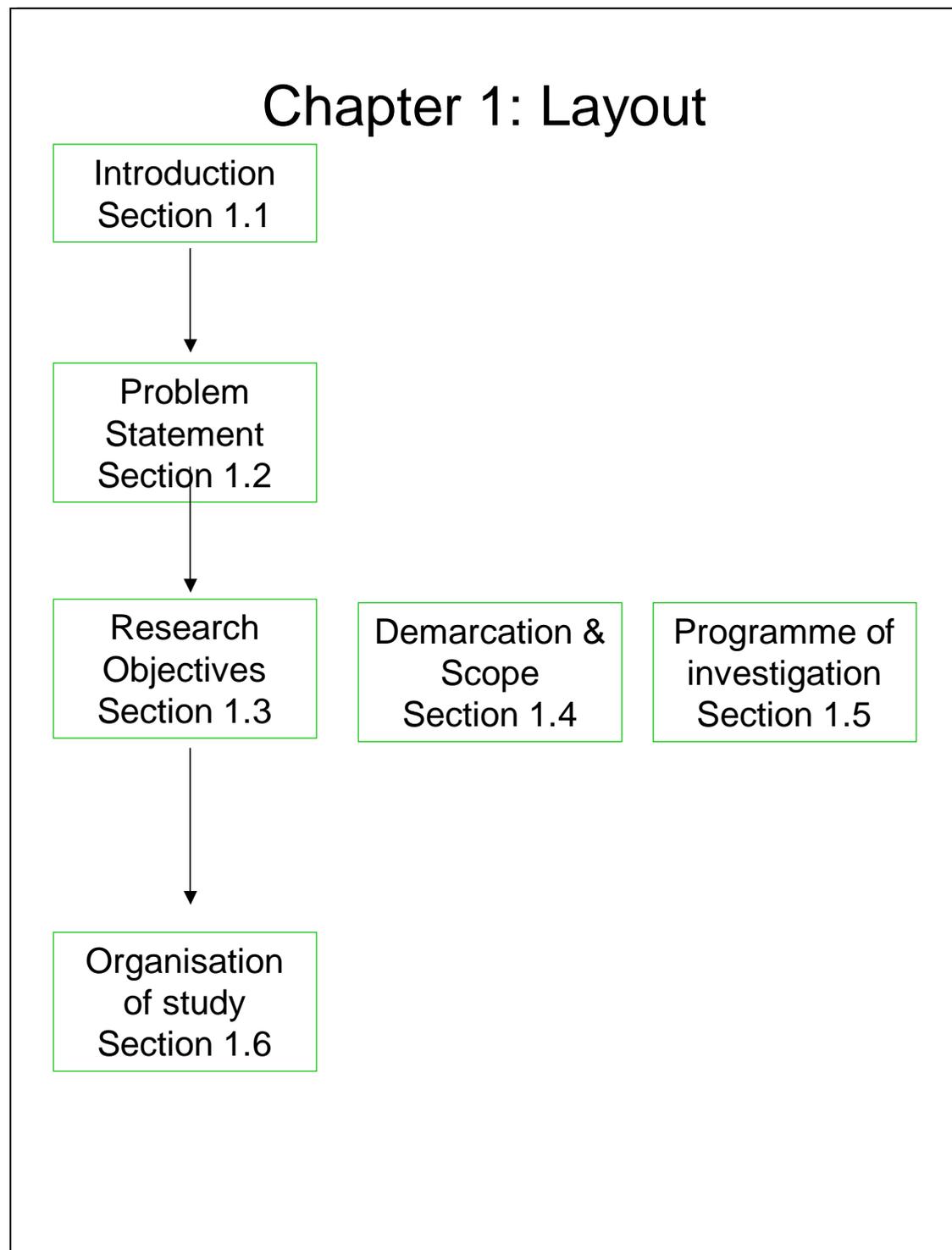


Chapter 1: Background and orientation to the problem



1.1 Introduction

Researchers traditionally addressed the question of how one must understand the entrepreneur by examining whether entrepreneurs were more likely than others to have certain personality traits, such as locus of control and need for achievement. This direction, however, has been characterized as a “dead end” by some, based on inconclusive findings of a direct effect of traits on action. Thus with a few notable exceptions (e.g. Johnson, 1990), the research focus moved away from studying individual trait differences to examining entrepreneurial cognitive and decision processes. This approach suggested that an individual’s perception of reality might play an important role in determining entrepreneurial activity.

(Simon & Houghton, 2002: 106).

Until recently, entrepreneurship theory was based on the fields of economics, personality psychology and strategy (Mitchell, Busenitz, Lant, McDougall, Morse, & Smith, 2002: 94). All these approaches based on the different fields mentioned made a contribution to the understanding of entrepreneurship, but at the same time had some shortcomings, which will later be explored.

In recent years, however, entrepreneurship researchers have made great strides towards explaining why some individuals proceed with entrepreneurial actions when others do not. Much of this research concluded that differences in individual perceptions about a potential entrepreneurial action play a major role in the decision to proceed or not.

Similarly, numerous scholars have suggested that perceptions of feasibility and desirability lead to venture creation and other entrepreneurial activities. For example, Simon, Houghton & Aquino (1999: 113) found that individuals who perceive lower risk associated with a venture are more likely to decide to start the

venture. Therefore the cognitive perspective is of importance for the entrepreneurial process (Chapter 4).

In order to understand entrepreneurial cognition one needs to look at the previous theories that attempted to explain the relationship between the entrepreneur and how a new venture is formed. Until recently, three different fields, namely economics, personality psychology and strategy, were used to explain entrepreneurship theory (Mitchell et al, 2002: 94). Each of these fields made its own contribution, but at the same time had some major shortcomings:

The economists had an outcomes-based approach to understanding new venture formation, in that they viewed the contribution of the entrepreneur to be the creation of a new business venture. Their positive contribution was the fact that they established what entrepreneurship is and when it occurs, but they were unable to explain how and why it occurs (Mitchell et al, 2002: 94).

The second phase of entrepreneurship research, according to Mitchell et al (2002: 94), was that of the behaviourists like Max Weber and David McClelland. Mitchell et al (2002: 94) quote McClelland (1985), who tried to establish the characteristics and traits of the entrepreneur and also tried to describe the entrepreneurial personality as the key component in new venture creation. Unfortunately this research did not succeed because the researchers were unable to establish a set of characteristics that were unique to all entrepreneurs (Mitchell et al, 2002: 95).

The third phase of the research was based on strategic management and how the entrepreneur actually influences the performance of the venture. This research was very useful in linking the performance of ventures to entrepreneurship research relative to research in strategic management. The general shortcomings, however, were the fact that the researchers were unable to link attributes of the entrepreneur to performance of the venture (Mitchell et al, 2002: 95).

Given the shortcomings of the previous fields of research and the inability to establish the entrepreneur as a distinct individual, academics have changed their field of thought to that of the cognitive view of entrepreneurship, in an attempt to try to explain the role of the individual in the entrepreneurial process (Mitchell et al, 2002: 95). Shaver & Scott (1991: 26) had already stated that a psychological approach to new venture creation must involve cognitive processes that occur within the individual.

In more recent studies the focus has thus moved to a cognitive approach of understanding how entrepreneurs think and make strategic decisions (Tversky & Kahneman, 1974; Manimala, 1992; Busenitz & Barney, 1997; Vallaster, 2000; Alvarez & Busenitz, 2001; Selden, Transley & Fletcher, 2004). It has been asserted that two broad categories influence the probability that particular people will discover particular opportunities:

- Firstly, the possession of the information necessary to identify an opportunity
- Secondly, the cognitive properties necessary to exploit it (Mitchell et al, 2002: 94)

According to these criteria, research that contributes to a better understanding of information processing and entrepreneurial cognition has an important role to play in the development of entrepreneurship literature.

According to Mitchell et al (2002: 95), the cognitive viewpoint acts as an effective tool and helps us to explain the previously unexplainable phenomena within the entrepreneurship research domain. It will help people to understand how entrepreneurs think and why they do some of the things that they do. In doing so a theoretical, rigorous and testable argument for such distinctiveness will be provided with.

Entrepreneurship Theory and Practice published a special issue (Winter, 2002) on information processing and entrepreneurial cognition because it felt that the

journal had a role to play in developing entrepreneurship literature. Five articles (out of 26) were selected and published, using authors such as Simons, Houghton, Lim, Mitchell, Balkin, Baron, Krueger, Shepherd, Gartner and Gatewood to explore issues regarding decisions to start a venture, heuristics, biases, misconceptions and cognitive processes of entrepreneurs.

The Journal of Business Venturing, Volume 19 (2004) published a special issue that focused on concepts and findings in cognitive science that had not yet been successfully “imported” by entrepreneurship researchers. Five articles from authors such as Baron, Brockner, Ward and Sternberg were published on cognition, creativity and entrepreneurship.

Entrepreneurship Theory and Practice published another special edition (Winter 2004) on the distinctive and inclusive domain of entrepreneurial cognition research, in an attempt to develop and utilise a “boundaries and exchange” concept. It aimed to provide a lens through which both distinctive and inclusive aspects of the entrepreneurship domain (see Figure 1.1) were employed to frame this special issue (Mitchell, Busenitz, Lant, McDougall, Morse & Smith, 2004: 505).

Mitchell et al (2004: 506) quote Harrison & Leitch (1996), who suggest that entrepreneurial cognition needs to create a distinct position within the context of existing research. The domain of entrepreneurial cognition research cannot simply be a net importer of theory from cognitive psychology and other domains, and expect thereby to establish its legitimacy. Mitchell et al (2004: 506) also quote Davis (1971), who argued that the domain of entrepreneurial cognition must develop its own interesting research questions and make progress in answering those questions by building and extending theory in its own domain, and thereby gradually establish its legitimacy.

Entrepreneurial cognition distinctiveness is therefore most likely to be established when questions, concepts and relationships are proposed that are different from those proposed by scholars in other areas like cognitive

psychology, and which are overlooked by them when using their research lenses (Mitchell et al, 2004: 506). However, it is important to note that both cognitive psychology and entrepreneurial cognition as fields of study have a distinct territory within which they work, but also a region of shared territory, as shown in Figure 1.1 (Mitchell et al, 2004: 507).

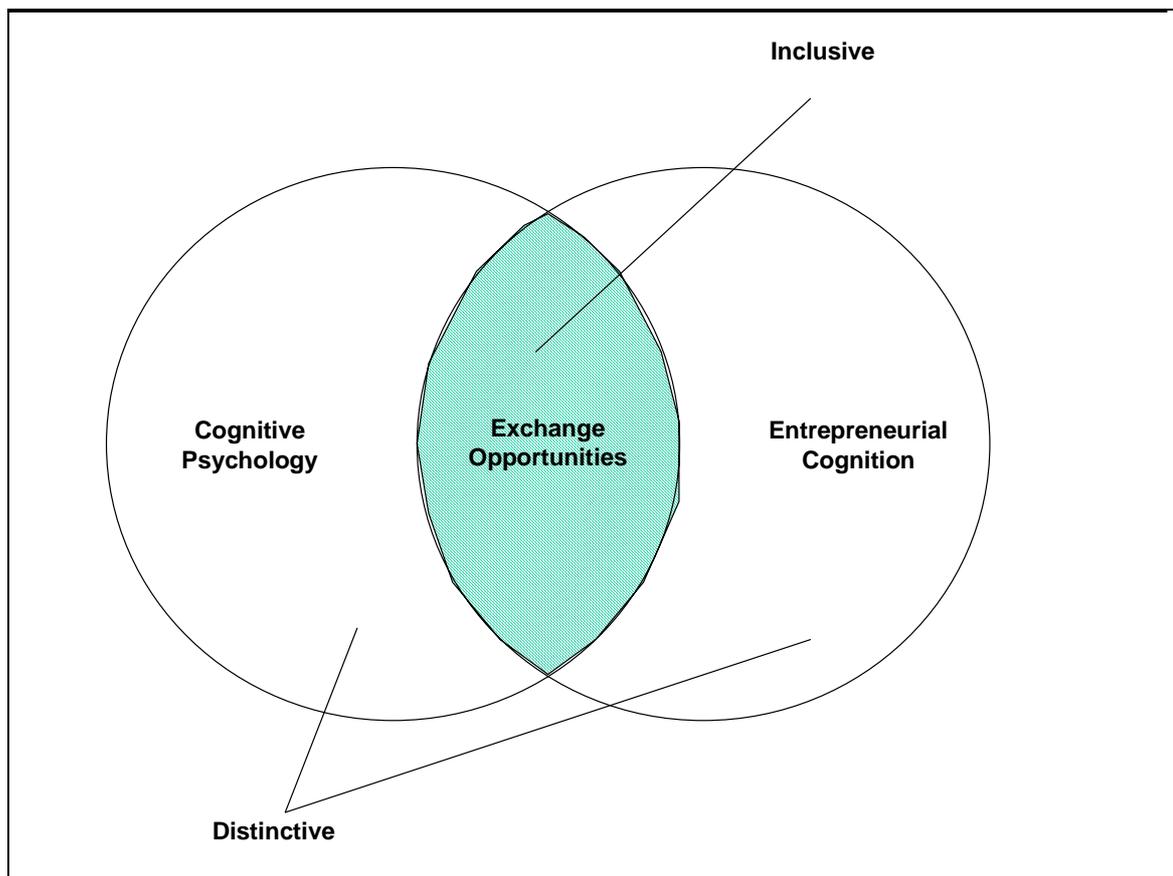


Figure 1.1 Conceptual domain of Cognitive Psychology and Entrepreneurial Cognition (Mitchell et al, 2004: 507)

The types of question that it is important to investigate in the entrepreneurial cognition field are summarised in Table 1.1. An attempt is made to provide examples of research questions relevant to the domains of both cognitive psychology and entrepreneurial cognition.

Table 1.1 Research question for the different domains with quoted references as suggested by Mitchell et al (2004: 508).

Questions specific to the Cognitive Psychology domain	Exchange opportunities with the other domain	Questions specific to the entrepreneurial domain
How do people think? Barsalou (1992)	Fundamental understanding of human cognition	
Does regulatory focus theory explain how people engage in self-regulation? Roese (1997)	Examples of the development of specific cognitive theory. How do entrepreneurs engage in multi-tasking?	
Creative cognition? Balance between novelty and familiarity. (Ward & Sifonis (1997)	An understanding of the basic mental operations of creativity.	
What are the mental processes that lead people to depart from the rational model of decision-making? Kahneman & Lavallo (1994)	The nature of human decision making and potential problem areas.	
What are the mental processes that account for expert performance?	Explanation of new venture formation as use of expert scripts.	
Methodology: Scale development of challenging concepts/theory. Hinkin (1995)	Measurement and scale development.	
	Do cognitive differences lead to meaningful	Why do some people and not others

	differences in choices such as career choices?	choose to become entrepreneurs? Simon, Houghton & Acquina (2002)
	Generalisability issues, Implications of creative people working in complementary careers.	Why do some people and not others recognise opportunities that can be profitably exploited? Gaglio & Katz (2001)
	Provides focus for why the examination of different decision processes is important. Also explains adjustments to theory boundaries.	How do entrepreneurs think and make strategic decisions? How do these differences lead to competitive advantages or disadvantages? Busenitz or Barney (1997); Mitchell et al (2000; 2002); Alvarez & Busenitz (2001)
	Research into alertness, biases, heuristics, transaction cognitions and so forth.	Do entrepreneurs think differently from other business people? Busenitz (1997); Gaglio & Katz (2001); Mitchell et al, (1994); Mitchell (2003)
	Dealing with measurement issues outside laboratory	Measurement of cognitive concepts in

	settings.	non-laboratory settings. Mitchell (1994); Mitchell et al (2000)
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The above research questions are of importance to this study. This study is undertaken to investigate certain aspects of possible research questions mentioned in Table 1.1. An attempt is also made to contribute to the body of knowledge related to the entrepreneurial cognition domain. The study deals with:

- How business risk perception influences the decision to exploit a venture opportunity
- How misconceptions influence the decision to exploit a venture opportunity
- How illusion of control bias influences the decision to exploit a venture opportunity
- How self-efficacy influences the decision to exploit a venture opportunity
- How thinking preferences as determined by HBDI (Herrmann Brain Dominance Instrument) influence the decision to exploit a venture opportunity

Figure 1.2 illustrates the focus of the study.

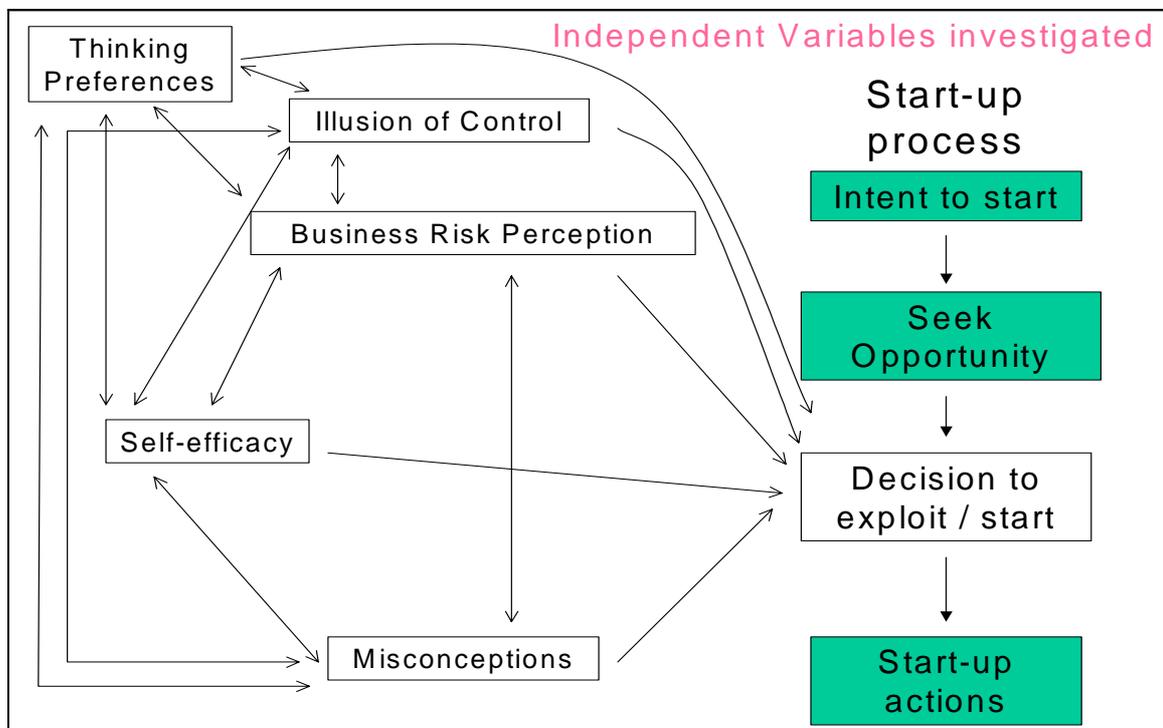


Figure 1.2 The focus of the study: the decision to exploit or start as the dependent variable and the independent variables investigated.

1.2 Problem statement

The key problem of the study is to establish which constructs may influence the decision to start a venture opportunity. To better understand the thinking of the entrepreneur, the study looks at elements influencing the decision on whether to start the venture opportunity, such as perceptions (business risk perception, misconceptions and self-efficacy), as well as heuristics and biases (illusion of control bias).

The following constructs and potential influences on the decision are investigated:

- Patterning and thinking preferences (Whole brain thinking / cognitions)
- The illusion of control bias and its influence on the entrepreneur's risk perception
- Self-efficacy
- Misconceptions
- Business risk perception

The relationships between the above factors and how misconceptions contribute to all of the above

1.3 Research objectives

The primary objective of the study is to investigate whether and how the decision to pursue a business opportunity is influenced by factors from the entrepreneurial cognition domain. Many authors (including Mitchell, Shepherd, Simon and Houghton, to name only a few) are currently investigating the entrepreneurial cognition domain.

- The major objective leads to the following secondary objectives:
- To contribute to the body of knowledge regarding the entrepreneurial cognition domain

- To investigate factors that influence the decision to start a new venture opportunity
- To develop an understanding of the specific factors that contribute to the decision to start a new venture opportunity

Figure 1.3 shows the layout of the study in order to achieve these objectives.

1.4 Demarcation and scope of the study

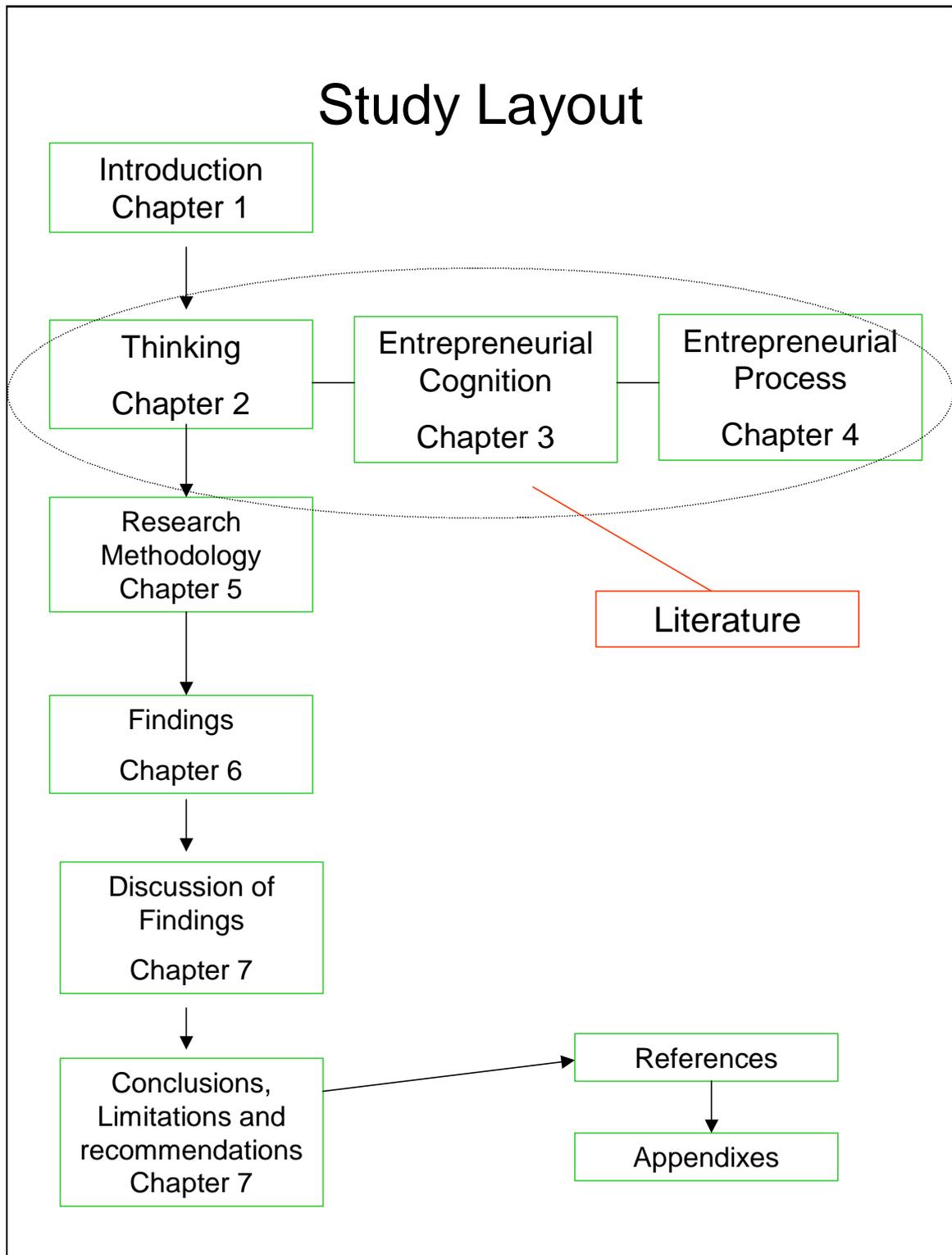


Figure 1.3 Scope of the study

1.5 Programme of investigation

- Firstly, the investigation started with a literature review. The literature regarding cognitive styles, patterning (De Bono) and thinking preferences (HBDI) was investigated and is reported on in Chapter 2. This was followed by an investigation into cognition, heuristics and biases, self-efficacy, misconceptions and risk perception, as described in Chapter 3. The last part of the literature review investigated the entrepreneurial process, reported on in Chapter 4.
- Secondly, an empirical analysis of data was executed out. The research and methodology are described in Chapter 5 and the empirical statistics are given in Chapter 6. A factor analysis was performed to determine the factors involved, as well as an item analysis, analysis of variance, a linear discriminant analysis and a logistical regression. A focus group to obtain expert opinion on the viability of the business was also held. The method of data collection included the use of a case study and a questionnaire in a case-study format.
- Thirdly, an interpretation of the data, and the conclusions from the findings, as well as the recommendations and limitations of the study, are reported in Chapter 7.

1.6 Organisation of the study

Chapter 1: Background and orientation to the problem

Chapter 1 introduces the entrepreneurial cognition concept and gives an overview of the background and orientation to the concept. References are made to specific journals such as *Entrepreneurship Theory and Practice* and *The Journal of Business Venturing*, which published special editions on entrepreneurial cognition.

The problem statement is then presented, followed by the research objectives and the demarcation of the study. The programme of investigation is mentioned, followed by the organisation of the study according to the different chapters.

Chapter 2: Cognitive styles and thinking patterns

Chapter 2 reviews the literature related to mental or cognitive models, patterning and thinking preferences (HBDI). Cognitive or mental models are seen as powerful thinking tools or metaphors. When mental models are understood they can enhance communication, teamwork and decision-making, which in turn can enhance effective problem solving (Lumsdaine, Lumsdaine & Schelnutt, 1999: 49).

Thinking preferences are also investigated. It has long been recognised that people have different styles of knowing and thinking and that the left brain deals with analytical, systematic and logical information and the right brain with creative, artistic and intuitive information (Lumsdaine & Binks, 2003: 47).

Chapter 3: Cognition and biases

Chapter 3 reviews the literature related to cognition, heuristic and biases, misconceptions, self-efficacy and business risk perception. According to Baron (2004: 237), the cognitive perspective should be viewed as complementary to, rather than incompatible with, other points of view in entrepreneurship such as personality and characteristic traits. The cognitive perspective may provide additional insight into the complex process of entrepreneurship thinking.

Chapter 4: Entrepreneurial process

Chapter 4 reviews the literature related to the entrepreneurial process. Entrepreneurship can be seen as the process whereby entrepreneur creates or takes an opportunity and pursues it, regardless of the resources currently controlled.

The chapter investigates a cognitive model suggested by Forbes (1999) and the window of opportunity metaphor (Wickham, 2001: 209) as a generalised

introduction to understanding the entrepreneurial process. The discussion is then followed by the organising model of Shook, Priem & McGee (2003: 381), who proposed four stages in the entrepreneurial process. The role of the enterprising individual has been studied within each of the four stages.

Cognitive processes in the entrepreneurial process are part and parcel of the entrepreneurs' perception and thinking and form the backbone of entrepreneurial decision-making. The identification of the opportunity, the gathering of resources and the decisions taken regarding the potential of the venture, its viability and long-term sustainability are all important factors to be taken into account.

Chapter 5: Research procedures and methodology

Chapter 5 presents the research design and methodology applied in this study. It starts by providing an overview of the research process, research questions, hypotheses and the sampling process. The measuring instruments used and the type of data analysis are specified.

Chapter 6: Findings

In Chapter 6 the results of the empirical study are reported. The results of this empirical study are provided in tabular format. The demographic data are presented, followed by the results of the factor analyses (four factors were identified), variance analysis, focus group, discriminant analysis and logistical regression analysis.

Chapter 7: Discussion of findings

Chapter 7 discusses the findings and draws final conclusions. It is evident from the empirical data that certain factors influence the decision of whether to start a venture opportunity or not. Recommendations are made for further investigations. Limitations to the study were also perceived and these are reported in this chapter.