrne, 1971 cited in De Carolis & Saporito, 2006). Learning and sharing

of knowledge means that entrepreneurs can get into their peers' thinking processes (Grant, 1996; Nonaka, 1994 cited in De Carolis & Saporito, 2006). The limitation is that receiving information from a trusted partner means that there is a risk that the information is more likely to be perceived as accurate and taken at face-value (McEvily, Perrone, & Zaheer, 2003 cited in De Carolis & Saporito, 2006). The researcher will therefore explore the element of trust within networks and related to individuals in the following section.

2.6. Trust

2.6.1. Introduction

Trust, for the purpose of this research, is based on an individual level and therefore can be defined as interpersonal trust, which is “an individual’s belief about the integrity and dependability of another” (Ferrin, Dirks, & Shah, 2006, p. 871). Trust, in a network, results in a reliance on a tight circle of existing relationships and could be understood as a result of social capital (Coleman, 1988 cited in De Carolis & Saporito, 2006; Anderson & Jack, 2002). Hence, in the context of the above, trust can viewed as a foundation of to a network and social capital.

Trust is often referred to with a focus on the psychological nature in which it develops. However, what is core to this research is more the social nature and context of trust within the framework of decision-making. The concept of networks and social capital are closely related to trust from a dyadic relationship perspective. Individuals participate in multiple trusted dyadic relationships, given that many third parties are connected (Ferrin et al., 2006). Trust involves interdependence and it is therefore relational in that you do not have control over the other party, which can consequently result in unpredictable outcomes (Goel & Karri, 2006).

2.6.2. Entrepreneurial and individual trust

Entrepreneurial opportunities are more prevalent in an environment where there is greater organisational membership with a higher level of trust. An environment with a higher level of trust will also lead to individuals of that environment to more readily invest with an entrepreneur than if no trust was present (Kwon & Arenius, 2010). Consequently, the researcher proposes that organisational membership could be a predictor of an individual’s level of trust.

The extant literature indicates that entrepreneurs are more likely to over-trust than non-entrepreneurs. This tendency should not be viewed negatively as they could require greater levels of trust to build their businesses and expand their networks. This could

actually promote entrepreneurial activity by acting as a substitute for formal institutions (Goel & Karri, 2006). Trust is also a core element used as a governance mechanism to enhance the quality of the resource flows (Hoang & Antoncic, 2003). The researcher would therefore expect there to be greater levels of trust between entrepreneurs when compared to non-entrepreneurs.

There is a component of vulnerability when it comes to trust as the individual is relying on the positive expectations of another. This reliance should be seen in a positive light as it reduces the potential for self-seeking behaviour and opportunistic behaviour from the involved parties (Goel & Karri, 2006). As a result, trust could be seen as a key element in the generation of social capital.

There is a strong tendency for individuals to rely on family members and close friends for advice instead of consulting with professional advisors. The reason for this is that many people feel as though they will get more of an unbiased opinion from friends and family when discussing the investment options available to the potential investor (Sahi et al., 2013). This could be taken a step further where a trusted person close to the investor could potentially know at least one financial expert whom they trust and could refer the investor to. The investor would therefore feel more comfortable discussing confidential matters regarding their investments (Seghers et al., 2012). Trust is therefore a critical element when it comes to potential investors making an investment decision to allocate funds to the financial markets. Hence, the researcher aims to show that trust, as defined in this study, is a required factor when investing in the financial markets.

Extant literature also proves that those with the highest measured levels of trust achieve the greatest individual outcomes in a network. An important caveat to this though, is that while trust is significant in individual outcomes, the social context in which the decision is made is vital (Olekals, Lau, & Smith, 2007). Therefore, trust should be viewed in conjunction with social capital and networks when assessing decision-making of investors.

2.6.3. Trusted decisions

Trust and risk are closely related, in that the greater the level of trust, the lower the propensity to acknowledge higher levels of risk (Goel & Karri, 2006). This is an important consideration when taking into account the effect which trust could have on individuals when considering investing in the financial markets as well as their investment options, which is discussed in the next section.

Trust can also be related to an investor's decision-making in that many people will trust their own judgment over the advice of others when it comes to decisions regarding their personal investments (Sahi et al., 2013). This ties in with the overconfidence bias discussed later in this review.

2.7. Decision-making

2.7.1. Overview

The cognitive process for human beings is also highly effected by the emotions and feelings people have (Baron, 2008). Baron (2008) terms feelings and emotions as affect and goes on to say that the relationship between cognition and affect is persistent and constant (Baron, 2008). Decisions are therefore not purely rational and made on a factual basis as there are several other aspects which should be taken into account when considering influence in the context of social capital, networks and trust.

To increase the complexity of decision-making, we live in a world where there are many complex financial products available, which increases the influence of biases and heuristics in the decision-making process (Sahi et al., 2013). The greater the uncertainty, the more subjective decision-making becomes and individuals are then more reliant on their own judgment and preferences, which results in biased decisions (Pompian, 2006 cited in Sahi *et al.*, 2013; Shefrin, 2002 cited in Sahi *et al.*, 2013). As the researcher has shown, preferences are strongly influenced by the environment the individual operates in and the social capital, networks and trust which exist in this environment.

2.7.2. Entrepreneurs

Entrepreneurs have been shown to be judgmental decision-makers, and are required to be so out of necessity, given their environment (Grieco, 2012). Judgment from the perspective of an entrepreneur effectively frames the decision-making process and should be seen as the underpin for the investment decision given the information uncertainty in the environment (Grieco, 2012). Of course, it is important to assess how an entrepreneur views money and the creation of wealth. People consider money earned through their direct effort (as in the case of most entrepreneurs) to be more precious than money earned from other sources (Sahi et al., 2013). Grieco (2012) concludes on decision-making for entrepreneurs as “when the entrepreneurial decision is explicitly analysed and framed as an investment decision, contextual factors related to information play a major role” (Grieco, 2012, p. 457) meaning that the entrepreneur analyses the opportunity cost of his decision, taking into account alternative forms of

investment for the corresponding amount. The implication of this is that entrepreneurs will often not explicitly make investment choices on a rational, risk adjusted basis, given their biased view of risk and how they might be influenced.

Entrepreneurs need to be inventive and creative in their environments, given the unpredictability and rapid changes which they face on an ongoing basis (Baron, 2008). The result is that often feelings and emotions have to be relied on in order to make decisions or take specific action, as there is simply not enough information at hand to follow a set process or procedure (Baron, 2008). As a result, the reliance on a network is enhanced and the effect compounded. This is specifically evident, as previously mentioned, when entrepreneurs are undertaking a new venture where the tasks are predominantly extremely varied and also change significantly over time (Baron, 2006; Shane, 2003 cited in Baron, 2008).

An entrepreneur's emotions and feelings will contribute to their perception of the external world (Baron, 2008). And the entrepreneur will have to be in a position to quickly adapt and respond to ever changing external conditions (Baron, 2008). Baron (2008) suggested that affect may be a link between an entrepreneur at the individual-, or subjective-level, and the macro-level, and would link into the entrepreneur's ability to acquire resources specific to achieving their goals and objectives in highly dynamic environments (Ciavarella, Buchholtz, Riordan, Gatewood, & Stokes, 2004). This accentuates the need to the researcher to evaluate the decision-making of the investor in the context of social capital, networks and trust, as these primary constructs have been shown to influence the investor's decision-making.

2.7.3. Experience and perceptions

Sahi et al.'s (2013) research supports the researcher's proposition made above, as they show that individuals as a whole avoid uncertainty by playing it safe and investing in instruments with which they have previous experience. Familiarity provides people with comfort and security and hence they do not take full account of the inherent risks in the investment (Sahi et al., 2013). Investors thus actively try to avoid any feelings of regret by investing in instruments or strategies in which they have experience (Sahi et al., 2013). Once again investors rely on their trusted networks, feeling comfortable that the advice received and the decisions made are collectively shared by fellow investors, irrespective of the outcome. As a result, investors will end up increasing the chances of making losses, or getting lower than the expected returns, because they are reluctant to diversify their holistic portfolios correctly (Agrawal, 2012).

An individual's financial planning and management decision satisfaction is impacted through psychological biases (Sahi et al., 2013). Humans have the tendency to rely on a point of reference, which is often a subjective assessment of what value means to them (Sahi et al., 2013). Beckman et al. (2011) shows this in their study, where they conclude that people are risk-averse when presented with gains and risk-seeking when presented with losses, with both options defined relative to a single reference point. This means that individuals will protect gains and take on more risk to make up losses. The point of reference being a subject of value to the investor, and could be represented by social capital, networks and trust. Consequently, social capital, networks and trust are further linked directly to the decision-making of the individual.

Individuals will thus search for information which supports their decision. In the case of an entrepreneur, this could present the potential of leveraging off the social capital developed through their networks. Investors, including entrepreneurs and non-entrepreneurs, could take it a step further with the tendency to attribute the success of their investments to their own ability (Sahi et al., 2013). The research aims to show that this assertion from entrepreneurs will be greater, given the level of social capital to which they are exposed to. Hence, the decision to invest in the financial markets will be taken depending on the previous experience of the investor in their personal capacity, the advice of their network, and the level of trust which exists.

Entrepreneurs are also likely to experience very mixed emotions when making decisions, which adds to the uncertainty (Podoyntsyna et al., 2012). As mentioned previously, the fear of the loss of money influences how some people make investment choices (Sahi et al., 2013). A high emotional impact of a decision can result in cognition being overpowered and the decision being made from an affective point of view. Investors will then use past performance as a benchmark to make a decision, whilst it is common investment knowledge that past performance cannot be used as an indication of any future performance (Sahi et al., 2013; Carhart, 1997). This past performance could also be communicated through social capital, and trust of entrepreneurs in their networks. This could increase their bias to take action based on this historical information.

Furthermore, due to perceptions and beliefs, a person is biased in their investment decision behaviour and will, by implication, decide to take a course of action influenced by the biases (Sahi et al., 2013). Research has shown that affect has an influence on decision-making (Isen, 1993; Isen & Labroo, 2003 cited in Baron, 2008). How impactful events are stored in memory will be affected by the individual's interpretation of the memory, and also be influenced by subsequent experiences, which will change the

initial interpretation (Arora et al., 2013). From this, the researcher proposes that experience would have an effect on the level of social capital, networks and trust an individual experiences, and consequently their decision-making.

2.7.4. Rationality

Decisions often differ from the most optimal rational choices because internal standards, which are used to support those decisions, are created based on a person's individual cognitive limitations or values and beliefs (Sahi et al., 2013). This is supported in other extant research, where it has been shown that affect can influence the specific strategies which are chosen when making decisions (Forgas & George, 2001 cited in Baron, 2008). For example, if one is in a positive frame, then it encourages a term known as satisficing, where the first acceptable option available is chosen. This would allow an entrepreneur to make a decision quickly and action it. As shown, this is often the environment in which the entrepreneur operates, as time is a limited resource. In contrast, should the person be in a negative frame, then they would encourage maximising, which is very different in that each available alternative is explored before the conclusion is made on the evaluated best option. This is often not feasible in the entrepreneurial environment as very little information might be available to support alternatives, and a judgment call needs to be made very quickly to take advantage of an opportunity (Baron, 2008). This theory is important as it further emphasises the implications that mood and feelings can have on the investment decision, rather than purely rational thought. And that mood and feelings could very easily be influenced by the levels of social capital and trust and the extent of an individual's network.

Extant research has shown that when involved in decision-making, an individual uses two parts of their brain - one where decisions are reached through reason, and the other which relies more on feelings and emotion (Cohen, 2005 cited in Baron, 2008). The more the emotion processing part of the brain was used in the decision-making process, the poorer the rationality of the decision, given the individual's own economic interests (Sanfey, Rilling, Aronso, Nystrom, & Cohen, 2003 cited in Baron, 2008). For that reason, one can conclude that affect can at times outweigh rational thoughts in other cognitive processes and decision-making (Cohen, 2005 cited in Baron, 2008). And affect has been shown to be closely linked to the primary constructs given the review of the literature of social capital, networks and trust.

Therefore, investors reviewing the same set of information could, and probably would, process that information differently given their experiences and hence behave

irrationally in their decision-making (Agrawal, 2012). The researcher aims to investigate this irrational decision-making as an outcome to the relative influence which social capital, networks and trust has on the individual, and whether it is more prevalent for entrepreneurs. It is necessary to understand what influence means in the realm of decision-making, which is explored in the following section below.

2.8. Influence and biases

2.8.1. Psychological biases

Psychological biases which influence the decision-making behaviour of individuals must be understood to provide insight into the behavioural undercurrents of financial investment decisions (Sahi et al., 2013). People are affected by basic psychological motives such as fear and greed and these impact decisions, which lead individuals to options that are aligned with their personal motives (Sahi et al., 2013). Decisions of individuals can be attributed to a tendency to resort to shortcuts due to constraints and the mental capacity to process unlimited information, and this leads to biases (Agrawal, 2012). Therefore, in order to understand influence, the researcher believes that a review must be undertaken of the various biases which drive the influential factors in decision-making. The researcher will also further demonstrate how these psychological biases are linked to the primary constructs of social capital, networks and trust.

The flaws of an investor's mind are not revealed through biases, but rather the design of the investor's mind, where the biases provide a lens into the decision maker's thought process (Sahi et al., 2013). How someone makes sense of a decision is to a large extent linked to the emotions and motivations of that individual (Arora et al., 2013). This is related to the influence of affect on the investor. Biases, with reference to entrepreneurs, should not be viewed negatively or positively. Rather they should be regarded as objective and used to identify the decision processes and thoughts, which lead to alternate perceptions of opportunities – whether successfully exploited or not (De Carolis & Saporito, 2006). Therefore, the environment in which the individual makes a decision, influenced by their network, and given the levels of social capital and trust, is underpinned by the personal biases which the individual holds.

Interestingly, individuals have a natural tendency for self-deception as a defence to preserve their reputation against innate weaknesses to allow them to better fit into society (Montier, 2002 cited in Sahi *et al.*, 2013). This point is made considering the researcher's review regarding the tight networks in which entrepreneurs operate and the social capital which develops. This means that an entrepreneur's biases will be shaped by their reality and standing in their network. Another risk to consider is that

strong positive affective reactions can lead entrepreneurs to get involved in ventures prematurely without proper due-diligence or consideration of the measurable risks. This is because the entrepreneur actually becomes more susceptible to biases such as overconfidence (Baron, 2004; Busenitz & Arthurs, 2006 cited in Baron, 2008). The researcher proposes that overconfidence is a powerful bias which develops as a result of the primary constructs.

The result which is explored in this research is the possibility that the entrepreneur will rely more on their biases and therefore could be open to greater levels of influence, especially when one factors in the impact of social capital, networks and trust. Hence, it is proposed that entrepreneurs will have higher levels of social capital and trust and stronger networks than non-entrepreneurs. The additional major biases which entrepreneurs and investors are both prone to are discussed below.

2.8.2. Emotions and feelings

A person's current mood will determine how they process information and then at a later time, how specific information is retrieved from memory (Baddeley, 1990; Eich, 1995 cited in Baron, 2008). Baron (2008) goes on to conclude that a person's mood could be seen as a point of reference from which information will be recalled. If an individual is more enthusiastic, with reference to their feelings and emotions, this can result in a positive reaction from stakeholders and has been linked to persuasion (Hatfield, Cacioppo, & Rapson, 1994; Terry & Hogg, 2000 cited in Baron, 2008). As discussed previously, greater levels of affect are present in environments where social capital is high, and influences decision-making.

The influence of affect on cognition linked to creativity can be seen through the current research, which shows that individuals who in general are experiencing positive emotions and feelings, will tend to be more creative (Estrada, Isen, & Young, 1997; Isen, 2000 cited in Baron, 2008). Furthermore, it has been found that opportunity recognition, which is vital in the entrepreneurial sector, has been significantly linked to creativity. Given that entrepreneurship is a creative process, this could be linked as a key ingredient in developing meaningful social capital for the entrepreneur (Anderson & Jack, 2002). Creativity produces an environment of nonconformity and is important to the entrepreneur in developing original innovations and challenging the status quo (Goel & Karri, 2006).

The feelings and emotions (or affect) experienced by an individual result in the tendency of that individual to rely further on heuristics. Research goes on to explain that the said individual or entrepreneur will then fall back on activities which brought

him or her success and a positive affect previously; specifically when the entrepreneur is dealing with a new venture with many unknown variables (Baron, 2008). Therefore the emotions and feelings of the individual must be taken into account for a better understanding of social capital, networks and trust.

2.8.3. Overconfidence and control

To build on the above, a sense of hope and positivity is created through a perception of internal control (Hayek, 2012). Positive illusions can quickly lead to several biases such as optimism, overconfidence, illusion of knowledge and control, and self-control (Sahi et al., 2013). As discussed, individuals will tend to justify the choices which they have made retrospectively, and this will then lead to a lesser impact of those past choices on the future choices of the individual (Golden, 1992; Huber & Power, 1985 cited in Arora et al., 2013).

Overconfidence occurs when investors do not review their assumptions and they ignore new meaningful information after their decision has been made. The assumptions are treated as fact and the true risks are not quantified (De Carolis & Saporito, 2006). This points directly to social capital and networks, where knowledge is shared in a potentially limited pool and therefore drives overconfidence and a higher level of trust in investors, who believe that they have greater control over their decision than reality actually provides. This is why it is argued that overconfidence causes people to overestimate their ability to control events, overestimate their knowledge and undervalue risks (Kahneman & Riepe, 1998). This reinforces the proposition that entrepreneurs will differ to non-entrepreneurs, given the primary constructs, due to higher levels of overconfidence.

People create an illusion of control when they overestimate the extent to which they can affect the outcome of particular situations (Duhaime & Schwenk, 1985 cited in De Carolis & Saporito, 2006). When questioned, people would express their own probability of success to be higher than what would be objectively measured, which is a result of the fact that people will only focus on information which supports their own opinions, while ignoring contradictory information (De Carolis & Saporito, 2006). This is supported in Grieco (2012) where it is highlighted that entrepreneurs are affected by cognitive biases and therefore feel that they have a substantially better chance of success in the same industry or similar business. This indicates the importance of social capital, networks and trust for the entrepreneur and why this study also investigates potential demographic predictors of these constructs, shedding more light

on these predictors, as well as to ascertain whether they are more prevalent in entrepreneurs.

Risk perception has also been related to over-confidence and illusion of control in previous empirical research (Simon et al., 1999 cited in De Carolis & Saporito, 2006). The theory of planned behaviour states that the behavioural intentions of an individual are influenced by their perceived level of control (Hayek, 2012). As the literature in the previous sections indicates, entrepreneurs often operate in dynamic environments where the perception of what can and cannot be controlled, could have a quantifiable effect on the success of the venture (Hayek, 2012).

2.8.4. Representativeness and self-efficacy

When individuals make decisions based only on a limited amount of information sources, they fall victim to representativeness (Kahneman & Tversky, 1971). Their focus on small samples leads to the potential of serious biases. This is compounded by research which shows that people remember successes more readily than failures (Golder & Tellis, 1993 cited in De Carolis & Saporito, 2006). As previously discussed, it is particularly important to be aware of this with respect to entrepreneurs, as they will often operate in closed environments with small trusted networks.

Self-efficacy is an important concept as it represents an individual's perception of their control and ability to successfully complete a task (Hayek, 2012). People who have a high self-efficacy and engage in counterfactual thinking do not undermine their self-esteem (Arora et al., 2013). When related to entrepreneurship, it is likely that the relationship between entrepreneurial self-efficacy and counterfactual thinking is in line with that individual's locus of control (Arora et al., 2013). This makes the decision process of an entrepreneur in the context of social capital, networks and trust all the more fascinating and valuable to explore further.

2.9. Conclusion

2.9.1. Entrepreneurs

Entrepreneurs do not do business as usual, due to the varying environments in which they need to operate and how they need to be able to take advantage of various opportunities. By having to create these opportunities themselves, entrepreneurs might feel hesitant to trust an organisation to manage their wealth, which is the direct result of their own efforts. Further investigation should therefore be undertaken as to how entrepreneurs perceive their environment with respect to social capital in the context of their networks, and this should allow for better education of entrepreneurs' decision-

making and when they should be encouraged or cautioned (Hayek, 2012). This literature emphasises the

The beliefs which entrepreneurs have in the controllability of a situation will influence their perceived risk of that situation (Hayek, 2012). Hayek (2012) goes on to state that the unrealistic control belief predisposes an individual to engage in behaviours which are doomed to fail. Hence, individuals could go so far as to distort reality to realign it with their beliefs (Zuckerman *et al.*, 2004 cited in Hayek, 2012). Baron (2008) states that it would seem essential that affect (emotions and feelings) be further investigated as a key variable to understand the cognitive process of entrepreneurs, and as the literature has indicated, affect is closely linked with the primary constructs of social capital, networks and trust.

It is essential to understand the motivations, emotions and goals of an individual within the context of the situation, in order to understand cognitive processing and outcomes (Arora *et al.*, 2013). The researcher believes that an exploration into the way investors behave when considering the social capital, which is developed through their networks and built on a level of trust, would prove valuable.

2.9.2. Decisions

Entrepreneurs, because of the highly competitive, uncertain environment in which they operate, have the propensity to make decisions with limited information, where generalisations and heuristics can affect the individual's judgment of risk (Baron, 1998; Busenitz & Barney, 1997 cited in De Carolis & Saporito, 2006). Research has also shown that when individuals are given an extensive set of choices they are less likely to make a decision than when faced with fewer choices, specifically when they are inexperienced in that field. This is known as the paradox of choice and can lead to "decision paralysis" where no choice is made at all (Kida, Moreno, & Smith, 2010). Given how complex the investment environment is in the financial markets, this is an issue which the researcher has found common when having discussions regarding the personal portfolios of potential investors. Related to the uncertainty facing decision-making, it is not practical to develop a routine process, as information requirements are difficult to anticipate in advance (Grieco, 2012). One can thus conclude that entrepreneurs often rely on their own experience and personal heuristics when making decisions. Taking into account the extant literature, this would suggest that entrepreneurs would be more prone to rely on their networks which comprise of levels of social capital and trust.

With a vast amount of information available in the market on various investment solutions, prospective investors will tend to rely on heuristics to make decisions as they cannot analyse all the information effectively (Sahi et al., 2013). As shown above, if they do not do this, they put themselves in a position where they might not make any decision at all. Here the role of the professional investment advisor is key, as the advisor will need to present the investor with the most appropriate solutions to aid them in their decision-making. However, one of the objectives of the research is to investigate whether the influence of social capital, networks and trust prove to be critical in this decision-making process, especially in the case of the entrepreneur.

Common biases in decision-making are optimism bias, loss aversion, regret aversion, representativeness bias, anchoring bias, framing effect, self-control, mental accounting and overconfidence bias (Sahi et al., 2013). Research indicates that the most prevalent biases when it comes to an entrepreneur's perception of risk are overconfidence, illusion of control, and representativeness (Busenitz & Barney, 1997; Palich & Bagby, 1995; Simon et al., 1999 cited in De Carolis & Saporito, 2006). These biases and heuristics need to be considered at all times when considering the psychological factors with reference to the cognition of entrepreneurs and how they are influenced. It is important to note that when considering biases, they should not simply be viewed in isolation as several may be active simultaneously (Agrawal, 2012). These biases need to be factored as elements which affect the primary constructs and drive decision-making.

We exist in an environment which is changing rapidly and the access to information is swift and efficient. Hence entrepreneurs are able to undertake their own analysis of the financial markets and will often be influenced by their own biases and perceptions when making investment decisions (Hayek, 2012). This reinforces the case for further investigation made in 2.9.1. with respect to the entrepreneurs' perception of their environment (Hayek, 2012). The reliance on social capital networks should also be reviewed in line with investment decisions and the potential influence on those decisions. The researcher proposes that better understanding of how biases affect the investment decision-making process of entrepreneurs will allow for improved appropriateness of advice in the wealth management industry.

2.9.3. Social capital, networks and trust

The research is relevant in that the extant literature calls for future research to "test the relationship between the dimensions of social capital, such as trust and other cognitive biases" (De Carolis, Litzky, & Eddleston, 2009. p 540). De Carolis et al. goes on to

suggest that future studies should also explore the extent to which “trust (or the lack of trust) may influence the relationship between network characteristics and cognition” (De Carolis, Litzky, & Eddleston, 2009. p 540). The extant literature highlighted in this review illustrates the linkages between the primary constructs of social capital, networks and trust. The researcher thus proposes that these linkages should be investigated further in relation to potential predictors, which could affect and better explain the primary constructs as well as their prevalence for entrepreneurs and non-entrepreneurs.

Further, basic demographic predictors regarding individuals could provide insight into the levels of social capital, networks and trust and should be investigated. Through an analysis of the extant literature, these predictors include, amongst others, the investment experience of individuals, organisational membership and education.

Although networks and access to information can provide competitive advantages for entrepreneurs, the adverse effect and a key risk is that it may cause them to overestimate their own knowledge base (De Carolis & Saporito, 2006). A representativeness bias also becomes apparent as entrepreneurs attach a higher value to the in-depth information they receive from their trusted network, and the result is that they use fewer sources of information in decision-making (De Carolis & Saporito, 2006). The investment universe and interaction of individuals with the market is a relatively new occurrence considering human development over the ages, and so it should not be surprising to find that people are ill-adapted to this new environment (Beckman, Chen, DeAngelo, Smith, & Zhang, 2011). Therefore the reliance for all investors on social capital, networks and trust would not be surprising. The researcher also proposes that the influence of social capital, networks and trust should play a role in the investment decision of the individual.

It is important that entrepreneurs recognise that social capital may affect their feelings of control and risk and ultimately have an influence on their decision-making (De Carolis et al., 2009). The research therefore aims to create a better understanding of the role of social capital, networks and trust in investor decision-making, with a focus on the entrepreneur and the environment in which they operate.

Chapter 3: Research questions and hypotheses

The research questions have been developed given the literature review and the main themes which have been highlighted for further investigation.

3.1. Research questions

3.1.1. Research question 1

Do entrepreneurs have higher levels of social capital, networks and/or trust than non-entrepreneurs?

3.1.2. Research question 2

Do individuals who invest in the financial markets have higher levels of social capital, networks and/or trust than those that do not?

3.1.3. Research question 3

What effects on social capital, networks and/or trust do the following demographics have: age, gender, years of work experience, years at their current organisation, years in current industry, years investing in the financial markets and organisational membership?

3.1.4. Research question 4

Do age, gender, years of work experience, years at their current organisation, years in current industry, years investing in the financial markets, organisational membership, networks and/or trust predict social capital?

3.1.5. Research question 5

Do age, gender, years of work experience, years at their current organisation, years in current industry, years investing in the financial markets, organisational membership, social capital and/or trust predict networks?

3.1.6. Research question 6

Do age, gender, years of work experience, years at their current organisation, years in current industry, years investing in the financial markets, organisational membership, social capital and/or networks predict trust?

3.2. Hypotheses

3.2.1. Hypothesis 1

Entrepreneurs do have higher levels of social capital, networks and/or trust than non-entrepreneurs.

3.2.2. Hypothesis 2

Individuals who invest in the financial markets have higher levels of social capital, networks and/or trust than those that do not.

3.2.3. Hypothesis 3

Different demographics (age, gender, years of work experience, years at their current organisation, years in current industry, years investing in the financial markets and organisational membership) have an effect on social capital, networks and trust.

3.2.4. Hypothesis 4

The predictors of social capital are age, gender, years of work experience, years at their current organisation, years in current industry, years investing in the financial markets organisational membership, networks and trust.

3.2.5. Hypothesis 5

The predictors of networks are age, gender, years of work experience, years at their current organisation, years in current industry, years investing in the financial markets, organisational membership, social capital and trust.

3.2.6. Hypothesis 6

The predictors of trust are age, gender, years of work experience, years at their current organisation, years in current industry, years investing in the financial markets, organisational membership, social capital and networks.

3.3. Conclusion

The researcher postulates that entrepreneurs, through the development of social capital and trust in their networks, will be influenced to a greater extent by these primary constructs than non-entrepreneurs. Therefore, there should be a difference between entrepreneurs and non-entrepreneurs when considering the primary constructs, with them being higher for entrepreneurs.

The literature has shown that trusted networks have a high impact on the decision-making and the behaviour of the entrepreneur. These research questions have been posed to understand whether the influence of the networks, social capital and trust, which has been generated in this environment, expand to decisions regarding investing in the financial markets in the entrepreneur's personal capacity, and are not just specific to the entrepreneur's sector or industry.

Further, research questions are posed to assess what variables could effect and predict the presence of social capital, networks and trust and the connectedness the primary constructs have with each other. This would help gauge the presence of the primary constructs in the investment environment. It would also allow for better identification of situations where one should be cognisant of the likely affect the primary constructs could have on the investment decision of an individual. This supports the aim of the research where a better understanding of the influential factors in investment decision-making adds value to the financial industry as well as the potential investor.

The above questions are motivated from the gaps identified in the literature and will aid in better understanding the decision-making process of an entrepreneur in respect to investing in the financial markets. The follow section discusses the methodology of this study.

Chapter 4: Research Methodology

4.1. Introduction

The purpose of the research was to ascertain a better understanding of the decision-making of investors given the primary constructs of social capital, networks and trust. Further investigation was done to reveal whether the influence of the primary constructs are more prevalent with entrepreneurs. Analysis was also carried out to shed light on the potential predictors of each of the primary constructs.

The literature review provided a detailed overview of the current academic understanding of the various constructs which the researcher aims to evaluate.

This chapter is dedicated to discussing the research methodology and discusses each of the following aspects in more detail below:

- Research design and method
- Research population, unit of analysis and sample
- Research measurement instrument
- Research data gathering and analysis
- Research assumptions and limitations

4.2. Research design

The researcher adopted a deductive research approach where tests were conducted based on the primary constructs, taking into account a review of the literature and the proposed hypotheses. A quantitative and cross sectional design was adopted in an explanatory study which investigated the causal relationships between key variables (Saunders & Lewis, 2012). The research could therefore be seen as a quasi-experimental design.

The reasons for the decision to use quantitative research were because the research design was positioned to understand the causal links given in the research questions. Further, the results were objective as the researcher was an uninvolved observer. The quantitative research required a large sample so that the results could be generalizable (Zikmund, Babin, Carr, & Griffin, 2009).

The survey strategy allowed for the behaviour of the sample of respondents to be observed and described with an experimental feature to shed light on the causal links between certain variables (Zikmund et al., 2009; Saunders & Lewis, 2012). The study

was done in a cross-sectional research design where the information gathered was at a particular point in time (Saunders & Lewis, 2012).

The hypotheses could therefore be tested through the quantitative data which was collected and then processed through a statistical analysis into meaningful information (Zikmund et al., 2009).

4.3. Sample

The target population was individuals in South Africa who were employed. The population included both entrepreneurs and non-entrepreneurs. The sample was taken from this population.

The reason for this population is that the researcher wanted to design a study which incorporated a broad spectrum of potential respondents for analysis. The role of an entrepreneur in South Africa is key to the success of the country and can take on many forms (Luiz & Mariotti, 2011). Therefore the researcher did not want to exclude potential individuals who could have added value to the research analysis.

4.3.1. Unit of analysis

The unit of analysis for this research was individual entrepreneurial and non-entrepreneurial people who were employed or had been employed (and are now retired) in South Africa. These were classified as investors. The sample included people who traditionally would not be seen as investors as this gave the researcher the ability to compare social capital, trust and networks against individuals who were not invested in the financial markets against those who were.

4.3.2. Sampling method and size

Non-probability sampling was used where respondents were selected from various parties' extensive investor networks and contacts. It was not possible for the researcher to have a complete list of the population and therefore convenience or personal judgment had to be used (Zikmund et al., 2009; Saunders & Lewis, 2012).

This was done through purposeful sampling of a homogenous group of individuals defined as investors in South Africa. The sample frame was therefore purposefully based on constraints which the researcher faced and pragmatic considerations, taking into account the objective of gathering the necessary dataset. It was therefore saturated, in that the researcher defined to whom the survey was going to be sent to, and it was then sent to each one of those potential respondents. The researcher used personal databases and also requested access to databases which included investor

centres and associations, such as the Innovation Hub in Pretoria. The Innovation Hub sent the researcher's email request, for completion of the survey, to 150 known entrepreneurs from their database.

The final consideration is the size of the sample. Given that a quantitative study was concluded, the larger the sample, the more precise the data would be normally distributed and thus the smaller the risk of random sampling error or skew distributions. According to the central-limit theorem, the distribution of the sample means should approach a normal distribution. The size of the population is not a concern, but rather the variance of the individual investors, to ensure that the sample is as representative as possible. This variance, taken into account with the magnitude of the acceptable error and confidence level required, were key in determining the sample size (Zikmund et al., 2009). The researcher therefore aimed to have a minimum representative sample of between 150 and 250 usable respondents.

4.4. Data collection tools

A questionnaire was used to collect the primary data for the study. To accomplish this, a survey strategy was employed with some experimental elements. This allowed for the testing of key variables highlighted through the literature that has an effect or involved the focal constructs of social capital, networks and trust. These were the dependent variables and were manipulated by the independent variables or predictors. Data was also collected to measure whether there was any differences between entrepreneurs and non-entrepreneurs when it came to the key constructs.

4.4.1. Validity and reliability

The test for reliability was Cronbach's alpha, which at 0.902 indicated strong reliability, this demonstrating excellent internal consistency. This test remains one of the most widely used and important tests for reliability (Peterson, 1994). The deletion of only one question would slightly raise the measure to 0.911, which the researcher deemed unnecessary given the structure of the questionnaire.

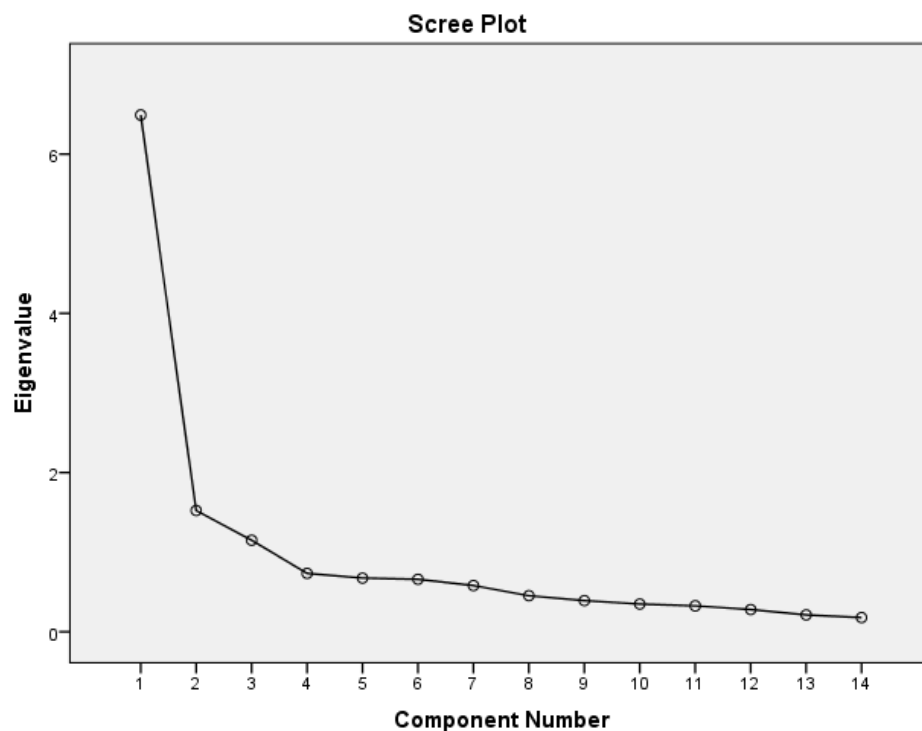
It was important that reliability of the newly created constructs be tested, ensuring that the required information be measured accurately. The dependent variables for this study, given research questions four to six, were: social capital, networks and trust respectively. Similarly, the independent variables for this study were: age, gender, years of work experience, years at their current organisation, years in current industry, years investing in the financial markets and organisational membership in each research question.

An exploratory factor analysis was done as a test for construct validity on the 14 Likert scale questions. The factor analysis was based on a correlation matrix. An interval scale was used in the analysis. The significant level was done on a two-tailed test with $\alpha = 0.05$. A Kaiser-Meyer-Olkin (KMO) test was run to measure sampling adequacy. This was 0.882, and above the minimum requirement of 0.6, which shows that the variables are more factorable. The factor analysis proved construct validity to the statistics.

The researcher then established which main constructs were present in the data set. The below scree plot confirmed that there were 3 main constructs and this was supported by Kaiser's criterion, which had three factors with eigenvalues, which were greater than one.

Note the below the change in the "cliff face" and the flattening of the curve after three components.

Figure 1: Scree plot diagram



The below confirms this with the presence of three constructs where the eigenvalues are over one:

Table 1: Eigenvalues establishing constructs

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	6.492	46.371	46.371
2	1.523	10.879	57.25
3	1.15	8.216	65.466

The researcher then established, through the rotated component matrix, the three main constructs, which were loading on each construct and therefore enabling the formation of a definition per construct. Here the higher loading indicated the constructs as shown below (secondary loadings with a factor higher than 0.4 were ignored to avoid ambiguity):

Table 2: Rotated component matrix indicating constructs

Rotated Component Matrix^a

Question number	Component		
	1	2	3
16		0.634	0.38
17			0.827
18	0.304	0.754	
19		0.819	
20	0.527	0.488	
21	0.386	0.664	
22			0.775
23	0.643		0.367
24	0.672	0.346	
25	0.581		0.532
26	0.771		
27	0.825		
28	0.734	0.345	
29	0.721	0.405	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalisation.^a

a. Rotation converged in 7 iterations.

The constructs were then classified as follows according to the question themes:

Table 3: Three primary constructs depicting questions from survey which relate to each construct

Construct	Related questions
1. Social Capital	20. You are able to achieve better personal investment performance due to your networks. 23. When starting a new business venture or launching/ investigating a new innovation, you would seek advice from a trusted party in your network. 24. You are able to achieve better business performance due to your networks. 25. You would invest in a venture based on the advice of a trusted party in your network. 26. Your involvement with trusted networks or organisations helps facilitate new ventures. 27. Your involvement with trusted networks or organisations helps facilitate new investment opportunities. 28. Your involvement with networks or organisations provides a forum to discuss new business ideas. 29. Your involvement with networks or organisations provides a forum to discuss new investment ideas.
2. Networks	16. Your involvement in the organisation(s) provides you greater access to information. 18. Your involvement in the organisation(s) provides you with greater access to business opportunities. 19. Your involvement in the organisation(s) provides you with greater access to intellectual capital. 21. Your involvement in the organisation(s) provides a forum for the discussion of personal investment opportunities or options.
3. Trust	17. You feel that there is less of a need to verify information received from a trusted party in your network. 22. You consider information received from a trusted party in one of your organisations or networks as reliable.

From the above, it should be noted that there are only two questions which relate to trust. This could limit the interpretation of the data.

4.4.2. The questionnaire

Structured questions posed in a questionnaire limit the number of responses and therefore can be used to test the hypotheses (Zikmund et al., 2009). The questionnaire

was divided into three main sections. Section one aimed to establish whether the respondent was an entrepreneur or not, through a series of six questions, which is discussed in more detail below.

4.4.2.1. Defining the entrepreneur

Given the type of study and that many of the respondents were not known to the researcher, it was important to evaluate whether each respondent was an entrepreneur or not. This determination was operationalised with the selected definition of an entrepreneur, which was stated in the questionnaire - Entrepreneurs are defined as “individuals who recognize and exploit new business opportunities by founding new ventures” (Baron, 2008; Shane & Venkataraman, 2000 cited in Podoyntsyna, Van der Bij, & Song, 2012).

The first six questions in the questionnaire related to entrepreneurship. On analysis, the researcher used five of the six questions (question 5 was removed) to determine whether the individual respondent was an entrepreneur or not. With “Yes” being coded as “1” and “No” as “2”, a respondent was considered an entrepreneur if they scored a total of less than nine. Non-entrepreneurs were those respondents who scored nine or ten. For example, for a person to be considered a non-entrepreneur, they would have to answer “No” to at least four out of the five considered questions. This was as per the design of the qualifying questions, as an answer of “Yes” to more than one question, given the type of questions asked, would have resulted in the respondent meeting the definition of an entrepreneur for the purposes of this research.

These scores therefore took into account the individual questions asked. As a result, of the 199 useable respondents, 161 were classified as entrepreneurs, leaving the remaining 38 as non-entrepreneurs. The dominance in entrepreneurs being over 80% of the sample was a limitation in respect that the comparisons between entrepreneurs and non-entrepreneurs might not have been truly representative given the small sample size of the non-entrepreneurs.

Additional statistical tests were conducted with the aim of measuring any significant difference between entrepreneurs and non-entrepreneurs against the constructs developed and the descriptive variables.

4.4.2.2. Demographic questions

The second section was demographic questions which were of interest to the researcher from a descriptive and predictive perspective. These questions related to age, gender, years of work experience, years at their current organisation, years in

current industry, years investing in the financial markets and organisational membership. The research was designed to investigate whether there were any significant relationships between these descriptive variables and the core constructs. Some of the variables such as gender were selected for informative purposes. Others which involved investment experience, work experience (including age) and organisational membership were selected given the learnings from the literature.

4.4.2.3. Core questions

The main constructs were derived from the final section of the questionnaire and provided the platform for discussions regarding influential factors. This final section consisted of 14 questions which were the core of the questionnaire with respect to measuring statistical inference. This final section was created through the adaption of previous questions posed by researchers which were identified in the literature review process:

Table 4: Referenced sources of journals for the development and adaption of questions for the questionnaire

Reference	Applied to questions	Notes
(De Carolis et al., 2009)	15, 16, 18, 19, 21, 25, 26, 27, 28, 29	This was a core article which analysis social capital with respect to entrepreneurs and their ability to undertake new ventures. The methodology in the journal was outlined in detail and a sample of the questions, which they used in their questionnaire, was provided. These were adapted for the purposes of the research and most related to the constructs of social capital and networks.
(De Carolis & Saporito, 2006)	17, 22	Another core article which investigated entrepreneurs and their environments. Questions used in the methodology of this research were adapted to create the questions for the construct of trust.
(Claro & Laban Neto, 2009)	20, 24	This paper focuses on the impact of an advice network and social capital on the performance of employees in a large corporate. This provided additional questions which related to social capital.
(Elfring & Hulsink, 2003)	23	This journal discusses the value networks provide to entrepreneurial success and a single question was used to determine social capital.

The survey comprised of a Likert Scale which was used to measure the rate of how strongly respondents agree or disagree with certain statements (Zikmund et al., 2009). To create a representable range of options, a 7-point Likert scale was employed:

1. Strongly disagree
2. Disagree

3. Somewhat disagree
4. Neutral/Undecided
5. Somewhat agree
6. Agree
7. Strongly agree

The development of the scale and entire questionnaire was leveraged off tested surveys as shown in Table 4 above, which were gathered through the literature review process.

A process of content and face validity of the questionnaire was operationalised to ensure that there were no issues in answering questions. That would allow for the data to be properly interpreted, which is expanded on in the section (Saunders & Lewis, 2012).

See Appendix 1 under main Appendices for the full questionnaire as it was presented in SurveyMonkey® and 4.12.2 Appendix 2 for the source of the relevant questions and the structuring of the questionnaire.

4.4.3. Pre-testing the questionnaire

The questionnaire was pretested with the researcher's supervisor, close friends and family members who qualified for the population. A total of five pre-tests were done sequentially to ensure a progressive improvement of the questionnaire. The results were simply preliminary and not included in the final study, but served to assist the researcher in ensuring that the questionnaire was structured in a clear manner where the potential respondents would not misinterpret any of the information and there would be no ambiguity or bias (Zikmund et al., 2009).

The individuals chosen to pre-test the survey were also experienced in understanding research methodology. The supervisor is permanent faculty at the business school and has many years of experience in supervising research papers. Another individual studied English and psychology at university and has completed a thesis. Another individual has done a Master's degree at a top European business school. Another individual performs editing and publication duties in her profession. These individuals therefore provided valuable feedback and expertise on the structure of the questionnaire, including the preamble and email.

The feedback consisted of the rewording of certain questions to avoid ambiguity, deletion of unnecessary questions and the adding of introductions for certain sections to ensure that the respondents had a clear understanding and the correct interpretation

of the intended purpose of the questionnaire. The researcher was also able to ascertain the time which was required to complete the questionnaire, which was decreased to five minutes from 15 minutes. This contributed to the face and content validity of the survey.

4.5. Data gathering process

Ethical clearance was obtained from the Research and Ethics Committee at the Gordon Institute of Business Science before any data was collected. See Appendix 1 for the approval letter.

A self-administered questionnaire was used to collect the primary data from the respondents. The questionnaire was distributed via the Web which is an effective and inexpensive channel of distribution and collection (Zikmund et al., 2009). Specifically SurveyMonkey® was used as the survey tool to create the survey and collect the data (www.surveymonkey.com).

The email sent to the prospective respondents contained a covering letter which succinctly aimed to outline the reason for the questionnaire without creating any initial biases for the respondents (Saunders & Lewis, 2012). The email had a link to the questionnaire in SurveyMonkey® where it was completed and the data was captured (See 4.12.1 Appendix 2 for an example of the email which was sent to respondents). The email was written in a manner which promoted the use of the psychological concept of reciprocation to attempt to receive a greater response rate from individuals as well as asking for assistance directly (Groves, Cialdini, & Couper, 1992). Importantly, respondents agreed to provide their consent for the study and the researcher confirmed that the respondents would remain anonymous.

The questionnaire was sent out to the researcher's network which comprised 226 potential respondents. The researcher then also used a key relationship with a former business development manager at the Innovation Hub who, as mentioned previously, then sent it onto his network of 150 entrepreneurs. In addition, the researcher requested that a family member send it to her network of corporate employees, of which there were 20 potential respondents. Therefore, the survey was directly sent to 396 individuals. The email requested the respondents to send it on to their contacts or network. It is therefore not clear as to how many individuals received the survey in totality. This meant that the response rate based on the known number of respondents was 55.3% and it was 50.25% for those respondents that fully completed the survey and formed part of the final dataset for analysis.

The researcher also aimed to keep the questionnaire short, with a completion time of approximately five minutes, to encourage a higher response rate. This was also done taking into account the time constraints many employed individuals find themselves under. The researcher was also aware of the high level of email communication people receive on a daily basis and did not want to over impose on the potential respondents' time.

4.6. Data analysis

4.6.1. Data preparation

Once the data was collected by SurveyMonkey[®], the researcher exported the results of the survey into Microsoft Excel. The researcher then scrutinised the data for invalid responses and to ensure the import of the data was done successfully. There were no further exceptions after the 20 partial respondents' data were deleted.

SPSS was the statistical tool used to analyse the data. The data was appropriately coded so that the relevant tests could be run. It was then possible to represent the data in both tables and graphs to allow for clear description of the findings. The basic approach was to examine the relationships through the analysis of the statistics which were tested and inferred whether there were any meaningful patterns or trends (Saunders & Lewis, 2012). The core constructs of social capital, networks and trust were measured and tested against the descriptive variables. The collection of the scaled responses provided the data to conduct the research.

4.6.2. Assumptions

It was assumed that the questionnaire would be passed on by primary respondents to individuals who would qualify for the population. In some cases, certain respondents were sent personal emails in which they were requested to send the survey on to their known network. Therefore an assumption was made that should the survey have been passed on, it would have been to potential respondents who qualified with respect to the target sample.

4.7. Limitations

4.7.1. Introduction

The researcher recognised throughout the entire process the need to develop a robust and fit for purpose research design to properly address the research questions posed. Systematic errors are caused through a flaw in the research design and it is therefore imperative that enough time and consideration was given to the research design and its

execution (Zikmund et al., 2009). All research, including this study, has its limitations and it is only proper to discuss these limitations openly. This will better inform other researchers so that they can improve on them in the future and appreciate how far they can generalise the findings to other populations.

4.7.2. Resource limitations

The researcher had to contend with resource limitations. Considerations had to be made with respect to access to the population, where elements of convenience and judgment sampling were used. This also took into account monetary limitations as the researcher did not have a budget to employ or allocate funds to research professionals who could have provided access to a larger sample and therefore increase the representativeness of the sample with respect to the population. Time was also a key limitation in the collection, analysis and evaluation of the data as the research had to be completed by a deadline, while the researcher had to manage the time spent on the study with other responsibilities.

4.7.3. Design flaw limitations

Related to the design limitations of the study was the selection of the respondents to the questionnaire and whether they did in fact, in the required instance, meet the requirements of an entrepreneur or non-entrepreneur as defined for the purposes of the research. More research could have been done on the potential respondents to ascertain whether they were entrepreneurial or not. This could have resulted in a more evenly weighted target sample of entrepreneurs and non-entrepreneurs, which could have provided more representative results. Especially for non-entrepreneurs who were only approximately 20% of the sample.

The definition and classification of entrepreneurs could be viewed as a limitation as it was determined by the researcher in accordance with a widely accepted definition from extant literature. The definition was very broad with reference to what constituted an entrepreneur and allowed for many factors to be considered for entrepreneurship. This could have had an effect on the statistics which were done. Either a stricter definition could have been adopted or additional preparation could have been done in selecting the sample of respondents from which the data was collected.

Response error to the questions which determined entrepreneurship could have meant that the final calculation of entrepreneurship, and comparisons between entrepreneurs and non-entrepreneurs, was biased as there was an unequal group size. This could have affected some of the statistics and resulted in a bias.

The sample was limited to particular networks and contacts and therefore the sample might not have been fully representative of the population. A limitation of the sampling method used makes it likely that the networks accessed meant that investors could have been individuals similar to themselves (Saunders & Lewis, 2012). This is to be expected with the anticipated social capital which develops through networks in the entrepreneurial sector (Adler & Kwon, 2002).

Snowball sampling was also used to distribute the questionnaire to a larger audience in order to increase the potential number of respondents. Respondents receiving the questionnaire were asked to send it on to their networks and contacts where they deemed it appropriate. The researcher does not have any information to determine to what extent this might have taken place and to whom the respondents could have forwarded the email to. The limitation though, is that the respondents who did forward the questionnaire would more than likely select individuals who were very much like themselves, resulting in a very homogenous sample. This could be a further explanation for the high number of entrepreneurs in the sample (Saunders & Lewis, 2012).

Non-response error was also a concern, but was potentially reduced through the email sent to respondents to encourage them to complete the questionnaire. There was also the high likelihood that the respondent would know the person who sent the email to them. There were only 20 incomplete surveys from the data collected or a 9.1% incompleteness ratio. The completed portion of these surveys could have been included, but given this low ratio, the researcher decided to delete the partial respondents' data and only deal with the 199 respondents which were 100% complete. It is possible that useful information could have been lost from the deleted respondents, which could have been factored into the results.

Response bias may also occur when the respondents are required to answer scale type questions as they may be influenced by their previous answers and respond to questions with a certain slant (Zikmund et al., 2009). This could have occurred to some extent even when establishing the entrepreneur, given the high number of "Yes" answers to the defining questions. In the Likert Scale questions, respondents could not take the time to give each question due consideration and might slant towards one end of the scale. This could be confirmed when analysing the results and assessing the relevant means of the primary constructs.

Another potential issue with the Likert Scale was that it was assumed that the difference between the points was equal. For example, the difference in the strength of

feeling between “somewhat agree” and “agree” is assumed to be exactly the same as “agree” and “strongly agree” (Jamieson, 2004).

There were only two questions which made up the construct of trust. This could have had negative implications on the richness of the information which could have been drawn from the data. The research design should have taken this into account upfront and formulated more questions addressing trust.

Speaking of this, there was a limitation on the depth of the information, which could have been gathered from respondents through the use of a quantitative approach with a very short survey. The survey could have been designed to be more in-depth. There was also the potential to bring in a qualitative aspect to the study to enhance the understanding from individuals regarding the hypotheses.

The demographic data was very concentrated in certain areas (for example age), which therefore could mean that the findings are more applicable to these groups. The study could therefore be under representative of the general population.

Although the above limitations are relevant to this study, the quality data was obtained which allowed for a parametric study and provided insightful results, which the researcher has expanded on.

4.8. Summary and depiction of instruments used

4.8.1. Email sent to respondents:

Subject: Request for short questionnaire completion

Hi

I am a Masters student at the Gordon Institute of Business Science in Johannesburg and am busy with my final research report on the influence of social capital on investor’s financial decision-making.

Would you please assist me by following the link below to complete my questionnaire? Because your time is important, the questionnaire is short and should take you no longer than 5 minutes.

Link: <https://www.surveymonkey.com/s/stuartmilroy>

Should you wish to know more about my findings, please feel free to email me and I will make the results available to you once the study is completed.

Lastly, it would be greatly appreciated if you would please take a moment to forward this email to your contacts/network where possible.

Kind regards

Stuart Milroy

446121@mygibs.co.za

4.8.2. Questionnaire

Profession Questions – Establishing the Entrepreneur		
Nr:	Question:	Type of Question:
1.	Do you own or have an ownership stake in a business?	Yes/No
2.	Are you planning on starting your own business or getting involved in a business outside of your current role?	Yes/No
3.	Do you actively seek out business opportunities to create wealth or social benefits?	Yes/No
4.	Do you earn a source of income outside of your primary employment?	Yes/No
5.	Do you personally take financial risk with the goal of creating wealth?	Yes/No
6.	Do you consider yourself to be self-employed?	Yes/No

Demographics

These variables are included because of the need to specifically control the effect any of them may have on the variables of interest:

Demographical Information – About you		
Nr:	Question:	Type of Question:
7.	Age	Ranges [18-30], [31-40], [41-50], [51-60], [61 and older]
8.	Gender	Male or Female
9.	Education	Matric or lower, Diploma or Technical Degree, Bachelor's or Honours Degree, Master's Degree, PhD
10.	Number of years of work experience	Ranges [5 or less],[6-10], [11-15], [16-20], [More than 20]
11.	How many years have you been working at your current organisation?	Ranges [0-2], [3-7], [8 or more] years
12.	How long (in years) have you been working in the same industry?	Ranges [0-2], [3-7], [8 or more] years
13.	Have you previously, or are you currently invested in the financial markets?	Yes/No
14.	How many years of experience do you have in investing in the financial markets?	Ranges [0], [Less than 1], [1-2], [3-7], [8-15], [16 or more] years

Questions regarding the primary constructs and hypotheses			
Nr:	Question:	Type of question	Reference (adapted from)
15.	Do you belong to any business or trade associations, community or club, political, religious and alumni organisations and if so, how many?	Ranges [0], [1-2], [3-4], [5 or more]	(De Carolis et al., 2009)
16.	Your involvement in the organisation(s) provides you greater access to information	Likert Scale (1 = Strongly disagree; 7 = Strongly agree)	(De Carolis et al., 2009)
17.	You feel that there is less of a need to verify information received from a trusted party in your network	Likert Scale (1 = Strongly disagree; 7 = Strongly agree)	(De Carolis & Saporito, 2006)
18.	Your involvement in the organisation(s) provides you with greater access to business opportunities	Likert Scale (1 = Strongly disagree; 7 = Strongly agree)	(De Carolis et al., 2009)
19.	Your involvement in the organisation(s) provides you with greater access to intellectual capital	Likert Scale (1 = Strongly disagree; 7 = Strongly agree)	(De Carolis et al., 2009)
20.	You are able to achieve better personal investment performance due to your networks	Likert Scale (1 = Strongly disagree; 7 = Strongly agree)	(Claro & Laban Neto, 2009)
21.	Your involvement in the organisation(s) provides a forum for the discussion of personal investment opportunities or options	Likert Scale (1 = Strongly disagree; 7 = Strongly agree)	(De Carolis et al., 2009)
22.	You consider information received from a trusted party in one of your organisations or networks as reliable	Likert Scale (1 = Strongly disagree; 7 = Strongly agree)	(De Carolis & Saporito, 2006)

23.	When starting a new business venture or launching/investigating a new innovation, you would seek advice from a trusted party in your network	Likert Scale (1 = Strongly disagree; 7 = Strongly agree)	(Elfring & Hulsink, 2003)
24.	You are able to achieve better business performance due to your networks	Likert Scale (1 = Strongly disagree; 7 = Strongly agree)	(Claro & Laban Neto, 2009)
25.	You would invest in a venture based on the advice of a trusted party in your network	Likert Scale (1 = Strongly disagree; 7 = Strongly agree)	(De Carolis et al., 2009)
26.	Your involvement with trusted networks or organisations helps facilitate new ventures	Likert Scale (1 = Strongly disagree; 7 = Strongly agree)	(De Carolis et al., 2009)
27.	Your involvement with trusted networks or organisations helps facilitate new investment opportunities	Likert Scale (1 = Strongly disagree; 7 = Strongly agree)	(De Carolis et al., 2009)
28.	Your involvement with networks or organisations provides a forum to discuss new business ideas	Likert Scale (1 = Strongly disagree; 7 = Strongly agree)	(De Carolis et al., 2009)
29.	Your involvement with networks or organisations provides a forum to discuss new investment ideas	Likert Scale (1 = Strongly disagree; 7 = Strongly agree)	(De Carolis et al., 2009)

Chapter 5: Results

5.1. Introduction

This chapter provides the sample and results of the study, given the statistical analysis which was done as described in the previous chapter.

5.2. Description of the sample

The sample included 219 total respondents of which 20 were not valid due to the incompleteness of the complete survey by those respondents. Therefore the total number in the used sample was 199.

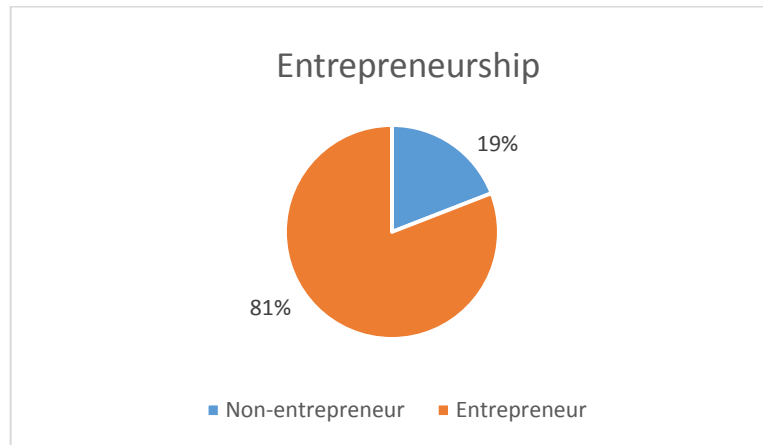
5.2.1. Descriptive statistics of the respondents

Frequencies were run on the following demographic data captured:

There was quite an overwhelming bias to respondents who were entrepreneurs (81%). This is because of the broad definition of an entrepreneur, which the researcher used as explained in the previous chapter, as well as the sample population to which the survey was distributed. The researcher expected this, as entrepreneurs were actively sought out through the research methodology and hence contributed to the high number of entrepreneurs. The researcher understood that this was not representative of the South African population as a whole as only 7% of adult South Africans are directly engaged in entrepreneurship (Herrington et al., 2012).

What is interesting though, given an analysis of the individual entrepreneurial questions, is that the number of individuals who are planning on starting their own business (69%) and those who actively seek out business opportunities to create wealth or social benefit (73%), is very high. This indicates the willingness to partake in entrepreneurial activity. Only 32% considered themselves to be self-employed though, indicating that there is the potential for more entrepreneurs to enter the market as self-employed business owners. Of the total sample, 51% of respondents had an ownership stake in a business which leads the researcher to conclude that several individuals have separate businesses which they are involved in while being employed. Refer to Figure 2 below.

Figure 2: Entrepreneurship



The majority of the respondents were between 31 and 40, male and had at least a bachelors or honours degree. Therefore, the findings from this study are most particular to this group and they could have the most to gain from the findings.

The respondents were also employed and educated with over 90% having a qualification higher than a matric level. The researcher felt confident, given the education level of the respondents that the interpretation of the statistics would be correct and would result in representative data being collected with low error levels. See Figures 3 to 6.

Figure 3: Age

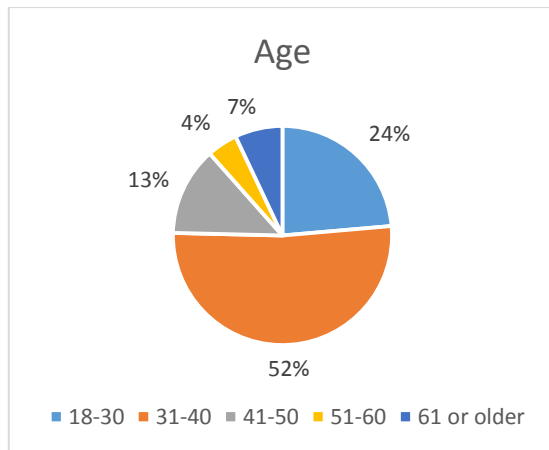


Figure 4: Gender

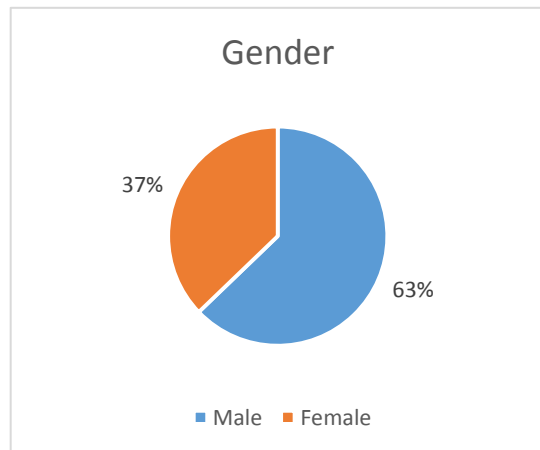


Figure 5: Education

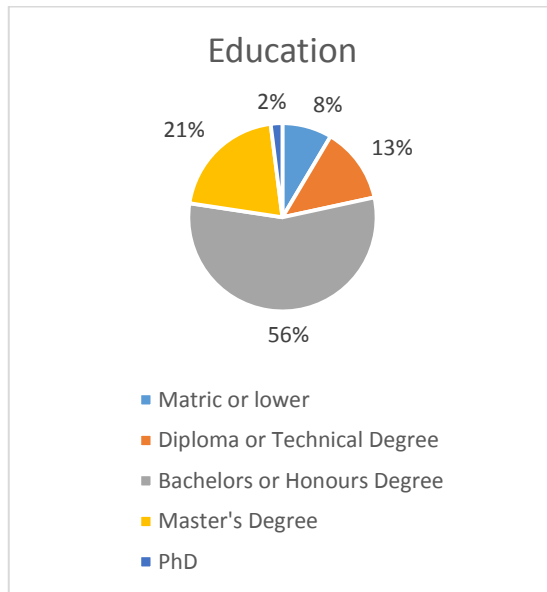
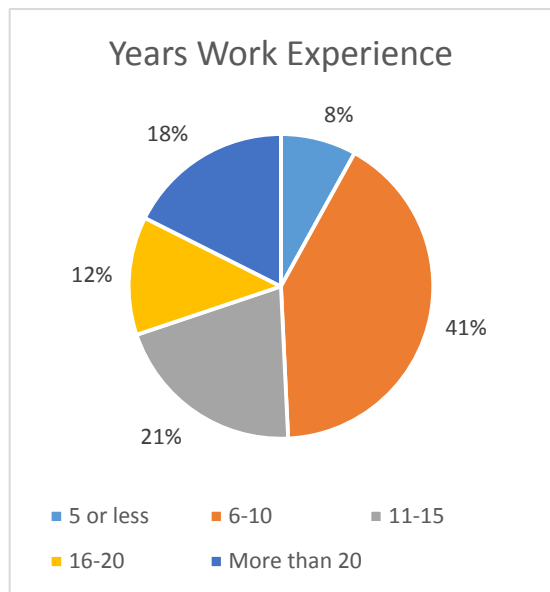


Figure 6: Years of work experience



The majority (92%) of respondents have been working for more than five years, which indicates that they have good experience of the working environment and are well positioned to provide an informative contribution to the study. Two thirds are in stable employment as they have been at their current organisation for more than three years with 90% of the total sample also being in the same industry for at least three years. See Figures 7 and 8 below.

Figure 7: Years at current organisation

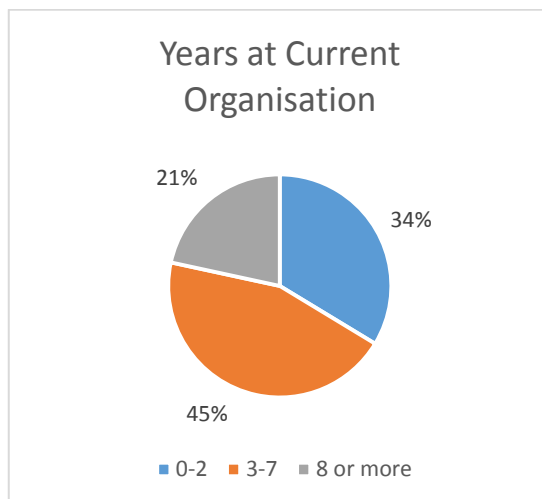


Figure 8: Years in current industry

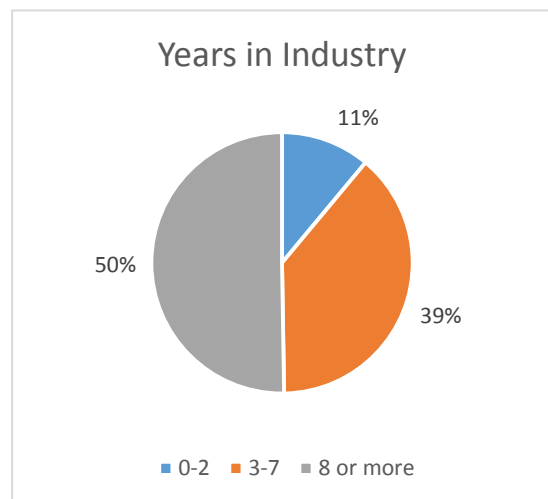


Figure 9 and 10 below show that the percentage of respondents who have not invested in the financial markets is exactly reflective of the percentage of respondents who have no experience in investing in the financial markets. Important to note is that the balance of 76% of the sample would have made decisions regarding their investments. This is relevant given the aim of this study, which is to better understand the factors which

influence investment decision-making in the context of the primary constructs. So, with more than three quarters of the sample having made investment decisions, the data can provide further valuable insights into those decisions.

Figure 9: Invested in the financial markets

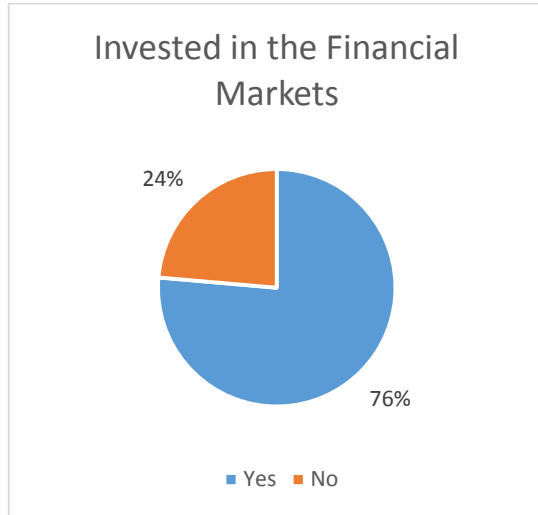
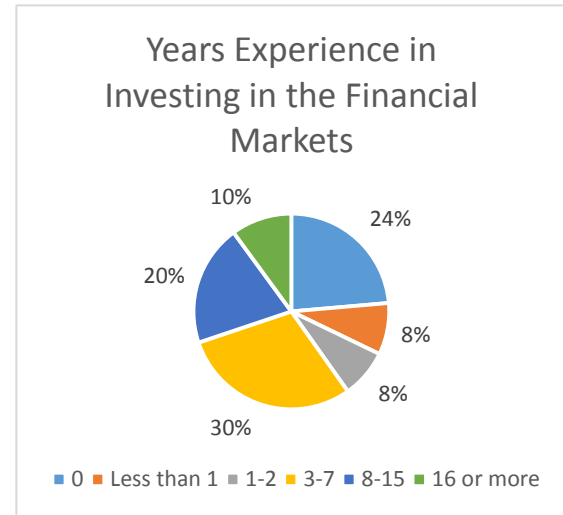
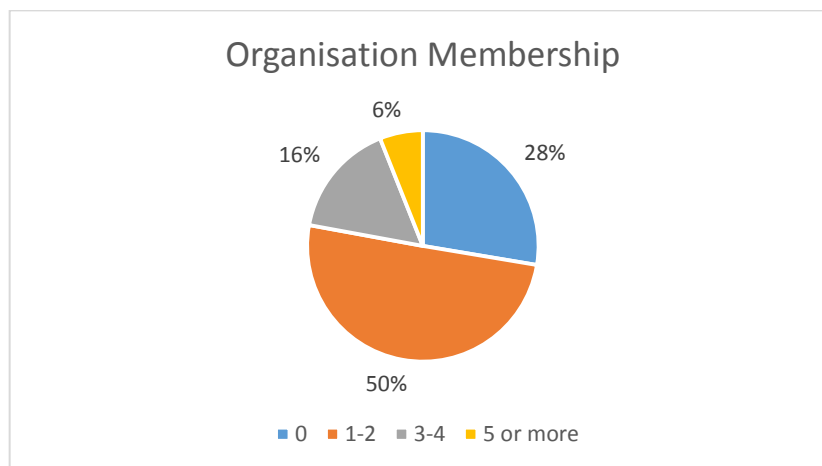


Figure 10: Years of experience in the financial markets



The majority of individuals belong to at least one organisation, which was important for the study in terms of the development of social capital, networks and trust. Although 28% do not belong to an organisation, they should still be considered to have an informal network through friendships and other relationships. See Figure 11 below.

Figure 11: Organisational membership



5.2.2. Descriptive statistics of the primary constructs

Certain reliability and validity measures have already been discussed in the previous chapter. Below further analysis has been done on the descriptive variables to interpret the results. The three primary constructs which were developed from the data and in line with the research hypothesis are social capital, networks and trust.

As shown below, the three constructs are normally distributed given that the skewness coefficients are within the range between -1 and +1. This allows for a parametric study. The ability to run a parametric study enables a variety of statistical tests which include T-tests, regressions and correlation analysis for a hypothesis about a mean (Zikmund et al., 2009).

The averages for the constructs are rather high given the maximum and minimum ranges. Responses for the three constructs vary across the full possible ranges for both social capital and networks (8-56 and 4-28 respectively), while for trust the range captured is from 3-14 where the possible minimum was 2. The means are closer to the maximum range, showing the researcher that the average response was positive with respect to the various constructs. A possible cause for this could have been due to the high number of qualifying entrepreneurs in the sample and one could possibly get a more neutral average with a more diverse sample where more non-entrepreneurs were included.

It can also be seen graphically and from the standard deviation statistic that the data is not widely distributed, that there is consistency in the results and that the observations all fall within two standard deviations of the mean (see Appendix 3).

Table 5: Descriptive statistics for social capital, networks and trust

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Social Capital	199	8	56	42.56	7.645	-.932	.172
Networks	199	4	28	20.97	4.511	-.831	.172
Trust	199	3	14	10.08	2.422	-.931	.172

Therefore the data collected allows for parametric tests to be done where assumptions can be made about the population with reference to the primary constructs.

5.3. Statistical results per hypothesis

5.3.1. Entrepreneurship

Research question 1: Do entrepreneurs have higher levels of social capital, networks and/or trust than non-entrepreneurs?

The means for entrepreneurs and non-entrepreneurs are very close. Table 6 below shows that the requirements of the T-test were met, being homoscedasticity, interval scale and random assignment. There is homogeneity of variance and therefore equal variances are assumed and this, along with the interval data, again indicates that parametric tests should be used. At a 5% confidence interval ($\alpha = 0.05$), it is shown that there are no significant differences. Even when dividing the significance by two, as would be the case for a one-tailed test, there are still no significant relationships. This applies to the research question which is directional in that the researcher aimed to determine whether the levels of social capital, networks and/or trust were higher in entrepreneurs than non-entrepreneurs. The group statistics show that there are very similar means and standard deviations for entrepreneurs and non-entrepreneurs (See Appendix 4).

Table 6: T-test for entrepreneurship

		Levene's Test for Equality of Variances		T-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper	
Social Capital	Equal variances assumed	0.194	0.66	-1.328	197	0.186	-1.828	1.376	-4.542	0.886
Networks	Equal variances assumed	0.426	0.515	-0.034	197	0.973	-0.028	0.816	-1.636	1.581
Trust	Equal variances assumed	0.075	0.785	0.978	197	0.329	0.427	0.437	-0.434	1.289

The conclusion, in this instance, is that there is no significant difference between entrepreneurs and non-entrepreneurs when it comes to social capital, networks and trust. Therefore the researcher undertook to review other independent variables to ascertain differences between other demographic variables on the primary constructs, as well as predictors of the main constructs.

5.3.2. Invested in the financial markets

Research question 2: Do individuals who invest in the financial markets have higher levels of social capital, networks and/or trust than those that do not?

The two tables below show the statistics run on whether the individual had invested in the financial markets or not, and whether there was a greater element of social capital, networks or trust in those that did. Only with trust did there prove to be a significant relationship.

Table 7: Invested in the financial markets for primary constructs

Group Statistics

Invested in financial markets		N	Mean	Std. Deviation	Std. Error Mean
Social Capital	Yes	152	43.06	7.799	.633
	No	47	40.94	6.958	1.015
Networks	Yes	152	21.20	4.492	.364
	No	47	20.21	4.539	.662
Trust	Yes	152	10.27	2.367	.192
	No	47	9.45	2.518	.367

Table 8: T-test for trust when invested in the financial markets

Independent Samples Test

		Levene's Test for Equality of Variances		T-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Trust	Equal variances assumed	.684	.409	2.052	197	.042	.823	.401	.032	1.614

There were no significant relationships when analysing the second measure which was the number of years an investor had invested in the financial markets when compared to social capital, networks and trust.

5.3.3. Demographic and descriptive statistics

Research question 3: What effects on social capital, networks and/or trust do the following demographics have: age, gender, years of work experience, years at their current organisation, years in current industry, years investing in the financial markets and organisational membership?

5.3.3.1. Non-significant demographic variables

There is no significant difference between groups in the following demographic variables when it comes to social capital, networks or trust:

- Gender: Male versus female

- Years of work experience: Ranges [5 or less],[6-10], [11-15], [16-20], [More than 20]
- Years at current organisation: Ranges [0-2], [3-7], [8 or more] years
- Years in current industry: Ranges [0-2], [3-7], [8 or more] years
- Years investing in the financial markets: Ranges [0], [Less than 1], [1-2], [3-7], [8-15], [16 or more] years
- Organisation membership: Ranges [0], [1-2], [3-4], [5 or more]

For additional statistical tables and the output on the below, please see Appendix 5.

5.3.3.2. Age

The test for the homogeneity of variances was met for age. A Oneway ANOVA was conducted to ascertain the impact of age on the dependent variables of social capital, networks and trust. The assumptions required to run the test are all met, which include an interval scale, normality and homogeneity of variances (demonstrated by the Levene's test).

The highlighted significance in Table 9 below shows that the age of the respondents has a significant effect on social capital ($F_{4,194} = 4.144$ where $p = 0.003$).

Table 9: Oneway ANOVA for age on social capital

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
Social Capital	Between Groups	911.079	4	227.770	4.144	.003
	Within Groups	10662.007	194	54.959		
	Total	11573.085	198			

Therefore a conservative Tukey post hoc test was conducted with multiple comparisons to test the relationship between groups:

Table 10: Tukey comparison for age

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Social Capital	Tukey HSD	18-30	31-40	-1.806	1.305	0.639	-5.4	1.79
			41-50	1.462	1.812	0.928	-3.53	6.45
			51-60	-4.333	2.697	0.495	-11.76	3.09
			61 or older	5.429	2.257	0.118	-0.79	11.64
		31-40	18-30	1.806	1.305	0.639	-1.79	5.4
			41-50	3.267	1.627	0.266	-1.21	7.75
			51-60	-2.528	2.577	0.864	-9.62	4.57
			61 or older	7.234*	2.112	0.007	1.42	13.05
		41-50	18-30	-1.462	1.812	0.928	-6.45	3.53
			31-40	-3.267	1.627	0.266	-7.75	1.21
			51-60	-5.795	2.867	0.26	-13.69	2.1
			61 or older	3.967	2.458	0.49	-2.8	10.73
	51-60	18-30	4.333	2.697	0.495	-3.09	11.76	
		31-40	2.528	2.577	0.864	-4.57	9.62	
		41-50	5.795	2.867	0.26	-2.1	13.69	
		61 or older	9.762*	3.167	0.02	1.04	18.48	
	61 or older	18-30	-5.429	2.257	0.118	-11.64	0.79	
		31-40	-7.234*	2.112	0.007	-13.05	-1.42	
		41-50	-3.967	2.458	0.49	-10.73	2.8	
		51-60	-9.762*	3.167	0.02	-18.48	-1.04	

The above shows significant differences on social capital between the following groups of individuals: 31 – 40 and 61 and older; 51 – 60 and 61 and older.

5.3.3.3. Years of work experience

Although no direct significant relationship was found between the primary constructs and years of work experience, the researcher decided to investigate what the relationship was between age and years of work experience. This was obviously expected to be closely correlated, as the older an individual is, the longer they would most likely be working. This correlation is shown to be true in Table 11 below:

Table 11: Spearman's rank correlation coefficient for age and years of work experience

Correlations

		Age	Years work experience
Spearman's rho	Age	1.000	.821**
	Correlation Coefficient		
	Sig. (2-tailed)		.000
	N	199	199

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

From the below Chi-Square test it can be seen that $X(16) = 244.85$, $p = 0.000$. Therefore there is a statistically significant association between age and years of work experience which have been classed as nominal variables.

Table 12: Pearson's Chi-Square test for age and years of work experience

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	244.850 ^a	16	.000

Therefore a strong association exists between age and years of work experience.

5.3.4. Primary constructs of social capital, networks and trust

Regressions were run to investigate predictors of the primary constructs.

5.3.4.1. Regression – social capital

Research question 4: Do age, gender, years of work experience, years at their current organisation, years in current industry, years investing in the financial markets, organisational membership, networks and/or trust predict social capital?

Table 13: Social capital regression summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.705 ^a	.497	.464	5.595	.497	15.305	12	186	.000

a. Predictors: (Constant), Organisation number, Years in industry, Gender, Trust, Education, Invested in financial markets, Entrepreneur, Networks, Age, Years at your current organisation, Years investing in market, Years work experience

A regression analysis for social capital showed that 70.5% of the variance in social capital is explained by the predictors (dependent variables) and that this prediction is significant ($F_{12,186}=15.31$ where $p=0.000$).

Table 14 indicates which of those predictors are significant where the Beta of the standardised coefficients indicates the strength of the relationship. Networks are significant ($t_{12,186}=10.85$ where $p=0.000$) and given that $B=0.637$ it is a strong positive relationship and therefore as networks increase, so does social capital. Trust is significant ($t_{12,186}=1.99$ where $p=0.49$) and given that $B=0.115$ it is a weak positive relationship and therefore as trust increases, so does social capital. Entrepreneurship is significant ($t_{12,186}=1.999$ where $p=0.47$) and given that $B=0.111$ it is a weak positive relationship and therefore as trust increases, so does social capital. In all cases the Variance Inflation Factor (VIF) for the predictors is below three and the predictors have sufficiently high Tolerance levels, which indicates that there are no multicollinearity issues.

Table 14: Social capital predictors

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	β	Std. Error	Beta			Tolerance	VIF
(Constant)	16.461	4.851		3.393	.001		
Networks	1.079	.099	.637	10.851	.000	.786	1.272
Trust	.363	.183	.115	1.984	.049	.807	1.239
Entrepreneur	2.149	1.075	.111	1.999	.047	.881	1.135

When running collinearity diagnostics on the above, it is shown how much the regressors in the test are related to other regressors, and how it affects the variance and stability of the regression estimates (StatPac, 2015). When run with all the predictors, the sum of the condition index is 45.364, which is higher than the recommended level of 30. Therefore the above was only run with those predictors which were significant where the new total of 13.649 fell within the limit.

Table 15: Social capital collinearity diagnostics

Collinearity Diagnostics

Model	Eigenvalue	Condition Index	Variance Proportions				
			(Constant)	Networks	Trust	Entrepreneur	
1	1	3.785	1.000	.00	.00	.00	.01
	2	.164	4.805	.01	.02	.04	.87
	3	.031	11.056	.03	.48	.85	.03
	4	.020	13.649	.96	.50	.11	.09

a. Dependent Variable: Social Capital

5.3.4.2. Regression – Networks

Research question 5: Do age, gender, years of work experience, years at their current organisation, years in current industry, years investing in the financial markets, organisational membership, social capital and/or trust predict networks?

Table 16: Networks regression summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.720 ^a	.519	.488	3.229	.519	16.700	12	186	.000

a. Predictors: (Constant), Social Capital, Education, Years investing in market, Entrepreneur, Years at your current organisation, Organisation number, Sex, Trust, Years in industry?, Age, Invested in financial markets, Years work experience

A regression analysis for networks showed that 72% of the variance in networks is explained by the predictors (dependent variables) and that this prediction is significant ($F_{12,186}=16.70$ where $p=0.000$).

Table 17 indicates which of those predictors are significant where the Beta of the standardised coefficients indicates the strength of the relationship. Social capital is significant ($t_{12,186}=10.85$ where $p=0.000$) and given that $B=0.609$ it is a strong positive relationship and therefore as social capital increases, so do networks. Trust is significant ($t_{12,186}=2.633$ where $p=0.009$) and given that $B=0.148$ it is a weak positive relationship and therefore as trust increases, so do networks. Organisation membership is significant ($t_{12,186}=2.70$ where $p=0.008$) and given that $B=0.145$ there is

again a weak positive relationship and therefore as organisational membership increases, so do networks. Education is significant ($t_{12,186}=-2.335$ where $p=0.021$) and given that $B=-0.126$ it is a weak negative relationship and therefore as education increases, networks actually decrease. In all cases the VIF for the predictors is below three and the predictors have sufficiently high Tolerance levels, which indicates that there are no multicollinearity issues.

Table 17: Network predictors

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	β	Std. Error	Beta			Tolerance	VIF
(Constant)	5.762	2.854		2.019	.045		
Trust	.276	.105	.148	2.633	.009	.820	1.220
Education	-.654	.280	-.126	-2.335	.021	.883	1.132
Organisation number	.794	.294	.145	2.700	.008	.892	1.121
Social Capital	.359	.033	.609	10.851	.000	.822	1.217

When run with all the predictors, the sum of the condition index is 46.321, which is higher than the recommended level of 30. Therefore the above was only run with those predictors which were significant where the new total of 18.451 fell within the limit. See Table 18 below.

Table 18: Networks collinearity diagnostics

Collinearity Diagnostics^a

Model	Eigenvalue	Condition Index	Variance Proportions					
			(Constant)	Trust	Social Capital	Education	Organisation number	
1	1	4.772	1.000	.00	.00	.00	.00	.01
	2	.115	6.449	.01	.02	.01	.04	.98
	3	.068	8.359	.00	.12	.04	.81	.00
	4	.031	12.326	.08	.86	.24	.04	.00
	5	.014	18.451	.91	.00	.70	.11	.01

a. Dependent Variable: Networks

5.3.4.3. Regression – Trust

Research question 6: Do age, gender, years of work experience, years at their current organisation, years in current industry, years investing in the financial markets, organisational membership, social capital and/or networks predict trust?

Table 19: Trust regression summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.458 ^a	.210	.159	2.222	.210	4.117	12	186	.000

a. Predictors: (Constant), Networks, Entrepreneur, Years work experience , Education, Invested in financial markets, Organisation number, Sex, Years at your current organisation, Years in industry?, Social Capital, Years investing in market, Age

A regression analysis for trust showed that 45.8% of the variance in social capital is explained by the predictors (dependent variables) and that this prediction is significant ($F_{12,186}=4.117$ where $p=0.000$).

Table 20 indicates which of those predictors are significant where the Beta of the standardised coefficients indicates the strength of the relationship. Social capital is significant ($t_{12,186}=1.984$ where $p=0.049$) and given that $B=0.180$ it is a weak positive relationship and therefore as trust increases, so does social capital. Networks are significant ($t_{12,186}=2.633$ where $p=0.009$) and given that $B=0.243$ it is a weak positive relationship and therefore as networks increase, so does social capital. In all cases the VIF for the predictors is below three and the predictors have sufficiently high Tolerance levels, which indicates that there are no multicollinearity issues.

Table 20: Trust predictors

Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	β	Std. Error	Beta			Tolerance	VIF
(Constant)	3.874	1.964		1.972	.050		
Social Capital	.057	.029	.180	1.984	.049	.514	1.946
Networks	.130	.050	.243	2.633	.009	.499	2.003

When run with all the predictors, the sum of the condition index is 46.190, which is higher than the recommended level of 30. Therefore the above was only run with those predictors which were significant where the new total of 16.352 fell within the limit. See Table 21 below.

Table 21: Trust collinearity diagnostics

Collinearity Diagnostics^a

Model	Eigenvalue	Condition Index	Variance Proportions		
			(Constant)	Social Capital	Networks
1 1	2.966	1.000	.00	.00	.00
2	.023	11.469	.77	.01	.42
3	.011	16.352	.23	.99	.57

a. Dependent Variable: Trust

5.4. Conclusion

The results above provide interesting findings in addressing the research questions posed in this study. In the following chapter they are further analysed and interpreted in conjunction with the literature.

Chapter 6: Discussion of Results

6.1. Introduction

This chapter specifically answers the research questions making use of the results shown in chapter five. Initial consideration is given to the descriptive data captured, as this provides context and colour to the further discussions regarding each research question.

For each research question, the data is analysed in detail and then the interpretations are supported by the literature. Conclusions are finally made regarding the individual research question. The analysis for research questions 4, 5 and 6 has been done collectively given the relationship which exists between the primary constructs. Finally, a model has been formulated taking into account the relevant results, and the findings are summarised.

6.2. Identifying the entrepreneur

There were 199 respondents who fully completed the survey. Given the definition of an entrepreneur and the methodology adopted, 81% were entrepreneurs with only 19% qualifying as non-entrepreneurs (See Figure 2). This was due to the broad definition of an entrepreneur and does present a limitation in terms of the results when comparisons are made between the entrepreneurs and non-entrepreneurs. The researcher expected that there would be a high number of entrepreneurs as they were specifically sought out.

Further analysis in terms of the questions asked when establishing the entrepreneur, revealed that 69% of individuals planned on starting their own businesses in the future, while a total of 73% actively sought out opportunities in which they could create wealth or social benefit. This indicates to the researcher that the majority of individuals, who might not have their own personal business interests at present, would like to, or are planning to undertake entrepreneurial activity in the future. This bodes well in the South African context where the need for entrepreneurs has been highlighted to improve growth potential in a developing nation (Herrington et al., 2012).

6.3. Demographic details

There was an element of concentration with respect to the demographic variance and representativeness of the sample. Over three quarters of the sample (specifically 76%) were between the ages of 18 and 40 with a far smaller portion of the sample (24%)

who were over the age of 40. This could have important implications in terms of the influence that age has on individuals. Most of the sample was male (63%) versus female (37%). See Figure 3 and 4.

The education level of the respondents was high, with 79% having at least a bachelors or honours degree. Thus, one can conclude that the majority of the respondents were given the opportunity that education affords in terms of being able to enter an industry and profession for which they have been trained or educated and are interested in. Essentially they were provided with choice as a result of their education and their careers could therefore follow a desired or designed path. As a result, many individuals would have chosen to be entrepreneurs because this is what they desired and where they saw potential opportunity; and not purely out of necessity to survive, which is often the case for nascent entrepreneurs as they have no other option (Herrington et al., 2012). Education is also important because this is where many networks are first formed and therefore, the first seeds of social capital are sown (Seghers et al., 2012). See Figure 5.

The years of work experience also show that as much as 92% of the sample has been working for more than five years with just over half (51%) having worked for 11 years or longer. This is important as it suggests that the majority of individuals in the sample have been working for some time and therefore, have a good understanding of the working environment and the scope of the roles that they could fulfil. This could be coupled with Figure 8 where 50% have been in their current industry for eight years or more, showing that there is a good element of stability when individuals decide to work in a certain sector. This is further emphasised in Figure 7 where two thirds have been in the same organisation for three years or longer. Although the remaining third shows that there is fluidity in the market with people having changed employment or jobs quite recently, they would have most likely remained in the same industry given that 89% of the sample had been in the same industry for over three years and 50% for over eight years.

Importantly, for the purposes of this research, 76% of individuals had, or are currently, invested in the financial markets. This is critical to the research as some of the hypotheses aim to understand how the primary constructs relate to the investment decision, which these individuals must have taken when investing in the financial markets. As a test for quality of the data, the researcher was pleased to see that the remaining 24% who had not invested in the financial markets in Figure 9, corresponded directly with the number of individuals who had zero investment experience in the financial market, shown in Figure 10. Of the 76% who had invested in the financial

markets, 79% had done so for three years or longer, which allows one to conclude that they should have a reasonable understanding of the financial markets.

Finally, 72% of individuals are a member of at least one formal organisation. This information is important as organisations are platforms that further promote the ability to network and build up social capital and trust. For entrepreneurs, they present the opportunity to reduce the costs of doing business and allow for the flow of information (Podolny, 1994). See Figure 11.

The demographic details with respect to the representation are, in the researcher's opinion, a result of two influences on the sample; the first being that the researcher relied on a personal existing network, which was biased to the younger generations (individuals under 40), males, and those individuals who are more educated than the general population at large. Secondly, the external network from a contact at the Innovation Hub was used, and so, the questionnaire was only sent out to entrepreneurs; the potential respondents from this group could have had an effect on the demographics and resulted in the overweight representation of entrepreneurs. The researcher thus expected this type of demographic breakdown as discussed above, and it provided good data and a suitable foundation to answer the research questions as set out below.

6.4. Research question 1

Do entrepreneurs have higher levels of social capital, networks and trust than non-entrepreneurs?

6.4.1. Analysis of the data

On analysis of the data after running a T-test, it was shown that there are no significant differences between entrepreneurs and non-entrepreneurs with respect to social capital, networks and trust. Therefore, the analysis showed that entrepreneurs do not have significantly higher levels of social capital, networks or trust. The total number of entrepreneurs in the sample was 161 or 81% and this high allocation to entrepreneurs could have meant that the sample for non-entrepreneurs of 38 or 19% was not representative enough to show whether there were any differences.

6.4.2. Review of the literature

This finding was contradictory to the literature. Endres and Woods (2006) showed that you would expect entrepreneurs and non-entrepreneurs to behave differently when making decisions. And decisions are made in the context of social capital, networks and trust.

Entrepreneurs will look at situations differently given that they develop a very different perception of risk, which is often confused with a higher risk tolerance (Norton & Moore, 2002). Non-entrepreneurs, on the other hand, are most likely not challenged by the same environment or required to make similar decisions with very limited information (Podolny, 1994). This is because they would predominantly operate in a more structured environment and have roles with more specific responsibilities. Podolny (1994) goes on to emphasise that because of the uncertainty which entrepreneurs face, they will prefer to deal with individuals and organisations that they know. This immediately points towards the development of higher levels of social capital and trust within stronger networks than one would expect to find in a corporate environment consisting of non-entrepreneurs.

Entrepreneurs are also extremely trusting, and because of this, might over-estimate the potential of a positive outcome (Bell et al., 2002). Entrepreneurs also put themselves in a position where they have to have a high level of trust in order to grow their network and gain required support to achieve a desired goal (Goel & Karri, 2006). A high level of trust also creates an environment where it is easier to invest with an entrepreneur than if there were no trust present (Kwon & Arenius, 2010). There are many other examples in the literature which further elaborate on the importance of trust and networks to the success of an entrepreneur. One would therefore expect that there would be a significant difference between entrepreneurs and non-entrepreneurs when it comes to trust and networks.

Social capital has also been shown to be extremely important to entrepreneurs, and potentially more so than for non-entrepreneurs. Through social capital, entrepreneurs are able to learn about different investment options, gain access to private information and build key relationships with private individuals and organisations (Hsu, 2007; Podolny, 1994). Entrepreneurs also operate in an imperfect market, and it is in this kind of environment where social capital becomes even more valuable (Burt, 1992 cited in De Carolis & Saporito, 2006). One would therefore expect that entrepreneurs would have a higher level of social capital than non-entrepreneurs.

6.4.3. Conclusion

The researcher's initial opinion was that, in line with the literature, there should be a difference between entrepreneurs and non-entrepreneurs with entrepreneurs having a higher predisposition for social capital, network and trust development. Non-entrepreneurs, in the case of this study, are individuals who work in an environment with more certainty and where the required need for social capital, networks and trust is

not as evident. This is because in a structured environment, the roles and responsibilities would be outlined and very specific for non-entrepreneurs. Hence they could complete their tasks without much need for reliance on others in the context of social capital, networks and trust. Certainly, the researcher agrees that these primary constructs would be valuable to a non-entrepreneur. But they would not be critical to their success.

Building on the final point above, there could be a substantial level of social capital and trust which exists in the networks in which the non-entrepreneur might operate. As corporates expand and at the same time connectedness improves through technological advances, the network of a non-entrepreneur has the potential to develop, even if it might only be within their own organisation.

The researcher believes that the primary reason for not finding any difference between the two groups and not being aligned with extant literature was because of the broad definition of an entrepreneur. This meant that a high proportion of the sample qualified as entrepreneurs, even though some of the qualifying entrepreneurs might only have had minor entrepreneurial traits when considering stricter definitions. Therefore, the entrepreneurial group would have included individuals who were completely entrepreneurial in that they own their own companies and are self-employed. However, the entrepreneurial group would also have included other individuals who might only be thinking about taking on an entrepreneurial business in the future, which might or might not come to fruition, or have only a small business interest.

Supporting the finding, the researcher believes that an ever-increasing connected working environment would lead to higher levels of social capital and networking. Employees in corporates are often inclined to be knowledge workers who are very mobile and, while not entrepreneurs, value their networks highly and depend on them for success (Farley, 2015). Therefore, in the changing, fluid work environment which exists for entrepreneurs and non-entrepreneurs alike, one could see the rise of networking, social capital and trust as integral elements that are necessary for making investment and business decisions.

6.5. Research question 2

Do individuals who invest in the financial markets have higher levels of social capital, networks and/or trust than those that do not?

6.5.1. Analysis of the data

Statistics were generated from the data for two independent variables, i.e. whether the individual had previously invested in the financial markets, and for how many years the individual had invested in the financial markets. While the dependent variables were the primary constructs, there was only a significant result for trust when taking into account whether an individual had previously invested in the financial markets.

6.5.2. Review of the literature

When people have to make investment decisions on how to invest their own money, they have to trust their own intuition and judgement (Sahi et al., 2013). An environment with higher levels of trust has been shown to make it easier for an individual to invest (Kwon & Arenius, 2010). Proof of this is evident given that potential investors will approach their close family and friends for advice on investments, as they expect to receive a more unbiased opinion than if they were to ask an independent person (Sahi et al., 2013). Taking this into account, it is not only from a personal viewpoint that trust is important, as trust between an individual and the investment professional is key in developing a relationship in which the investor feels comfortable in investing in the financial markets. This is especially true when the investment professional is already a trusted person (Seghers et al., 2012). This is very significant in the context of this research as it shows that once an investment professional gains the trust of their client, they become key in facilitating the investment decision. The vital enquiry for investment professionals would then be to better understand what factors could possibly affect or predict trust, so that they could genuinely employ them to achieve higher levels of trust. Thus, the investment professional would gain the confidence of the potential investor and be in a position to provide their investment solutions. Hence, trust in a personal network is important in driving decision-making.

Investing in the financial markets is often viewed by many as risky and therefore, trust is an important element when making this decision. As the levels of trust increase between individuals, so the propensity to acknowledge the potential higher levels of risk decreases (Goel & Karri, 2006; Kahneman & Riepe, 1998). This is critical in the investment environment where many risks, which are often difficult to quantify, are present and therefore a higher level of trust provides for a higher acceptance of these risks. Heuristics are commonly present in this decision-making environment as individuals cannot analyse all the information effectively and this would contribute to distortions in decision-making (Sahi et al., 2013).

Taking the above into account, investors often behave irrationally when making decisions (Agrawal, 2012). This makes trust all the more imperative in taking decisive action when investing in the financial markets, which can be confusing to the nascent investor. Affect also plays an important role as it is closely linked to trust (Baron, 2008). Hence, the mood of the investor could be more positively framed, given a higher level of trust and therefore allow for the investment decision.

Social capital is shown to influence individuals whether to invest or not, as it provides the ability for individuals to learn about investment alternatives (Hsu, 2007). The importance of social capital is also highlighted in an environment of imperfect competition, as it could assist in achieving a higher rate of return on the investment (Burt, 1992 cited in De Carolis & Saporito, 2006). These alternatives therefore are closely associated with the entrepreneur's business environment and not the financial markets.

6.5.3. Conclusion

Through a clearer understanding of the literature and given these results, the researcher concludes that trust is a vital ingredient when making a decision to invest in the financial markets; especially so for entrepreneurs, who have a high propensity to want to control the investments they make. They will need to relinquish a large degree of that control in order to invest in the financial markets. Even if they continue to manage their funds themselves, they will be exposing their capital to other companies and external factors out of their scope of influence and control.

The trust for an individual needs to be internal, meaning that they need to trust their own decisions. Individuals will rely heavily on trusted family and friends to assist in decision-making. However, the researcher believes that a key relationship is that which exists between an individual and his or her trusted investment professional. It is this trusted relationship which will most allow for informed investment decisions when investing in the financial markets. The role of the investment professional should be to temper any emotions and feelings the potential investor might have and to use his professional knowledge to advise on the best investment strategies.

Interestingly, social capital and networks do not have a significant direct relationship. However, the literature allows for a better understanding of this finding. This is because entrepreneurs will in many cases leverage off social capital to make investments in their networks and business environment. This could potentially be in their own business interests, or in other ventures which relate to a world in which they have a network and a perceived level of control and influence over the outcomes. As a result,

social capital and networks would not necessarily be higher when the decision is made to invest in the financial markets. In addition, networks and social capital are closely intertwined with trust. As an individual trusts another, they are certainly part of that person's network and the social capital between the two will develop. This again emphasises how important trust is as a foundation of relationships in which decisions need to be made.

Networks also provide a resource for individuals to connect, and hence make referrals of investment professionals to potential investors. The referral would be made from a trusted source within the potential investor's network and would assist in overcoming potential barriers. Consequently, as discussed above, while trust is a critical element when investing in the financial markets, it should not be viewed in isolation. Trust exists as part of the network in which it is nurtured with the support of social capital.

6.6. Research question 3

What effects on social capital, networks and/or trust do the following demographics have: age, gender, years of work experience, years at their current organisation, years in current industry, years investing in the financial markets and organisational membership?

6.6.1. Analysis of the data

For many of the variables tested, no significant relationship existed between them and the primary constructs. These variables were gender, years at current organisation, years in current industry, organisational membership and years of work experience.

The only variables for which there was a significant relationship was age and social capital. These differences existed between the age groups of 31-40 and 61 and older, with the difference being 7.2; and between 51-60 and 61 and older, with the difference being 9.8; the common age group being 61 and older. Both 31-40 and 51-60 have higher levels of social capital than the group 61 and older as shown by the differences above. See Tables 9 and 10.

The difference could be because individuals who are 61 and older may already have retired and no longer have the need to rely on social capital. What is interesting is how quickly the requirement for social capital changes from 51-60 and 61 and older.

It is important to note that 52% of the sample was in the group 31-40 with only 4% and 7% respectively in the groups 51-60 and 61 and older. The relatively low representativeness of the older individuals in the sample (from 51 and older) could have had an impact on these results and resulted in the significant difference.

The researcher then determined whether the logic held that the older a person was, the more years of work experience he or she would have. A strong correlation exists between age and years of work experience and it was shown that the two variables can be closely associated with each other. This could be taken further in that work experience, as shown in the literature below, is closely linked to social capital. See Tables 11 and 12 which show this relationship.

6.6.2. Review of the literature

As entrepreneurs gain more experience, their perception of risk changes (Podoyntsyna et al., 2012). This could be as a result of gaining greater social capital and therefore, relying more on their relationships as a resource when embarking on new ventures. However, this could also be viewed as a potential risk; as more experienced entrepreneurs tend not to recognise changes in their environment as they become ever more reliant on their existing social capital in their decision-making (Shepherd, Zacharakis, and Baron 2003; Starr and Bygrave 1991 cited in Seghers et al., 2012).

The extant literature provides further evidence that more experience will often mean that an entrepreneur will avoid uncertainty by rather investing in instruments to which they have previously been exposed. This familiarity provides the opportunity to avoid uncertainty and gives the investor a sense of comfort and security (Sahi et al., 2013). The memory recall of an individual is key in that it will impact on the individual's interpretation of those memories and hence affect their decision-making (Arora et al., 2013). Therefore, as investors get older, they will use their knowledge and experience, as they recall it, to aid them to make decisions that they face in the present. Of course, the fear of loss would also affect how the individual makes investment choices (Sahi et al., 2013). Therefore, investors who have incurred losses on their investments in the market in the past, would perhaps be more willing to rely on their social capital when making their next investment or invest in their own business where they have a greater feeling of control (Hayek, 2012).

The risk perception, which is influenced by age and experience, could result in irrational decision-making due to the previous experiences of the investor (Agrawal, 2012). This could become more pronounced with age, as an investor would not be able to develop a routine process when trying to invest in the financial markets, as markets are too difficult to anticipate in advance (Grieco, 2012). The outcome would be that investors who do not seek out professional assistance would have to rely more on their own experience to make investment decisions. This would most likely result in

underperformance as biases and heuristics would play an influential part in their decision-making (Sahi et al., 2013).

6.6.3. Conclusion

From the analysis, it can be concluded that years of work experience as a result of age can be associated with social capital. This means that the longer one works and the older one gets, the greater the level of social capital. The caveat to this though, which supports the analysis, is that when a person retires or is no longer looking to grow their business ventures, the level of social capital will dissipate.

Younger investors (in this case those between the ages of 31 and 40) could therefore be less risk adverse and willing to take more chances when it comes to investing. They need to build strong networks, where social capital can provide sufficient dividends to get their business ventures off the ground. Younger entrepreneurs will deliberately take themselves out of their comfort zones to network and build social capital. Therefore, the growth and need of their social capital could very well be higher than older individuals who are more established.

Perhaps the reason younger individuals (between 18 and 30) do not have a significantly higher level of social capital when compared to those over 61 is that they are simply starting out their careers. They have not had the benefit of time and exposure in their relevant industries to build up critical levels of social capital.

Those individuals who are between the ages of 51 and 60 are potentially at the peak of their careers in that they have strong established ties to others, through their built up social capital. Therefore, their level of social capital is expected to be high and definitely higher than those individuals who are over 61.

Once an individual achieves what they need to in their careers, they no longer have the need to expend the energy to continue to develop their social capital. This could be because they are looking to exit their job or business and retire. Or it could be that the competition from the younger, and potentially more enthused groups, erodes their social capital through higher effort. Nevertheless, those 61 and older have less social capital than the other two groups of 31 to 40 and 51 to 60.

The researcher concludes that social capital, as illustrated through the literature, is a vital ingredient in the success of a businessperson. The need to develop it is evident across all age groups as long as one remains in business. It is only potentially when one retires or looks to exit one's position, that the need to maintain those relationships, which foster social capital, becomes less important and eventually diminishes.

6.7. Analysis of the primary constructs

The primary constructs of social capital, networks and trust will now be discussed. As these three factors are closely interlinked, they are discussed collectively. First the analysis of the data is done for each construct. Then the literature is reviewed describing the results and further explaining the interconnectedness of the constructs. Finally the conclusion is made.

6.8. Research question 4

*Do age, gender, years of work experience, years at their current organisation, years in current industry, years investing in the financial markets, organisational membership, networks and/or trust predict **social capital**?*

6.8.1. Analysis of the data

There is a strong relationship between social capital and the significant predictors of networks, trust and entrepreneurship with over 70% of the variance in social capital explained by the predictors.

The relationship between social capital and these predictors is positive and therefore as the predictors increase, so does social capital. The strongest predictor of social capital is networks. Hence, an increase in networks would lead to a large increase in social capital. Entrepreneurship and trust have weak positive relationships as predictors for social capital.

Given the low Variance Inflation Factor (VIF) measurement and high Tolerance level, there are no multicollinearity issues, which means that the predictors are not highly correlated and therefore the data is reliable. This is confirmed by the Condition Index, which shows that the predictors are independent of each other and are not correlating, so the effects which are illustrated are genuinely due to the individual predictions. See Tables 13, 14 and 15.

6.9. Research question 5

*Do age, gender, years of work experience, years at their current organisation, years in current industry, years investing in the financial markets, organisational membership, social capital and/or trust predict **networks**?*

6.9.1. Analysis of the data

There is a strong relationship between networks and the significant predictors of social capital, organisational membership and education, with 72% of the variance in networks explained by the predictors.

The strongest predictor of networks is social capital. Hence, an increase in social capital would lead to a large increase in networks. Weak positive predictors of networks, which are significant, include trust and organisational membership.

Interestingly, education is a weak negative predictor of networks. This means that as education increases, networks actually decrease slightly. This is an interesting finding and could be related to the high education levels of the sample, where only 8% of the sample had an education level of matric or lower. Therefore, the relative increase in education might not have been impactful enough when comparing the other 92%. This may be explained by understanding the South African context, where increasing education, especially as it is lacking in society and so necessary for an individual to create employment opportunities, may lead to individuals taking a more non-entrepreneurial route of employment in a corporate environment. Consequently, the relative requirement of their network diminishes as they rely more on their personal knowledge capital to achieve their goals and success. The alternative route of becoming an entrepreneur out of necessity, due to a lack of opportunity because of a lack of education, would mean that the individual becomes more reliant on their network. Hence, the negative relationship between education and networks would hold true and should be explored in future research.

Given the low VIF measurement and high Tolerance level, there are no multicollinearity issues, which means that the predictors are not highly correlated and therefore the data is reliable. This is confirmed by the Condition Index, which shows that the predictors are independent of each other and are not correlating, so the effects which are illustrated are genuinely due to the individual predictions. See Tables 16, 17 and 18.

6.10. Research question 6

*Do age, gender, years of work experience, years at their current organisation, years in current industry, years investing in the financial markets, organisational membership, social capital and/or networks predict **trust**?*

6.10.1. Analysis of the data

There is a strong relationship between trust and the significant predictors of social capital and networks, with 46% of the variance in trust explained by the predictors.

There is a weak positive relationship between trust and both predictors, which means that as the levels of social capital and/or networks increase, so does the level of trust. These significant predictors do not explain more than 50% of the variance in trust, indicating that there are many other factors which affect trust and the interaction and behaviour with other potentially influential variables.

Given the low VIF measurement and high Tolerance level, there are no multicollinearity issues, which means that the predictors are not highly correlated and therefore the data is reliable. This is confirmed by the Condition Index, which shows that the predictors are independent of each other and are not correlating, so the effects which are illustrated are genuinely due to the individual predictions. See Tables 19, 20 and 21.

6.11. Review of the literature for research questions 4, 5 & 6

6.11.1. Overview of social capital, networks and trust

The links between the primary constructs are shown to be evident through the analysis and taking into account the literature. A study of entrepreneurship shows how important social capital is in pursuing entrepreneurial goals by taking advantage of personal social affiliations and network strategies (Hoang & Antoncic, 2003).

It is also important for entrepreneurs to trust others, or to act as trustees, in order to grow their network and to better influence individuals to support the goal of the entrepreneur with respect to value creation and success (Goel & Karri, 2006). Therefore trust acts as a support to facilitate better network interactions.

Social capital links into networks from a structural perspective, as it bridges the gaps between individuals and different groups. The greater the flow of information and resources, the stronger the bridges and the higher the level of social capital (Anderson & Jack, 2002). Therefore, social capital is a critical ingredient in the success of a network and vice versa.

Trust consists of many elements, one of them being social capital (Claro & Laban Neto, 2009). For that reason, it is not surprising to see that social capital is a predictor of trust as well as the contrary also being true.

The primary constructs are therefore closely interrelated and predictors of each other. Below, each of the constructs are discussed in more detail in line with the literature.

6.11.2. Social capital

Social capital can be viewed in an entrepreneurial context as the resources and goodwill which emanates from an individual's network of social relationships, and is the consequence of influence, solidarity and information to which the entrepreneur is exposed to (Adler & Kwon, 2002). Social capital allows for the flow of information, solidarity and a level of influence from the perspective of the entrepreneur (Adler & Kwon, 2002; Claro & Laban Neto, 2009). With greater levels of entrepreneurship, one should expect higher levels of social capital, as there is a strong element of obligation to other entrepreneurs who provided support for the entrepreneur in the past (De Carolis et al., 2009). Therefore, as the analysis proves, the level of entrepreneurship would be a good indicator to the amount of social capital which exists in that network.

Entrepreneurs would be advised to focus on social capital as it assists in their personal success by extracting more value, resources and information out of their networks (Adler & Kwon, 2002). If non-cooperative behaviour takes place, then one could expect a reduction in the flow of resources and information (Anderson & Jack, 2002). It can be interpreted that, as the efficiencies of entrepreneurship are reduced, so the amount of social capital in the system will be eroded. This again shows the importance that the level of entrepreneurship has in predicting the level of social capital within a network.

Building on the above, in the entrepreneurial environment, imperfect competition is more prevalent and because of this, social capital has shown to provide higher rates of return on investments (Burt, 1992 cited in De Carolis & Saporito, 2006). Therefore, it would be expected that entrepreneurship would be a predictor of social capital as entrepreneurs would strive to increase social capital to allow for greater flows of information when seeking out opportunities.

With the flow of information, the capability of social capital to provide specific information about financial alternatives can assist individual investors with their decision-making (Hsu, 2007). Therefore, the rise of social capital assists in decision-making for an individual.

6.11.3. Networks

One must remember, as discussed above, that networks comprise of social capital, which is essentially the resources, relational or structural, in a network which are available to the members of that network (Bhagavatula, 2009). Therefore, it is expected that social capital be a strong predictor of networks.

Organisational membership is an important element of a network, because in the entrepreneurial environment, where there can be greater levels of uncertainty, more organisations will look to find others which are similar to themselves. This also speaks to the importance of social capital and trust in these networks (Podolny, 1994). Therefore, the finding that an increase in organisational membership would increase an individual's network is supported and is not surprising. As an individual joins more networks, they are exposed to more people who could potentially add value to their objectives, and people therefore value these memberships in support of extending their networks.

With regard to education, it is important to point out that individuals will often overestimate their own knowledge base as a result of the level of connectedness and access to information they have in their networks (De Carolis & Saporito, 2006). The researcher can thus conclude that as a person's education increases and they become more self-aware of the reality of possibilities they have available to them, they may actually reduce their reliance on their network and could pursue other avenues to achieve their goals.

Supporting this conclusion is that individuals will overestimate their own knowledge and undervalue risks (Kahneman & Riepe, 1998). This is a common occurrence in a network, and so, as education increases, the unsubstantiated overestimation of knowledge could be kept in check, and individuals could then be more realistic of their true capabilities.

6.11.4. Trust

Entrepreneurs will often start from a position of trust, given that they are most likely developing a relationship within the context of their network in the presence of social capital. Hence, they could over-estimate the probability of positive outcomes (Bell et al., 2002). This is to be expected as entrepreneurs need to trust each other in order to build their networks to support their objectives (Goel & Karri, 2006).

Trust acts as the foundation and allows for the growth of relationships and the facilitation of business deals. People are more willing to do business with individuals with whom they have built a level of trust (Kwon & Arenius, 2010). People are also more open with individuals that they trust and are comfortable discussing confidential matters with regarding their investments (Seghers et al., 2012). This allows for the flow of information, which is so vital in growing social capital and strengthening networks.

Importantly, the social context in which trust is received is vital (Olekals et al., 2007). Therefore, it would be expected that increases in both social capital and networks

would provide for greater levels of trust. This is because individuals would feel more comfortable dealing with others whom they know and can rely on.

6.12. Conclusion for research questions 4, 5 & 6

Trust in a network results in a reliance on a tight circle of existing relationships and could be understood as a result of social capital (Coleman, 1988 cited in De Carolis & Saporito, 2006; Anderson & Jack, 2002). As proven through the analysis of the results, a strong link exists between social capital, networks and trust. Each construct is a predictor of the others and has an influencing factor in the level of the others. This inter-relationship is important in that it demonstrates the co-existence of the constructs. The core conclusion is that social capital, networks and trust are closely interrelated. These primary constructs develop in an environment where all three exist and facilitate entrepreneurial activity and decision-making.

Trust has been shown to be a foundation which needs to be present for a network to develop. This was touched on in research question two. Within and between networks, because of the foundation of trust, social capital is able to form, which then allows for the improved flow of information and resources between members of that network. As the level of social capital grows, so does the strength of the ties within that network and trust is able to increase to form a stronger foundation.

However, as strong as the relationships between the primary constructs and their ability to act as predictors might seem, it can quickly be damaged if any one of the primary constructs are negatively affected, as they are so closely related. An example could be the dilution of a network due to members of that network becoming more educated and not requiring the support that the network provides.

Further consideration must also be given to other factors which act as predictors to the primary constructs. In the case of social capital, entrepreneurship has been shown to be a predictor, which is supported by the literature. As expected, through greater levels of entrepreneurship, social capital will increase accordingly. With reference to networks, organisational membership acted as a predictor. As an individual joins more organisations, so his or her network should naturally increase. Education on the other hand decreases the need for networks, and it is proposed that this is as a result of a greater reliance on the individual's own skills and strengths which they develop through education. This allows the individual to be less reliant on a network to aid in decision-making and business opportunities.

Finally, both social capital and networks act as weak predictors of trust. The researcher believes that this is as a result of trust being such a multi-faceted concept with many influencing factors. However, the research shows that networks and social capital, and their existence in the entrepreneurial environment especially, are key in developing the critical element of trust. This then supports trust as the foundation of the three primary constructs.

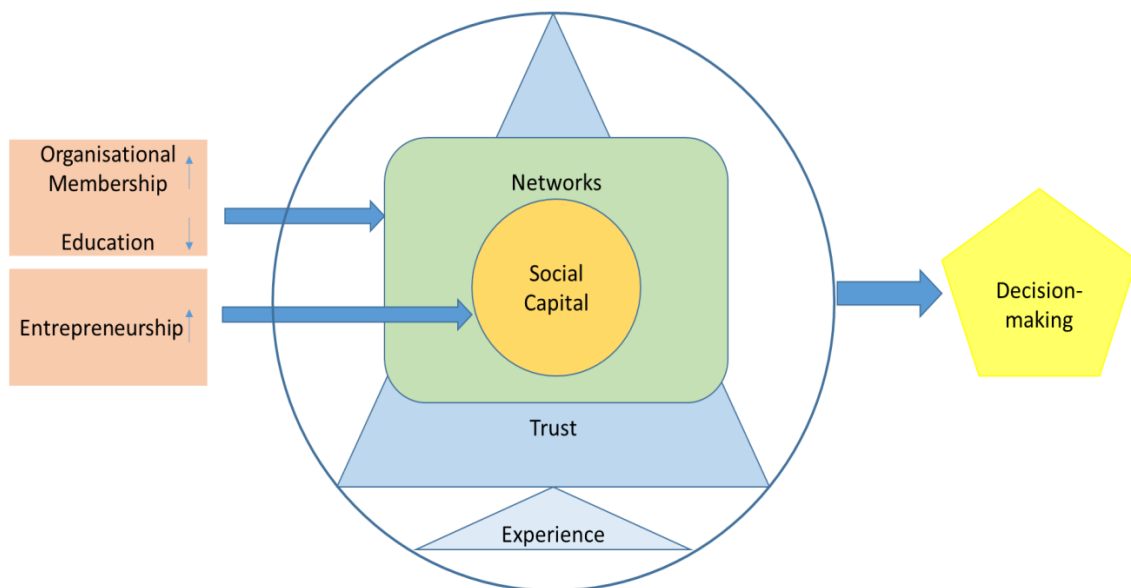
6.13. Model

The model below was constructed in line with the findings made in chapter six. The applicability of the model predominantly refers to the entrepreneurial environment and the context in which entrepreneurs would make decisions.

The model takes into account the primary constructs of social capital, networks and trust. The substance of the structure for the model was derived from the analysis of the research questions, specifically research questions 2 to 6. These questions analysed which factors would effect and predict the primary constructs and aimed to understand the involvement of the primary constructs in the decision to invest in the financial markets. It was further established that the primary constructs are closely interrelated and co-exist as influential factors in the decision-making of investors, and specifically entrepreneurs. The primary constructs are not only influenced by each other, they also have other significant external influences which were discovered.

See the model below and further description on how it should be interpreted and applied in practice:

Figure 12: Model – Influencing factors in entrepreneurial decision-making



In reading the model above and understanding its use, one should start from left to right. The predictors are furthest on the left and include organisational membership, education and entrepreneurship. It is shown that the predictors of organisational membership and education predict networks and that entrepreneurship predicts social capital. The directions of the vertical arrows next to the predictors indicate whether it is a positive or negative relationship. Therefore the interpretation for organisational membership, with an arrow indicating an increase, shows that organisational membership is a positive predictor of networks. As organisational membership increases, so does network strength. The inverse is then true for education as a predictor of networks, given the direction of the arrow. Consequently, entrepreneurship should be seen as a positive predictor of social capital.

In research question three it was made known that experience, through age, has a positive effect on trust. As individuals gain greater rapport with one another, trust is formed and strengthened over time, given their experience of working positively with each other. Therefore, experience is included below trust in the model, indicating that as an individual gains more experience, they also build more meaningful, trusting relationships. Trust also exists as the foundation on which networks and social capital are built. It was proved through the study that individuals required a significant level of trust before they invested in the financial markets. Given this fundamental bedrock, in the case of an entrepreneur, the importance of networks and social capital are factored in.

Social capital is shown to exist within networks as this is where it is created and becomes a valuable source of capital from which the individual can derive a real return. Social capital is key to promote the flow of information and necessary in influencing decisions. Networks are able to strengthen their ties through higher social capital and on the foundation of trust. Through these networks, entrepreneurs seeking out opportunities can gain valuable information from trusted parties. They are then well positioned to act on this information when making their investment decision.

Therefore, the elements of social capital, networks and trust complement each other and should not be viewed as individual features of decision-making, but rather as closely interrelated factors critical in the decision-making process when dealing with others.

This model is therefore useful to entrepreneurs who would like to gain more insight on how to best position themselves in creating a powerful platform to assist them in making decisions. It also provides insight on how to deal with other individuals with

whom they would like to do business and creates an environment which is primed towards effective opportunity recognition and value-adding decisions.

Investment professionals can also adopt this model to better understand the landscape of the entrepreneurial environment. It would add definite value for an investment professional to know how potential clients make their investment decisions. More specifically, how the investment professional can adapt his or her behaviour so as to become part of the network and a trusted advisor. By being part of this process, the investment professional opens up doors to others in the network, recommending his or her services and allowing for an organic increase in his or her client base and assets under management.

Chapter 7: Conclusion

7.1. Principal findings

Primary constructs of social capital, networks and trust are the ingredients for creating a successful entrepreneurial environment. These three elements are closely intertwined in a social ecosystem where they combine to promote the flow of information and influence decision-making. This is depicted in the model in Figure 12 where entrepreneurs are able to leverage off these primary constructs in their environment in order to make better informed decisions with higher probabilities of success. Investment professionals are also able to use the model in Figure 12 to enhance their understanding of the entrepreneurial environment and apply appropriate strategies to enhance their own business interests. The primary constructs are influenced by each other as well as external individual factors, which provides a clearer understanding of how they can be employed to promote the desired outcome of improved decision-making. This is expanded on below.

It was firstly established that no significant difference exists between entrepreneurs and non-entrepreneurs when considering social capital, networks and trust. This finding was in contrast to the extant literature. However, on analysis, it is probable that in the increasing dynamic markets in which business and corporates have to operate, the primary constructs have become more important to facilitate the transfer of information, finding opportunities and making decisions. Business has also seen the relative decline of formal hierarchies and the increasing development of more informal social relationships. Therefore, the prevalence of the primary constructs has potentially increased in the non-entrepreneurial space and as a result, the differences between entrepreneurs and non-entrepreneurs could no longer be significant. Hence, the conclusions and model derived from this study can be made applicable to a larger audience as non-entrepreneurs and entrepreneurs can be classed collectively as investors. Although there will always be distinguishing differences on the surface between the two groups, at a core social level with reference to social capital, networks and trust, entrepreneurs and non-entrepreneurs are shown to be quite similar.

When investing in the financial markets, investors require a level of trust before making the decision. The analysis has shown that trust is a significant element of this investment decision. This could seem obvious, but is important in the context of an entrepreneur who would often prefer to invest in ventures where they have previous experience (Sahi et al., 2013). Trust is essentially the foundation from which a

relationship is formed and is necessary for entrepreneurs to review potential investment options which they may not necessarily be familiar with; such as investing in the financial markets. Therefore, as an investment professional, one must form the foundation of trust with your potential client, should you wish to advise them to place their funds in the financial markets.

Trust was shown to be affected by experience, which is an age related factor. This is to be expected as one matures in one's career path and builds strong relationships with others through mutual experience and sharing the same environment. Taking this into account, it could simply be the time and experience that one individual shares with another, including an investment professional, which could create the potential scope for a trusted relationship. Investment professionals should also seek to build trust within the context of a friendship with their clients in order to achieve a larger sphere of influence.

Social capital is positively predicted by the degree of entrepreneurship. This indicates the importance of the relationships and resources that make up social capital in the entrepreneurial environment. Organisational membership has a positive influence on the strength of networks. Businesspeople from all sectors should be cognisant of the importance of networking for the growth of their business, and should take every opportunity to do so. Becoming a member of various organisations will provide the platform to grow personal networks. However, it was found that networks are negatively impacted by education. This finding suggests to the researcher that as individuals increase their personal human capital and expertise through education, they come to rely less on networks to find opportunities. This may be because they find themselves in specialised roles where the networks are not as relevant; or simply because they have been so inwardly focussed on increasing their education that they have not made the same effort to improve their networks. This could be an interesting area to investigate and has been recommended for future research as it contradicts extant literature which was reviewed which indicated that education supported networks.

The primary constructs of social capital, networks and trust are closely interwoven and can be viewed as a single significant social factor when influencing decision-making. All of the primary constructs are predictors of each other, and interplay between them is vital to ensure the health of the social ecosystem which they create. The external predictors influence the primary constructs and can be used as tools to enhance them. Trust acts as the foundation on which networks are formed and within those networks the relationships are made stronger with the presence of social capital from which

individuals can derive a real return on their capital invested. This capital takes the form of human and social capital. All three combine to aid in the flow of information and opportunities to facilitate decision-making.

7.2. Implications for management

From a management perspective, the findings can be specifically applied to two particular groups; those being entrepreneurs and investment professionals. As discussed above, this study is grounded in social behaviour and can therefore be related to many facets of business and different environments given the broad applicability of the primary constructs of social capital, networks and trust.

Entrepreneurs operate in an environment with many uncertainties and where information is key to success (Busenitz & Barney, 1997 cited in De Carolis & Saporito, 2006). Therefore, the understanding of the structure of their environment is critical in accessing that information and creating the necessary opportunities for their businesses. This study provides an understanding of the intangible factors which create a secure environment for entrepreneurs to approach others to further their personal goals and the goals of their business interests.

For the investment professional, the benefit of having a clearer insight in the decision-making of entrepreneurs in the context of the primary constructs has great value. Entrepreneurs are often difficult to convince of the benefits of diversifying their holistic portfolios away from their primary business interests and into the financial markets. Although this advice is sound in providing good risk adjusted returns for the potential nascent investor, the entrepreneur has difficulty in understanding the risks involved and allowing for the loss of control of their assets. This is because entrepreneurs will perceive risks differently (Palich & Bagby, 1995 cited in De Carolis & Saporito, 2006). Hence, a strategy to address this hurdle needs to be implemented by the investment professional to initiate a relationship with the entrepreneur. The model in Figure 12 provides a framework from which the investment professional should start.

Those within corporates and the non-entrepreneurial environment are still able to benefit from the findings in that they should perhaps be taking a more entrepreneurial view of their business landscape in order to compete effectively in dynamic markets. The research has also shown that non-entrepreneurs are not dissimilar to entrepreneurs in the context of the primary constructs

7.3. Contribution to the body of knowledge

Through studying the extant literature on social capital, networks and trust, the researcher found that these three elements were often reviewed independently. By bringing them together and creating a better understanding of the underlying relationships between them and the relevant influencing factors, the researcher hopes that a deeper understanding is now possible.

The research contributes to social sciences by providing a tool which aims to understand the conceptual implications of social capital, networks and trust and allowing for the practical implementation of strategies to improve the elements which would lead to better decision-making.

This study further contributes to the literature by creating a clearer understanding of how the key elements of social capital, networks and trust influence potential investors in their evaluation of the financial markets in arriving at personal investment decisions.

7.4. Limitations of the research

7.4.1. Introduction

The researcher recognised throughout the entire process the need to develop a robust and fit for purpose research design to properly address the research questions posed. Systematic errors are caused through a flaw in the research design and it is therefore imperative that enough time and consideration was given to the research design and its execution (Zikmund et al., 2009). All research, including this study, has its limitations and it is only proper to discuss these limitations openly. This will better inform other researchers so that they can improve on them in the future and appreciate how far they can generalise the findings to other populations.

7.4.2. Resource limitations

The researcher had to contend with resource limitations. Considerations had to be made with respect to access to the population, where elements of convenience and judgment sampling were used. This also took into account monetary limitations as the researcher did not have a budget to employ or allocate funds to research professionals who could have provided access to a larger sample and therefore increase the representativeness of the sample with respect to the population. Time was also a key limitation in the collection, analysis and evaluation of the data as the research had to be completed by a deadline, while the researcher had to manage the time spent on the study with other responsibilities.

7.4.3. Design flaw limitations

Related to the design limitations of the study was the selection of the respondents to the questionnaire and whether they did in fact, in the required instance, meet the requirements of an entrepreneur or non-entrepreneur as defined for the purposes of the research. More research could have been done on the potential respondents to ascertain whether they were entrepreneurial or not. This could have resulted in a more evenly weighted target sample of entrepreneurs and non-entrepreneurs, which could have provided more representative results. Especially for non-entrepreneurs who were only approximately 20% of the sample.

The definition and classification of entrepreneurs could be viewed as a limitation as it was determined by the researcher in accordance with a widely accepted definition from extant literature. The definition was very broad with reference to what constituted an entrepreneur and allowed for many factors to be considered for entrepreneurship. This could have had an effect on the statistics which were done. Either a stricter definition could have been adopted or additional preparation could have been done in selecting the sample of respondents from which the data was collected.

Response error to the questions which determined entrepreneurship could have meant that the final calculation of entrepreneurship, and comparisons between entrepreneurs and non-entrepreneurs, was biased as there was an unequal group size. This could have affected some of the statistics and resulted in a bias.

The sample was limited to particular networks and contacts and therefore the sample might not have been fully representative of the population. A limitation of the sampling method used makes it likely that the networks accessed meant that investors could have been individuals similar to themselves (Saunders & Lewis, 2012). This is to be expected with the anticipated social capital which develops through networks in the entrepreneurial sector (Adler & Kwon, 2002).

Snowball sampling was also used to distribute the questionnaire to a larger audience in order to increase the potential number of respondents. Respondents receiving the questionnaire were asked to send it on to their networks and contacts where they deemed it appropriate. The researcher does not have any information to determine to what extent this might have taken place and to whom the respondents could have forwarded the email to. The limitation though, is that the respondents who did forward the questionnaire would more than likely select individuals who were very much like themselves, resulting in a very homogenous sample. This could be a further

explanation for the high number of entrepreneurs in the sample (Saunders & Lewis, 2012).

Non-response error was also a concern, but was potentially reduced through the email sent to respondents to encourage them to complete the questionnaire. There was also the high likelihood that the respondent would know the person who sent the email to them. There were only 20 incomplete surveys from the data collected or a 9.1% incompleteness ratio. The completed portion of these surveys could have been included, but given this low ratio, the researcher decided to delete the partial respondents' data and only deal with the 199 respondents which were 100% complete. It is possible that useful information could have been lost from the deleted respondents, which could have been factored into the results.

Response bias may also occur when the respondents are required to answer scale type questions as they may be influenced by their previous answers and respond to questions with a certain slant (Zikmund et al., 2009). This could have occurred to some extent even when establishing the entrepreneur, given the high number of "Yes" answers to the defining questions. In the Likert Scale questions, respondents could not take the time to give each question due consideration and might slant towards one end of the scale. This could be confirmed when analysing the results and assessing the relevant means of the primary constructs.

Another potential issue with the Likert Scale was that it was assumed that the difference between the points was equal. For example, the difference in the strength of feeling between "somewhat agree" and "agree" is assumed to be exactly the same as "agree" and "strongly agree" (Jamieson, 2004).

There were only two questions which made up the construct of trust. This could have had negative implications on the richness of the information which could have been drawn from the data. The research design should have taken this into account upfront and formulated more questions addressing trust.

Speaking of this, there was a limitation on the depth of the information, which could have been gathered from respondents through the use of a quantitative approach with a very short survey. The survey could have been designed to be more in-depth. There was also the potential to bring in a qualitative aspect to the study to enhance the understanding from individuals regarding the hypotheses.

The demographic data was very concentrated in certain areas (for example age), which therefore could mean that the findings are more applicable to these groups. The study could therefore be under representative of the general population.

Although the above limitations are relevant to this study, the quality data was obtained which allowed for a parametric study and provided insightful results, which the researcher has expanded on.

7.5. Suggestions for future research

A future study should be done where the respondents are specifically known to be entrepreneurs or non-entrepreneurs. This would then create two definitive samples of approximately equal size, which would be representative of the general population. The researcher would then be able to conduct a more in-depth comparative study to understand the potential differences in influence and decision-making between the two groups.

A qualitative approach could also be taken to allow for a more in-depth study with the selected respondents. They would then have the opportunity to provide unique insight into the topic and the study could be very complementary to this one.

Backward and forward regressions could be run at a statistical level to gain more in-depth inferences from the data. This was beyond the scope of this research topic, but could add valuable insights in future research.

From the findings, it would be interesting to investigate the extent to which the primary constructs of social capital, networks and trust influence decision-making at an interpersonal level compared to a personal-institutional level. The extant literature showed that individuals relied on trusted personal networks when making decisions (Sahi et al., 2013). In addition, the extent of the social capital, networks and trust could be measured where the goal would be to establish what levels were required to initiate the investment decision as well as which predictors could be combined to create the greatest influence in reaching those levels. These predictors need not be limited to those explored in this study and could include other variables, which researchers predict will have an effect on the primary constructs.

Further research should be conducted on the extent and necessity of social capital, networks and trust for non-entrepreneurs. This research should investigate in what guise these primary constructs play a role and how a corporate could take the learnings from this study to perhaps promote the growth of these elements to provide for better decision-making in the corporate environment. It could be that there are different forms of social capital, networks and trust which exist in a non-entrepreneurial or corporate environment when compared to an entrepreneurial one. This is applicable

in today's globally connected markets where multi-nationals need to maximise synergies and remain highly efficient in an ever increasing competitive environment.

An interesting study would be to determine whether high levels of education actually result in a decrease in the reliance on networks for career advancement and success. It was found in this research that as the levels of education increased, so the need for networks decreased. The researcher proposes that a reason for this might be linked to higher education levels leading to a reliance on individual knowledge capital, and hence the requirement to build a strong network diminishes. Those who are more educated might also seek out other sources to aid their success as they could be more aware of potential options. Further investigation into this is warranted and could be done in the context of self-efficacy.

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Appendices

Appendix 1 – Ethical clearance approval letter

**Gordon Institute
of Business Science**
University of Pretoria

Dear Stuart Milroy

Protocol Number: **Temp2015-01845**

Title: **Influence of social capital on investor decision-making**

Please be advised that your application for Ethical Clearance has been APPROVED.

You are therefore allowed to continue collecting your data.

We wish you everything of the best for the rest of the project.

Kind Regards,

Adele Bekker

Appendix 2 – Questionnaire from SurveyMonkey®

The Influence of social capital on Investor decision-making

Welcome to My Survey

I am doing research to understand social factors that influence decision-making when investing in the financial markets. To this end, you are asked to please complete a short survey. This will help me understand the behaviour of how investors operate in their networks when deciding to invest in their personal capacity in the financial markets. The questionnaire should take no longer than 5 minutes of your time to complete. Your participation is voluntary and you can withdraw at any time without penalty. Of course, all data will be kept confidential and anonymous. By completing this anonymous survey, you indicate that you voluntarily participate in this research. If you have any concerns, please contact me or my supervisor. Our details are provided below:

Researcher:	Supervisor:
Stuart Milroy	Dr Gavin Price
446121@mygibs.co.za	PriceG@gibs.co.za
082 560 6953	011 771 4223

The Influence of social capital on Investor decision-making

Definition of an entrepreneur for this study

Entrepreneurs are defined as "individuals who recognize and exploit new business opportunities by founding new ventures" (Baron, 2008; Shane & Venkataraman, 2000 cited in Podoyntsyna, Van der Bij, & Song, 2012)

Therefore entrepreneurs need not necessarily just be people who own their own business. For the purpose of this study, they include those individuals who partake or who are planning to partake in new business ventures and who are actively seeking out opportunities to create wealth (even on a part-times basis).

The influence of social capital on investor decision-making

Profession Questions – Establishing the entrepreneur

* 1. Do you own or have an ownership stake in a business?

- Yes
 No

* 2. Are you planning on starting your own business or getting involved in a business outside of your current role?

- Yes
 No

* 3. Do you actively seek out business opportunities to create wealth or social benefits?

- Yes
 No

* 4. Do you earn a source of income outside of your primary employment?

- Yes
 No

* 5. Do you personally take financial risk with the goal of creating wealth?

- Yes
 No

* 6. Do you consider yourself to be self-employed?

- Yes
 No

The influence of social capital on investor decision-making

Demographical Information – About you

* 7. In which age bracket are you?

- 18-30
- 31-40
- 41-50
- 51-60
- 61 or older

* 8. Are you male or female?

- Male
- Female

* 9. What is your highest level of education?

- Matric or lower
- Diploma or Technical Degree
- Bachelor's or Honours Degree
- Master's Degree
- PhD

* 10. How many years of work experience do you have?

- 5 or less
- 6-10
- 11-15
- 16-20
- More than 20

* 11. How many years have you been working at your current organisation?

- 0-2
- 3-7
- 8 or more

* 12. How long (in years) have you been working in the same industry?

- 0-2
- 3-7
- 8 or more

* 13. Have you previously or are you invested in the financial markets?

- Yes
- No

* 14. How many years of experience do you have in investing in the financial markets?

- 0
- Less than 1
- 1-2
- 3-7
- 8-15
- 16 or more

* 15. Do you belong to any business or trade associations, community or club, political, religious and alumni organisations and if so, how many?

- 0
- 1-2
- 3-4
- 5 or more

The influence of social capital on investor decision-making

Statements

On a scale ranked from "Strongly disagree" to "Strongly agree", please rate the level of your agreement with the remaining questions:
(Note that the organisation(s) referred to below are those outside of your primary employment. They refer to your networks)

- * 16. Your involvement in the organisation(s) provides you with greater access to information

Strongly disagree	Disagree	Disagree somewhat	Neutral/ Undecided	Agree somewhat	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- * 17. You feel that there is less of a need to verify information received from a trusted party in your network

Strongly disagree	Disagree	Disagree somewhat	Neutral/ Undecided	Agree somewhat	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- * 18. Your involvement in the organisation(s) provides you with greater access to business opportunities

Strongly disagree	Disagree	Disagree somewhat	Neutral/ Undecided	Agree somewhat	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- * 19. Your involvement in the organisation(s) provides you with greater access to intellectual capital

Strongly disagree	Disagree	Disagree somewhat	Neutral/ Undecided	Agree somewhat	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- * 20. You are able to achieve better personal investment performance due to your networks

Strongly disagree	Disagree	Disagree somewhat	Neutral/ Undecided	Agree somewhat	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- * 21. Your involvement in the organisation(s) provides a forum for the discussion of personal financial investment opportunities or options

Strongly disagree	Disagree	Disagree somewhat	Neutral/ Undecided	Agree somewhat	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- * 22. You consider information received from a trusted party in one of your organisations or networks as reliable

Strongly disagree	Disagree	Disagree somewhat	Neutral/ Undecided	Agree somewhat	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 23. When starting a new business venture or launching/ investigating a new innovation, you would seek advice from a trusted party in your network

Strongly disagree	Disagree	Disagree somewhat	Neutral/ Undecided	Agree somewhat	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 24. You are able to achieve better business performance due to your networks

Strongly disagree	Disagree	Disagree somewhat	Neutral/ Undecided	Agree somewhat	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 25. You would invest in a venture based on the advice of a trusted party in your network

Strongly disagree	Disagree	Disagree somewhat	Neutral/ Undecided	Agree somewhat	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 26. Your involvement with trusted networks or organisations helps facilitate new ventures

Strongly disagree	Disagree	Disagree somewhat	Neutral/ Undecided	Agree somewhat	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 27. Your involvement with trusted networks or organisations help facilitate new financial investment opportunities

Strongly disagree	Disagree	Disagree somewhat	Neutral/ Undecided	Agree somewhat	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

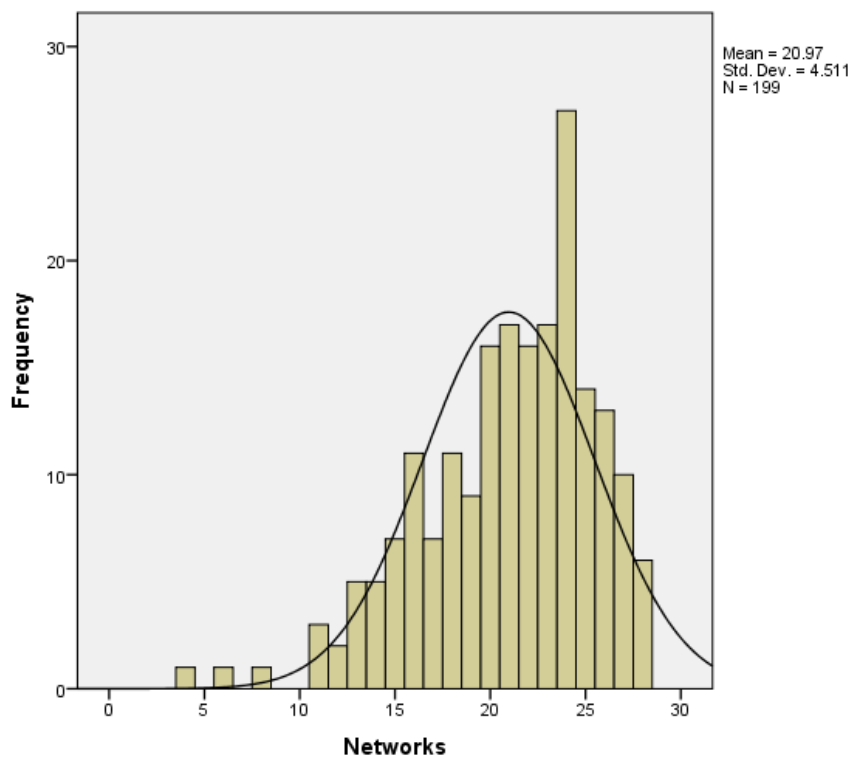
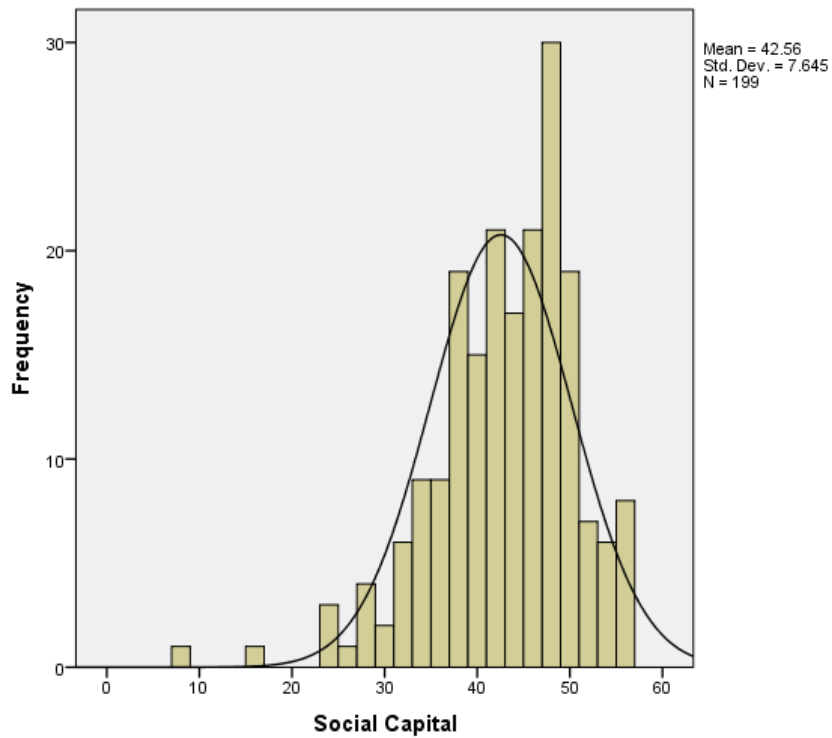
* 28. Your involvement with your networks or organisations provides a forum to discuss new business ideas

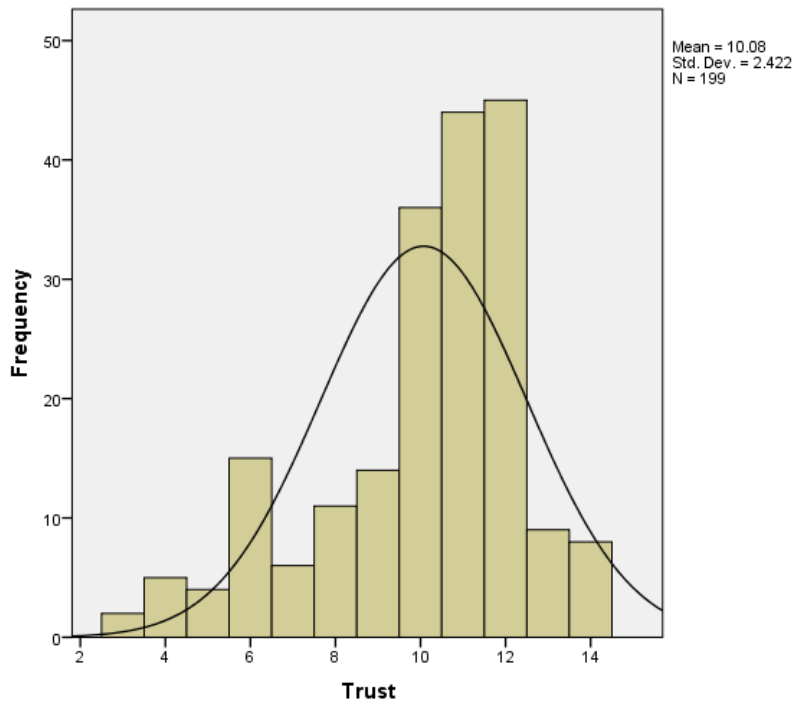
Strongly disagree	Disagree	Disagree somewhat	Neutral/ Undecided	Agree somewhat	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* 29. Your involvement with networks or organisations provides a forum to discuss new financial investment ideas

Strongly disagree	Disagree	Disagree somewhat	Neutral/ Undecided	Agree somewhat	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 3 – Histograms showing primary construct distributions





Appendix 4 – Research question 1: Entrepreneur and non-entrepreneur with respect to primary constructs

Group Statistics

Entrepreneur		N	Mean	Std. Deviation	Std. Error Mean
Social Capital	Non-entrepreneur	38	41.08	7.269	1.179
	Entrepreneur	161	42.91	7.712	.608
Networks	Non-entrepreneur	38	20.95	4.472	.725
	Entrepreneur	161	20.98	4.535	.357
Trust	Non-entrepreneur	38	10.42	2.456	.398
	Entrepreneur	161	9.99	2.415	.190

Appendix 5 - Demographic statistics: Gender

Group Statistics

Gender		N	Mean	Std. Deviation	Std. Error Mean
Social Capital	Male	125	42.87	7.740	.692
	Female	74	42.03	7.505	.872
Networks	Male	125	21.16	4.527	.405
	Female	74	20.65	4.498	.523
Trust	Male	125	10.26	2.159	.193
	Female	74	9.77	2.802	.326

Independent Samples Test

		Levene's Test for Equality of Variances		T-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Social Capital	Equal variances assumed	.109	.742	.753	197	.453	.845	1.123	-1.369	3.059
Networks	Equal variances assumed	.169	.681	.772	197	.441	.511	.662	-.795	1.818
Trust	Equal variances not assumed	9.492	0.002	1.283	124.281	.202	.486	.379	-.264	1.235