

**An investigation of the potential interrelationships between  
the coping-values of entrepreneurs and  
the developmental stages of their businesses**

by

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## Declaration

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A. le Grange

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## Abstract

Many authors advocate the benefits of deepened insight to be gained from contextualisation. Some of them highlight the need for multi-level research as a method to identify interrelationships across research focus areas to contextualise findings. The entrepreneurial business development phenomenon, as a social ecosystem, seems to be no different. This research supports this view. Applying research of an integral nature, the research seeks to gain deepened insight into the forces that contribute to the complex processes of the entrepreneurial business development phenomenon. This research explores the contextual interrelationship between the objective developmental stage of the entrepreneurial business and the subjective coping-value profile of the entrepreneur.

The important role of the entrepreneurial business in any economy is generally accepted. Furthermore, the crucial importance of understanding the dynamics of the successful transition of entrepreneurial business from early-stage towards established business has been highlighted as a key concern of any government or stakeholder responsible for the well-being of their citizens.

The successful transition from early-stage entrepreneurial business to established medium, larger-sized entrepreneurial business is complex. Various authors have observed that only a few entrepreneurs seem to be successful in developing their business ventures. They observed that successes in entrepreneurial business seem to consist of two key elements, being the success of the business venture and the extent that this is aligned with the entrepreneur's intent. Therefore, this research study holds the view that it is improbable to explain entrepreneurial business development independent from the context of the entrepreneur's intent.

With an observed need to contextualise the relationship between the subjective intent of the entrepreneur and the objective developmental stage of the business venture, the aim of the research is to explore the value proposition of integral research as a utility to operationalise the processes to gain deepened insight into subjective and objective interrelationships.

The research considers some basic principles in the application of an integral approach. This is followed by the identification of theoretical models on subjective and objective elements that offer utility to explore the subject field of entrepreneurial business development through an integral approach, in order to gain contextual insight.

The study frames these theoretical models in the context of the entrepreneurial business development ecosystem, proposing a framework to guide the application of an integral approach to gain deepened insight into entrepreneurial business development.

The remainder of the research explores the practical application of the proposed framework, using sample data collected on entrepreneurial businesses.

Reflecting on the results of the research analysis, an induced theoretical proposition is formulated that: the subjective interrelationship between the entrepreneur's world-view and his egocentric developmental seems to interrelate with the objective developmental stage of the entrepreneurial business.

Academically, considering the explorative induced findings of this study, suggestions are made for future research into the identified possible causalities in the above contextual interrelationships. This dissertation, in context of an entrepreneurship ecosystem model, ends with a translation of this academic work into legitimate practical application.

### **Key words**

Business developmental model

Entrepreneur's dominant logical world-view

Entrepreneurial business development

Entrepreneurial success

Integral framework

Integral research approach

Thematic coping-value system

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## List of definitions, acronyms and abbreviations

*a priori* and *a posteriori*:

These terms refer to the basis of how a concept (model) is known. *A priori* concepts (models) are independent of any experience. *A posteriori* concepts (models) are known on the basis of experience.

*Business gestalt*:

An indicative measurement, acting as a signpost, that enables the activity to group business into similar groups, consisting of a small number of extremely common configurations of business characteristics pertaining to the business structure and context.

*Heuristic utility*:

A thematically grouped set of ideas about the world, goals to achieve and coping methods that aim to explain how people make decisions, come to judgments, and solve problems.

*Holon*:

Elements (parts) that form a whole (a simple point of location) that are simultaneously a whole in itself and form part of a larger whole. As a holon is nested within other holons, it forms a point of single location that forms part of something larger than itself. A holon is influenced by the whole that it is embedded in and simultaneously by the elements (parts) that form the holon.

5DVS	5 Deep Vital Signs
ANOVA	analysis of variance
DTI	Department of Trade and Industry
GDP	gross domestic product
GEM	Global Entrepreneurship Monitor (report)
NGO	non-governmental organisation
PhD	Doctor of Philosophy
SDI	Spiral Dynamics Integral
SMEs	small and medium-sized enterprises
SMMEs	small, micro and medium-sized enterprises
SSE	sum of squared errors of prediction
UK	United Kingdom
US(A)	United States (of America)
VT	Values Test

## CHAPTER 1

### NATURE AND SCOPE OF THE RESEARCH

#### 1.1 INTRODUCTION

This chapter gives an outline of the research project. It considers the background factors that motivated the research and defines the research focus area. In the processes of defining the research objectives, delimitations are noted, and the explorative nature of the research design is described. This chapter ends with a contextual overview of the subsequent chapters.

The background factors that motivated this research relate to the phenomenon of entrepreneurial business development. In general, entrepreneurial activity is viewed as a major contributor to socio-economic development. In this regard, various sources worldwide advocate the ability of entrepreneurial activity to contribute to job creation, wealth creation and distribution, research and innovation. These are only a few of the expected contributions to socio-economic development by entrepreneurial activities in economies on all of the continents.

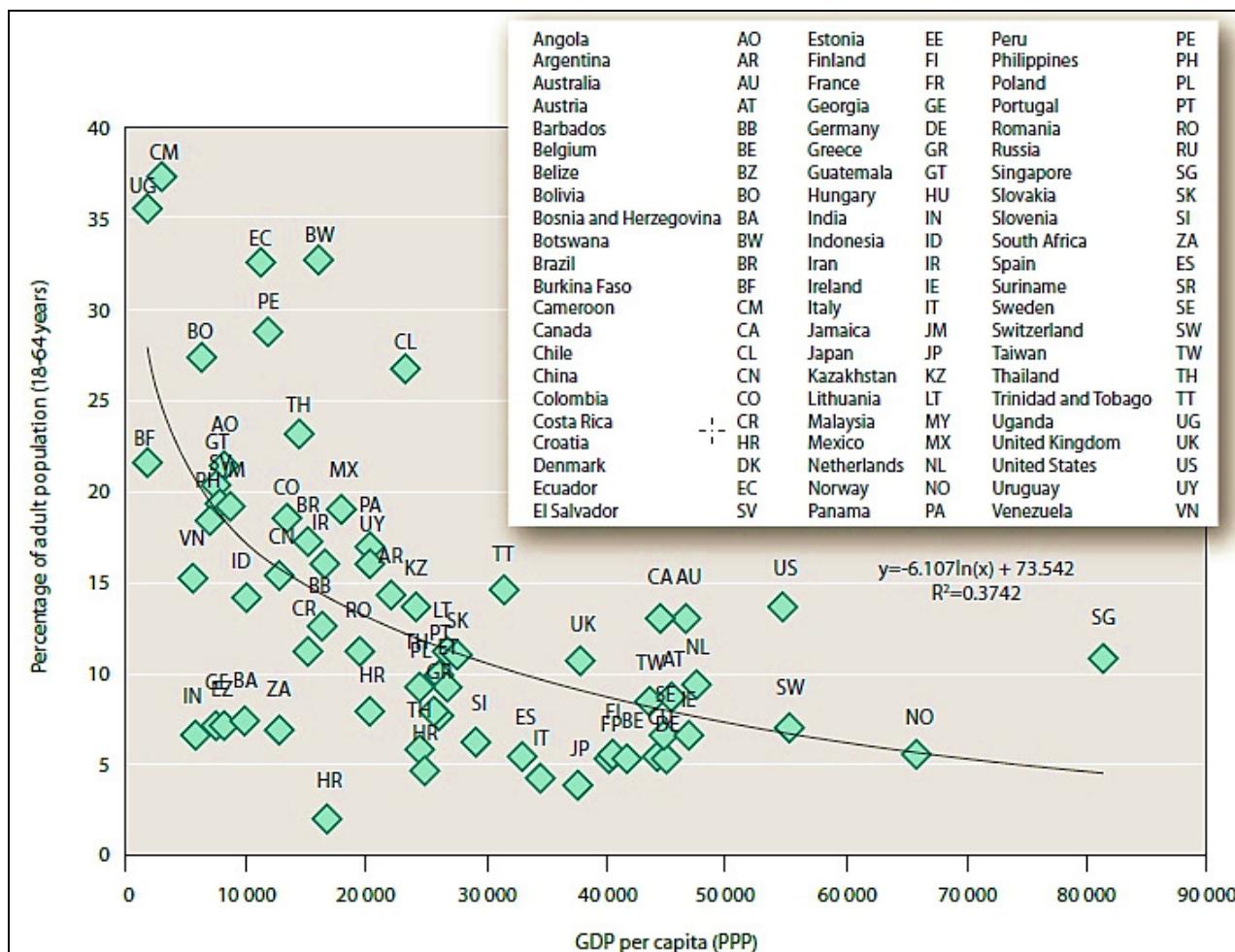
Carree and Thurik (2003, cited by Sautet, 2013) argued that entrepreneurial activity is a necessary condition for sound long-term economic growth. Sautet (2013) also cited various other sources indicating the important economic impact of entrepreneurial activity through its effect on innovation and employment.

As a result, significant resources are committed globally to entrepreneurial business development. This includes support that ranges from a political, policy, governmental strategy nature to legislative and institutional infrastructure, with financial and non-financial support programmes.

From a time perspective, these socio-economic development expectations from entrepreneurial business and the commitment of resources to support and nurture entrepreneurial business development, are not new phenomena. This time dimension contributes to the measuring and monitoring of the socio-economic development impact by these entrepreneurial business development activities.

Reflecting on the various Global Entrepreneurship Monitor (GEM) reports and the 2014 GEM data as presented in Figure 1.1 below, a rather counter-intuitive observation can be made that countries with relative high early-stage entrepreneurial activity, seem to be those countries with predominantly lower income measured in terms of gross domestic product (GDP) per capita.

Based on observations of this nature, Sautet (2013) asked the question: How can entrepreneurial activities be omnipresent and yet seem to have such little socio-economic development impact?



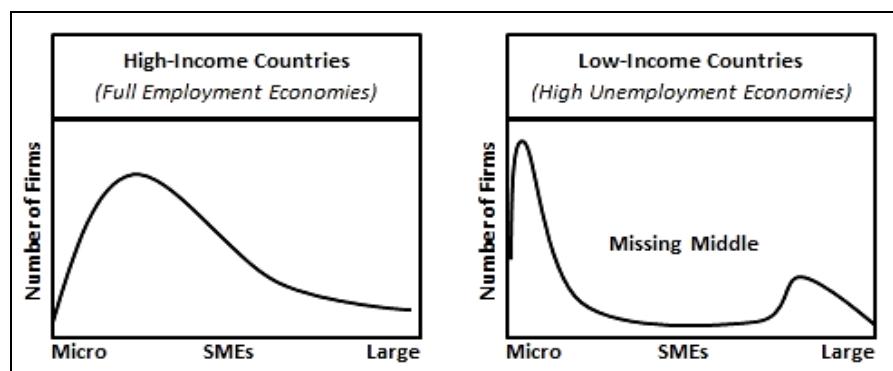
**Figure 1.1: Total early-stage entrepreneurial activity rates per country compared to the country's GDP per capita for 2014**

Source: GEM, 2014:53.

The GEM (2010; 2014) reports ascribed the observed phenomenon of high levels of entrepreneurial activity with relative low socio-economic impact to the presence of different types of entrepreneurial activity. Baumol (1990) observed that the nature of entrepreneurial activity influences the socio-economic productivity.

From this perspective, it can be generally accepted that there are different classifications of entrepreneurial activity, each with a different impact on optimum socio-economic development.

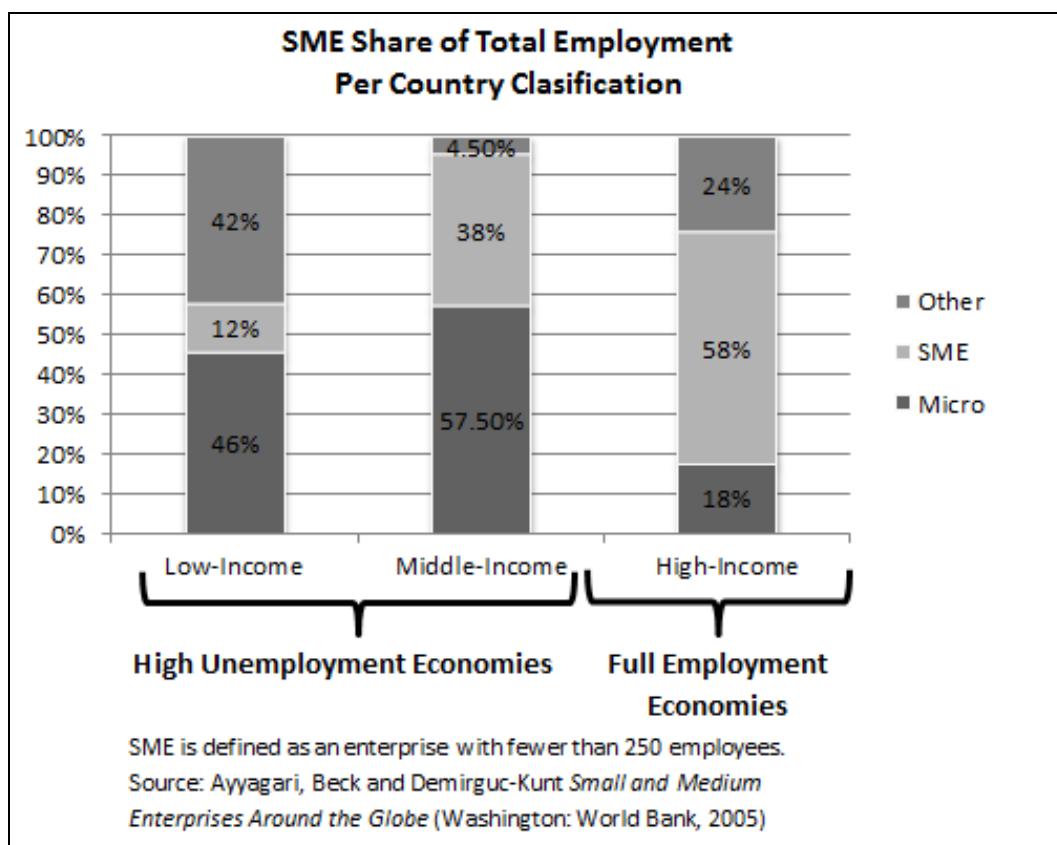
Considering the classification of entrepreneurial activity from a business size perspective, Figure 1.2 below depicts the structural difference observed between high-income and low-income economies. Figure 1.2 below shows the tendency, that low-income economies have a large segment of micro enterprises and some large enterprises with a missing middle segment of small and medium-sized enterprises. This observed large segment of micro enterprises in low-income countries seems to resonate with the above GEM (2014) observation, associating low-income countries predominantly with high levels of nascent entrepreneurial activities, predominantly in the form of informal micro enterprises.



**Figure 1.2: Enterprise size distribution for high-income and low-income economies**

Source: Harvard Kennedy School, No date.

In contrast, high-income economies have a large segment of small to medium-sized enterprises. This can be an indication that compared to micro and very-small organisations, medium to larger sized organisations seem to offer advantageous productivity prospects for socio-economic development. Exploring this opinion from an employment perspective, Figure 1.3 below shows the employment contribution generated by the formal small and medium-sized enterprises as observed in high-, medium- and low-income economies.



**Figure 1.3: Employment distribution in high-, middle- and low-income economies**

Source: World Bank, 2013.

Considered from a socio-economic development perspective, high-income economies are associated with full employment economies. Figure 1.3 shows that formal small to medium-sized enterprises employ more than half (58%) of the available work force of these full employment economies.

In comparison, Figure 1.3 shows that the informal micro- and very-small enterprises are the major contributors of employment in the low- and middle-income economies. From a comparative perspective, one should keep in mind that low- and middle-income economies are regarded from a socio-economic development perspective as economies that are plagued by relatively high levels of unemployment. Therefore, it can be interpreted that Figure 1.3 communicates only the impact that micro and very-small enterprises (predominantly necessity driven and operational in the informal sector) have on the people that are currently employed in these economies. These descriptive figures tend to be silent on the impact that micro and very-small enterprises have on the relatively large segment of unemployed people in the workforce of low- and middle-income economies.

There seems to be a need to consider the employment capacity of these informal micro and very-small-sized enterprises. In essence, there is a need to consider the difference in the socio-economic development capacity observed between the formal medium-sized enterprises and the informal micro and very-small-sized enterprises. A possible point of departure can be to assess whether they have the capacity to stay in operation and develop their production capacity to offer equitable employment opportunities for the unemployed segment of their economies.

This solicits the question: What is the capacity of these informal micro and very-small enterprises compared to the formal small and medium-sized enterprises to offer equitable employment opportunities to the total available workforce in their respective economies?

The objective of this study is not to explore this question. However, considering the structural employment opportunity differences between formal medium-sized enterprises and informal micro and very-small enterprises may provide potential insight on the above question.

Table 1.1 below is a summary of various sources indicating the employment capacity associated with the various classifications of enterprises according to employee numbers.

**Table 1.1: Business classification according to the number of employees**

<b>Business Category</b>	<b>Employee size classification according to</b>				<b>Multiplication ratio</b>			
	SA National Small Business Act., 1996 amended 2003 / 2004	Observatory for European SMEs, 2004	Australian Bureau of Statistics	Korea	South - Africa	Europe	Australia	Korea
Micro	5	10	4	5	1	1	1	1
Small	50	50	20	50	10	5	5	10
Medium	200	250	200	300	40	25	50	60

Source: Adapted from Asian Development Bank, 2014; Commonwealth of Australia, 2012; Department of Trade and Industry (DTI), 2008; Stokes, Wilson and Mador, 2010.

Observed from this summary, the significant employment capacity multiplication benefits to be realised are intuitively evident, if micro and very-small enterprises develop into small and medium-sized enterprises. The multiplication effect seems to range between 25 and 60 times depending on the classification system observed.

However, from a socio-economic development perspective, it is not only employment, but also the equitable nature of the employment that needs consideration. Considering equitability from an income perspective, the same socio-economic productivity trend appears to be present between informal micro and very-small businesses and more formal medium-sized businesses.

Various sources of literature indicate the relative limited income potential of small businesses that are predominantly a form of self-employment based on necessity-driven entrepreneurship. For example, Hatfield (2015) noted that the median income from self-employment across Europe seems to be falling at a faster rate than median employee's earnings. He noted that in 2011, the median self-employed worker in the United Kingdom (UK) earned over 40 percent less than the median employee (Hatfield, 2015). In other cases, it was reported that a significant number of entrepreneurs involved in very-small and micro enterprises earn below the poverty rate (DTI, 2008).

In summary, considered in the context of socio-economic productivity, it appears to be evident that micro and very-small businesses, predominantly in the informal sector as a form of necessity-driven entrepreneurship, seem to offer short-term benefits during periods of economic turmoil and/or offer limited employment relief to a percentage of the population in economies plagued by high unemployment. In comparison, medium-sized businesses, that are predominantly a form of opportunity-driven entrepreneurship, seem to offer higher multiples of employment opportunities of a more equitable nature, in essence, contributing to a more sustainable form of socio-economic development.

From this perspective, it is observed that there is a shift in entrepreneurial business development focus. Although the GEM (2014) report still acknowledged the importance of starting new business ventures in an economy; the report highlighted that without a goal to develop these businesses, the goals of full employment and wealth creation cannot be achieved.

In this regard the GEM (2014) report advocated the importance of established businesses as the core of a country's economic canvas, highlighting the importance of understanding the dynamics of the successful transition from early-stage entrepreneurial activity towards established businesses as one of the key concerns of any government or stakeholder responsible for the well-being of their citizens.

As the next section indicates, it can be challenging to understand the dynamics involved in the successful transition from early-stage entrepreneurial activity towards established business.

## **1.2 MOTIVATION FOR THE STUDY**

Various authors commented on the observation that only a few entrepreneurs seem to be successful in developing their business ventures. In this regard, Levie and Lichtenstein (2010) highlighted the importance to study the rareness of new businesses that show development ambition.

However, a note of caution should be made not to narrow research on entrepreneurial business to the relative few cases of business ventures that successfully develop into large corporations.

As Stokes, Wilson and Mador (2010) observed, studying only the few cases of successful business transition can be regarded as a rather narrow research approach that tends to exclude a large majority of businesses and their owners.

Considered from a broader perspective, there is the indication in the literature, that the entrepreneurs' choices may have a significant influence on the dynamics involved in the successful transition from early-stage entrepreneurial activity towards established businesses.

One of the observed views is that people who enter into entrepreneurial business based on necessity tend to return to forms of employment if and when they have the opportunity. Merrett and Gruidl (2000) indicated that people may engage in entrepreneurship for short-term goals. They cited Clark and James (1992) who observed that some people engage in entrepreneurship to supplement household income and after satisfying these goals might decide to retire or re-enter the labour force. Similarly, a report on self-employment in Europe indicated that European countries that are beginning to experience an economic upturn, seem to see a rise in employment with a decline in self-employment activities (Hatfield, 2015). This observation supports the general notion that during an economic recovery, necessity-driven nascent entrepreneurship (self-employment) seems to decline in favour of employment opportunities.

A second observed view by various authors is that many small business managers are not willing to pursue business development (Wiklund, Davidsson, & Delmar, 2003). For example, Davidson (1989, cited by Hanks, Watson, Jansen & Chandler, 1993) observed that entrepreneurs perceive the negative effects of development to outweigh the perceived benefits to be gained once the organisation reaches a certain size. Churchill and Lewis (1983) also identified a financially successful business developmental stage where the entrepreneurs consciously choose to disengage from business development.

The observation of Churchill and Lewis is a good example of the view of Stokes et al. (2010), that success in entrepreneurial business consists of two components: (1) the action of doing to achieve results, i.e. the practices of managing a business; and (2) the extent to which these results align with the intentions of the person who initiated the action, i.e. the entrepreneur's goals and values.

Equating success in entrepreneurial business as the transition from a small to larger established business, Walker and Brown (2004) referred to multiple authors quoting the traditional objectives for business success to be employee numbers or financial performance, for example profit. As an observation, these measures have the implicit assumption of growth imbedded in them. However, Walker and Brown (2004) observed that entrepreneurs as the key decision makers in their entrepreneurial business ventures may have other objectives than the above presupposed objective associated with business success.

In essence, the observed point of view is that entrepreneurship success may include other dimensions than the traditional monetary rewards associated with successful business ventures, with its imbedded growth-orientated measurements. There seems to be a need to consider the success of the entrepreneurial business in context with the entrepreneur's subjective goals.

From this perspective, follows the notion that the development of entrepreneurial business seems to include two dimensions: (1) the objective world, the study of knowledge, 'how we know'; and (2) the subjective mind perspective, the study of being, 'what is' (Smith, 2013).

From an objective world standpoint, the various ranges of theory (including business development) begin with how we observe and reason about and seek to explain phenomena we encounter in the world (Smith, 2013). In this regard, the theories on the elements of business venture success seem to be based on the presupposed goals of business development. These theories focus on the objective in nature constructs relating to the internal business structures and systems, the external business environment, markets, infrastructure, policies and the people (entrepreneur) in terms of education, skills, personality traits etc.

The interpretation that Stokes et al. (2010) and Walker and Brown (2004) asserted to above, is that entrepreneurship also includes the notion that our experience, actions, thoughts and perceptions are informed by our understanding of the world around us, our implicit or explicit ontology (Smith, 2004). Our ontology informs our intentional relation to objects in the world and the things

we are conscious of in perception, thought and action (Smith, 2004). In essence, it leads to the notion that the entrepreneurs' subjective goals seem to inform their intentional relation to their objective business venture.

This acknowledgment that the development of entrepreneurial businesses seems to be influenced by these two components, one of an objective nature and the other of a subjective nature, form the basis for the focus of this study, as explained in the next section.

### **1.3 THE RESEARCH FOCUS**

Various studies have been conducted to understand, explain and predict the phenomenon of entrepreneurial business development. These studies explored entrepreneurial businesses from their objective and subjective perspectives identified in the previous section. In the process, it added to the currently rich body of knowledge on entrepreneurial business development.

Consequently, various authors have identified the need to consider the integration of research findings. As De Clercq, Lim and Oh (2011) noted, a single-level investigation yields only an incomplete understanding, advocating the need to complement these findings through the application of multi-level (integral) models.

Reflecting on the need to integrate research findings, it seems that the objective observable elements that influence success and failure in entrepreneurial business ventures tend to be generic. However, there is the point of view that it is improbable to explain entrepreneurial business development independent of the situation (context) in which it finds itself (Shane & Venkataraman, 2000, cited by De Clercq et al., 2011).

When exploring the identified need to contextualise entrepreneurial business development, from an objective world and a subjective mind perspective, the process needs to identify the intentional relationship between the objective elements of entrepreneurial business in accordance to the individual's subjective intent (his value system, objectives or goals).

In this regard, Hackler and Mayer (2008) reviewed entrepreneurial business development from a regional economic analysis perspective, focusing on social and cultural factors in contrast to opportunity structural factors such as access to financial resources and markets. They observed that, from a cultural grouping perspective, there is a quantifiable impact on entrepreneurial business development in metropolitan areas (Hackler & Mayer, 2008). This resonates with the 2012 GEM report's finding that attitude (a subjective element) can play an important role in how societies provide the objective elements in the form of support, generating opportunities and structures, for entrepreneurial business development.

These examples above highlight the notion that the subjective realm seems to have an interrelationship with the objective realm of entrepreneurial business development.

This further resonates with Wilber's (2001) observation that, without correlated internal development, the exterior development cannot be sustainable. Wilber (2001) advocated that attempts to understand the process of development without an understanding of how the human consciousness unfolds, offers little prospect for success. This perspective highlights the need for an integral approach to investigate entrepreneurial business development, as an attempt to complement the understanding of the current rich body of knowledge on entrepreneurial business development.

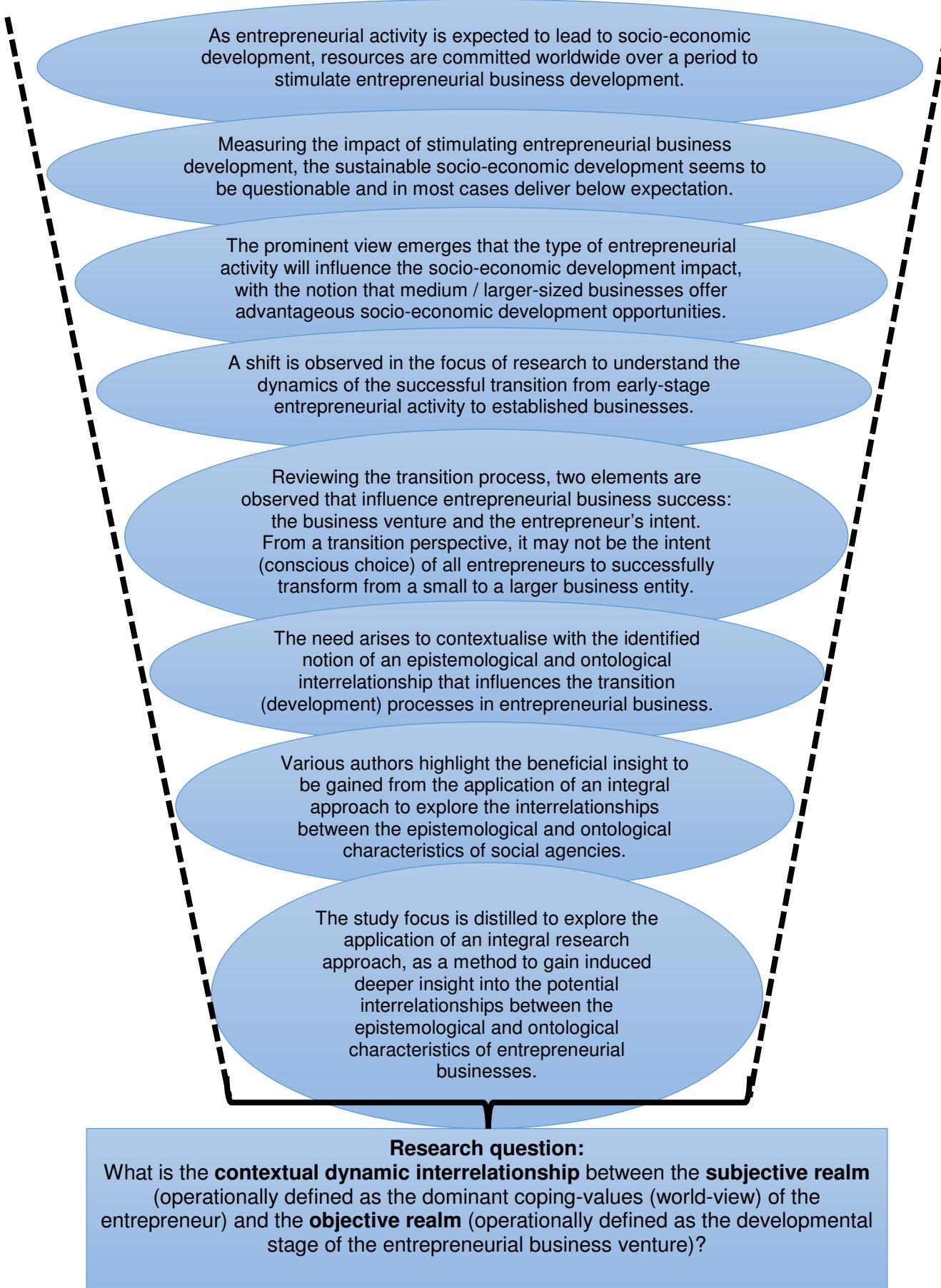
One approach, adapted from Beck and Cowan (2006), is that one should not only ask 'how' to guide entrepreneurial business development, but instead one should also ask 'what' is the nature (intent, objectives, goals) of the entrepreneurs to be guided, as the owners of these businesses. From this perspective, it follows that one can equate the entrepreneur's intent to his or her world-view of what is possible, and the analogue that the entrepreneur's world-view seems to be that of an inverter. This inverter seems to have the ability to invert contextually the rich body of knowledge on entrepreneurial business development.

Based on this analogue, the purpose of the research study is an explorative attempt to gain deepened insight into the interrelationship, if any, between the objective realm of entrepreneurship development and the subjective realm of the unfolding development of the entrepreneur's active dominant coping-value system (his world-view).

Executing this explorative research study, the research question arose: What is the contextual dynamic interrelationship between the subjective realm (operationally defined as the dominant coping-values (world-view) of the entrepreneur), and the objective realm (operationally defined as the developmental stage of the entrepreneurial business venture)?

Figure 1.4 (below) is a visual summary of the research focus, contextual to the background and motivation of this research project.

The next section considers the academic contribution expected from answering this research question.



**Figure 1.4: Research focus in context of the background and motivation of this research study**

#### 1.4 RESEARCH OBJECTIVE

Sautet (2013) indicated that entrepreneurial activity is a necessary condition for sound long-term socio-economic development. Considered from this perspective, this research study seeks to contribute to the discussions on how to capitalise on the potential observed in entrepreneurial business.

To capitalise on the potential of entrepreneurial businesses, the 2014 GEM report highlighted the importance of understanding the dynamics of the successful transition from early-stage entrepreneurial activity towards established businesses as one of the key concerns of any government or stakeholders responsible for the well-being of their citizens.

In this regard, the study's focus is to contribute to additional insight on the dynamics involved in the transition processes of entrepreneurial business from start-up activity towards established businesses.

Considering this task from an academic perspective, the aim of the study is to add to the current rich body of knowledge that contributes to the understanding of entrepreneurial business development. Various authors advocate the benefits that stand to be gained from the application of multi-level models to the findings obtained from focused single-level investigations.

From a multi-level approach, integral research is a type of multi-level model that seeks to obtain an understanding of the interrelationship between the objective matter and the subjective mind as an attempt to gain realistic insight into the reality of our world as well as the forces that create and shape it.

From this perspective, the key objective of this study is to explore deepened insight into the interrelationship between the subjective and objective elements of entrepreneurial businesses.

From this academic perspective, the research objective is the reason for engaging in research. It is to seek answers to the 'what is' question in order for us to understand, explain and/or predict phenomena (Cooper & Schindler, 2001). Cooper and Schindler (2001) compared scientific inquiry to the process of puzzle solving, where the puzzle takes the form of a solvable research problem that may be resolved or clarified through reasoning; a process of taking and classifying small facts, through induction into conclusion forming and confirmation seeking.

Corbin and Strauss (2008) commented that the process of theorising is interpretive and entails more than condensing raw data into concepts; it also arranges the concepts into a logical systematic explanatory scheme, a set of well-developed categories that are systematically interrelated through statements of relationship, forming a theoretical framework to explain some phenomenon.

Based on the above, from a scientific enquiry perspective, the aim of this study is to contribute to solving the puzzle, by deepening insight into the interrelationship between the subjective and objective characteristics of the phenomenon of entrepreneurial business development.

The intent of the study is to build on the current rich systematic explanatory schemata available on entrepreneurial business development in the literature.

As indicated in the sections above, the literature advocates the potential benefits from an integral approach in the development of deepened insight into social systems. This includes considerations relating to the interrelationship between the subjective and the objective characteristics of a social system. From this perspective, the aim of this study, through the application of an integral approach, is to explore the interrelationship between the objective and subjective characteristics of a social system, operationally defined as an entrepreneurial business.

Considered from an entrepreneurial business success perspective, there is an emerging acknowledgement that the traditional monetary objectives, with its imbedded measures that promote business development, are expanding to include other dimensions that include the intent (subjective values / world-views) of the entrepreneurs.

Wiklund et al. (2003) cited the work of various authors who commented on entrepreneurs who had started and operated businesses for a variety of reasons other than maximising economic returns. This alternative intent or objective for starting a business may be rational. As a result, there seems to be a need for more insight on the relative importance of economic and non-economic motives, as well as how these may influence entrepreneurial business development (Wiklund et al., 2003).

In essence, there is an identified need to explore the potential interrelationship between the subjective coping-value system (world-view) of the entrepreneur and the objective development of the entrepreneurial business venture.

As depicted in the section below on research design, this research study is an inductive systematic research process with a focus on the identification of subjective and objective interrelationships. This research utilises and builds systematically on well-established theoretical frameworks to explore deepened insights into these interrelationships.

In summary, this study contributes to solving the puzzle of understanding the phenomenon of entrepreneurial business development.

Many authors (Abdelgawad, Wright & Zahra, 2014; De Clercq et al., 2011; Beck & Cowan, 2006; Wilber, 2001; Sperry, 1993; Fischer, 1980) indicated the potential value of an integral approach to research of a social nature.

For example, as mentioned by Abdelgawad et al., (2014), the integration of the natural setting into the findings on a phenomenon, such as entrepreneurship can enrich the various theoretical perspectives and even advance to new theoretical frameworks.

The aim of this study is to explore the phenomenon of entrepreneurial business development, applying an integral approach to gain deepened insight and contribute to the current literature's understanding of the phenomenon of entrepreneurial business development.

Obtaining additional insight into the interrelationship between the objective 'how' of executing a business venture and the subjective dominant logic of 'why' people engage in an entrepreneurial business venture, may offer deepened insight into the research puzzle of understanding the transition process of start-up businesses into the various developmental categories associated with entrepreneurial business development.

## 1.5 THE DELIMITATION OF THE STUDY

### 1.5.1 Assumptions

This study assumed there would always be high expectations regarding entrepreneurial activities' generally accepted ability to make a positive contribution to socio-economic development, especially in developing countries and emerging markets.

From this perspective, it is assumed that the political will to explore entrepreneurial business development will prevail, as observed in the multitude of support programmes, development policies and funding and non-funding interventions.

There is also an assumption that entrepreneurial activity is omnipresent in all economies. However, it is the socio-economic impact that varies significantly and in many cases does not deliver in accordance to the high expectations professed from entrepreneurship.

From a sustainable socio-economic impact perspective, the assumption exists that it is not entrepreneurship *per se* that will deliver socio-economic development, but the type of entrepreneurial activity.

Considering the type of entrepreneurial activity, it is further assumed that the subjective intent of the entrepreneur may have a potential influence on the development of an entrepreneurial business into various types or classes. In this regard, the study also assumes that an entrepreneur's intent (coping-value system) has the ability to adjust in accordance to the complexity of the business venture he or she engages in. This assumption is based on the notion that people tend to seek and operate in a state of equilibrium between their internal (subjective) being and the external (objective) elements of the environment they engage with.

From a positive sustainable socio-economic impact perspective, it is assumed that the transition from early-stage entrepreneurial activity towards established business, and the ability to secure established business, is one of the key necessary conditions for sound long-term economic development. This assumption is based on the premise that larger businesses offer more productive capacity for socio-economic development in terms of employment creation and wealth distribution in the form of equitable remuneration.

### 1.5.2 Relationship and causality

The nature of this study is explorative with a purpose to explore interrelationship, not causality. One of the elements for causality is that the cause precedes the effect (Babbie & Mouton, 2012); that element A leads to the direct outcome of element B. Studies that seek to explore forms of causality are explanatory of nature (Andersen & Gamdrup, 1990, cited by Jeppesen, 2005).

Even though this study focuses on the identification of an interrelationship, there may be an induced interpretation of causality, due to the nature of the topic under investigation.

As noted in Chapter 2, some of the literature acknowledges the requirement of a behavioural change for development to take place. This can be translated into the notion that the entrepreneur has to make a strategic choice, and once this choice has been made, it warrants changes that will allow the organisation to fit into one of the common business developmental stages. From this perspective, there is an induced implied causality that the internal subjective being of the entrepreneur manifests into the formation of various types or classes of entrepreneurial business.

Considering the nature of this study to be explorative and not explanatory, the dominant emphasis of this study is not on causality, as this study explores the plausible interrelationship between the subjective and objective in nature elements within entrepreneurial businesses.

As discussed in the literature review, Chapter 2, the potential interrelationship between the developmental stage of the business and the active coping-value system of the entrepreneur is not necessarily an exact correlation, but more an approximation and changes in the one can be a catalyst to changes in the other and *vice versa*. As a result, the driving force of the potential interrelationship can be explained from a business development perspective as well as from an entrepreneur's active coping-value system perspective. For example, it can be that the entrepreneur's business successfully expanded its market into multiple segments because of the needs of one of its existing clients. This result in an increase in the complexity of the business *gestalt* as explained in the theoretical models on business developmental stages. The demands from these more complex external stimuli can be the driving force for the entrepreneur's activation of a more complex coping-value system.

Alternatively, considered from the entrepreneur's active coping-value system perspective, it may be that his or her active coping-value system evolved to a more complex level due to dissonance and insight provoked from outside his or her entrepreneurial business. For example, through the exposure to the opportunities of international business identified during an educational intervention. This active, more complex coping-value system may identify in the prevailing economy and industry the opportunity to expand into international markets. As a result, this decision to expand into the international market can be the driving force for the development of the entrepreneurial business. Accordingly, the business structure transforms to a more complex *gestalt* as explained in the theoretical models on business developmental stages.

From these two examples above, it is evident that the aim of the study is not to explore causality, but to focus more on the interrelationship between the objective external and subjective internal realms of entrepreneurial businesses. The study maintained the assumed notion that people tend to seek and operate in a state of equilibrium between their internal (subjective) state of being and the external (objective) elements of the environment they engage in.

### 1.5.3 Hypotheses

Empirical research of a social nature can serve many purposes (Babbie & Mouton, 2012). From this perspective, empirical research can be divided into five types of research each with a specific purpose (Andersen & Gamdrup 1990, cited by Jeppesen, 2005):

- i) Explorative types of research that aim to present information on a phenomenon and how it is constituted;
- ii) Descriptive types of research that aim to explain the character of the phenomenon in relation to a specific context;
- iii) Explanatory types of research that aim to answer why the phenomenon developed in a certain way and to identify its causes;
- iv) Predictive types of research that aim to provide suggestions, proposals and recommendations concerning how a phenomenon can be changed; and
- v) Action-oriented research that seeks to implement change in collaboration with a target group.

One of the discussions on the types of research is to consider, how and to what extent the level of knowledge in a particular domain impact the selection of the research to be conducted (Jeppesen, 2005). One of the views is that research moves through various phases starting with research that is more of an explorative nature, moving towards research that is more of an explanatory nature with its focus on the identification of causes (Jeppesen, 2005). From this perspective, follows the view that explorative research is typically related to subject fields that are relatively new (Babbie & Mouton, 2012; Jeppesen, 2005), for example, subject fields that are in their formative stage or with lower volumes of published knowledge available.

Considered from this perspective, the integral approach of this research project includes the application of consciousness constructs with measurement challenges that impact their operationalisation (Prinsloo, 2012; Stein & Heikkinen, 2009) as discussed in Chapter 4. Applying a prudent research approach, this research study regards these constructs as relatively new.

In deciding the research purpose for this study, the researcher considered Andersen (1999, cited by Jeppesen, 2005) who had indicated that a research project should attempt to focus on one type of research with its underlying research purpose. However, Andersen acknowledged that most research includes a descriptive element.

Deciding on a research purpose for this study the differences in focus between explorative and explanatory types of research were considered.

The major purpose of explanatory research is to indicate causality (Babbie & Mouton, 2012; Andersen & Gamdrup, 1990, cited by Jeppesen, 2005). Causality is a process that entails the testing of a specific statement of prediction; in essence, testing a hypothesis statement.

The purpose of explorative research can be to gain a better understanding of an existing phenomenon and thereby contribute to the development of hypotheses that can be tested in future research (Babbie & Mouton, 2012; Trochim, 2006). Explorative research can indicate future research priorities and/or the feasibility of more extensive research on a phenomenon, contributing by explaining concepts and constructs as well as considering possible research methods that can be deployed in subsequent research (Babbie & Mouton, 2012).

As indicated in Section 1.5.2 (Relationship and causality), the aim of this study is not to explore causalities. Accordingly, the purpose of this study is not explanatory with the aim of testing a research hypothesis statement.

The purpose of this research study is exploratory with the aim to gain deepened insight into the phenomenon of entrepreneurial business development. Through its systematic exploration, it rather focuses on identifying and contextualising possible interrelationships (as discussed in Chapter 6 and Chapter 7) that can contribute to the development of hypotheses for future research of an explanatory nature.

Considering the nature of this explorative in purpose research study, there is no proposed hypothesis statement to be tested in this research project.

#### **1.5.4 Delimitations**

Entrepreneurial business venture development and success is a complex topic with multiple forces at play. To elaborate on and explore all of these multiple forces are beyond the scope of this study.

The socio-economic development impact of entrepreneurial activity on any economy is also a complex topic with multiple forces at play. To elaborate on and explore these multiple forces are also beyond the scope of this study.

The focus of this study is to explore a possible integral approach to deepen insight into the phenomenon of entrepreneurial business development. This study is an attempt to explore the interrelationship between the objective realm (objective knowledge on business development) and the subjective realm of the entrepreneur (subjective belief / world-view).

The aim of the study is not to exhaust all possible integral research approaches that can be used to deepen insight into the understanding of the phenomenon of entrepreneurship development. This study attempts to explore and demonstrate the possibility of applying a selection of existing theoretical frameworks and/or logical explanatory schemas. Operationally, this study systematically applies these identified frameworks to explore an integral approach to the phenomenon of entrepreneurship development.

The findings and interpretations of this study are inductive in nature and limited to the inherent limitations of the selected theoretical frameworks used. The findings are also subject to the limitations in the research data obtained during the course of this study.

With a study focus on entrepreneurial business development, from an operational definition perspective, the research data for this study only considered businesses that are owner managed and/or controlled.

## **1.6 RESEARCH DESIGN**

This section discusses the research plan and the research methodology used in this study.

### **1.6.1 The research plan**

This study followed a systematic approach based on the following research steps:

- a. Conduct a literature review to identify possible existing theoretical frameworks and/or logical explanatory schemas that can form the basis for this study. The aim was to use these frameworks in a systematic approach to explore on an integral basis the phenomenon of entrepreneurial business development as represented in the study's survey data;
- b. To formulate a theoretical interrelationship concept framework to guide the research project, induced from the selected theoretical frameworks and/or logical explanatory schemes identified in the literature review;
- c. Identify an entrepreneurial business data source, develop data collection instruments, execute data collection and analysis to identify objective and subjective characteristics to investigate for interrelationships;
- d. Induce from the research data and literature, the interrelationships between the objective characteristics pertaining to the developmental stages of the business and the subjective characteristics pertaining to the subjective coping-value system of the entrepreneurs; and
- e. Conclude on the research findings and consider recommendations.

Figure 1.5 below is a visual representation of the research project indicating the research plan activities as indicated above.

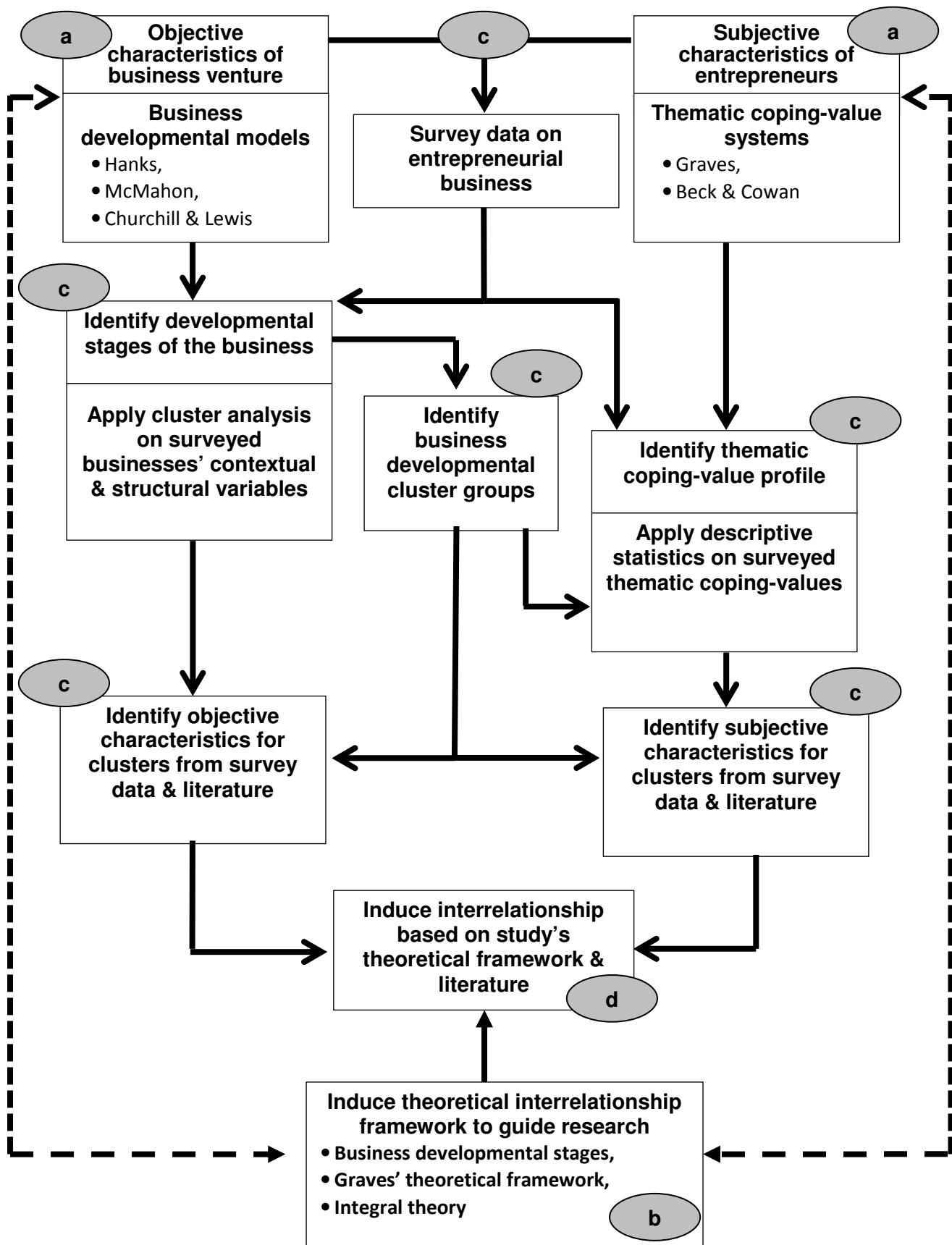


Figure 1.5: Visual representation of the research study indicating research plan activities

### 1.6.2 Research methodology

The aim of this study is to contribute systematically, through the application of an integral approach, to the development of a broad conceptual framework to understand the development of the entrepreneurial business phenomenon.

This research is an explorative systematic research process with a focus to identify and contextualise possible interrelationships. The study utilises and builds on well-established theoretical and logical explanatory schemes of entrepreneurial business development.

The objective of the study is to explore the implied dynamic interrelationship between the subjective realm (operationally defined as the dominant coping-values (world-view) of the entrepreneur) and the objective realm (operationally defined as the developmental stage of the entrepreneurial business).

From an entrepreneurial business development perspective, the proposition of this study is to add systematically to the richness of the descriptive characteristics used in the current literature to describe and define business developmental stages. In this regard, the study aims to identify potential subjective characteristics that can be added to the empirically-identified objective characteristics of business structure and context associated with the various business developmental stages.

Entrepreneurial business, for the purpose of this study, is operationally defined as an owner-managed business, where the owner, as a minimum, has the responsibility of approving the business strategy.

From a methodology perspective, as explained in more detail in Chapter 4, a three-step methodical approach was applied.

The first methodical step focused on the empirical identification of the presence of various business developmental stages in a data set of entrepreneurial businesses. For this stage of the research project, exploratory data analysis was applied to identify various business developmental stages in the entrepreneurial businesses data set.

With the successful identification of business developmental stages, on an empirical basis, the second methodical step was to explore the identification of the entrepreneurs' subjective realm. This subjective realm is operationally defined as the dominant coping-values system (world-view) of the entrepreneur. For this stage, descriptive statistics were applied following a systematic approach, to identify probable coping-value system patterns within the identified business developmental stages.

The third methodical step explored the interrelationship of the coping-value system patterns identified in the various business developmental stages. This methodical step explored how the entrepreneurs' identified thematic coping-value system characteristics contribute to explain and/or

support the empirically-observed contextual and/or structural characteristics present within the various identified business developmental stages and *vice versa*. This stage applied inductive reasoning to identify statements of interrelationship. Following a systematic process, the findings from the above two methodical steps were classified to identify explainable relationships within the data. The explainable interrelationships are based on inductive reasoning derived from the theoretical frameworks and logical systematic explanatory schemas in the current literature that pertain to entrepreneurial business development and the characteristics of the thematic coping-value pattern (world-view) identified in Graves' theoretical model (1974; 1973; 1971; 1970).

## 1.7 OUTLINE OF THE STUDY

This section provides a summarised overview of the content of the remaining chapters of this research study and gives an overview of the structure of this document for ease of reference.

### 1.7.1 Chapter 2: Literature review

With a research objective to explore the implied dynamic interrelationship between the dominant coping-values (world-view) of the entrepreneur and the developmental stage of the entrepreneurial business venture, the literature review focused on three broad topics of interest:

- i) Explanatory frameworks that integrate the external objective world with the subjective subconscious of the human being;
- ii) Explanatory frameworks on entrepreneurial business development phenomenon; and
- iii) Explanatory frameworks on the subjective intent for adult decision-making.

A literature review on business development frameworks and models indicated, with its fair share of critique, that business developmental stage models are still accepted as a relevant research approach to gain an understanding of and insight into the developmental challenges of entrepreneurial business development phenomenon.

With a research focus on entrepreneurial business development, and the intent to explore interrelationships, the empirical identification of business developmental stages is regarded as a key focus point.

Accordingly, the literature review focused more on business developmental stage models developed from an empirical perspective, instead of models developed from a theoretical propositions perspective.

With a more focused literature review on business stage developmental models, the literature review considered the major critique on business stage developmental models, the accepted number of developmental stages, the considerations for identifying developmental stages and considerations on the developmental processes through the various developmental stages.

The section on business developmental stage models ends with the acknowledgement in contemporary literature of the perceived benefits of an integral approach to obtain deeper insight into business development, that includes the consideration of how subjective elements impact on the objective elements of entrepreneurial business development.

To an extent, this introduced the literature review section on theoretical frameworks and logical explanatory schemata on adult subjective decision-making and goal-setting.

From the literature reviewed, it was observed that studies on adult subjective decision-making is conducted in an increasingly diverse set of disciplines. However, it was also observed that, the importance of psychological concepts is increasing in both normative and descriptive research work on decision-making (Slovic, Fischhoff & Lichtenstein, 1977).

From a cognitive research perspective, it seems that the focus is predominantly on the structure of adult knowledge, developing insight into cognitive processes. In relation to the objective of this study, this approach seems to be restrictive, without a combined focus on the content of adult knowledge and how it is used in decision-making.

As discussed, the objective of this study is to consider an integral approach to gain more insight into and understanding of entrepreneurial business development, hence to consider the subjective elements from a decision-making perspective, and not necessarily the cognitive processes or structure of knowledge.

Graves (1974; 1973; 1971; 1970) developed a theoretical framework with the notion of the interplay between an individual's external environment and his internal levels of existence, his internal beliefs or world-views. The concept of coping-value systems, imbedded in Graves' theoretical model, can be seen as a key element that influences how and why decisions are made. Instead of categorising behaviour or classifying personality types, the coping-value system concept aims to identify the core internal logic, the so-called deep coping-values of people, used in their decision-making process to interact with their external environment.

Considering Graves' theoretical framework, in terms of the objective of this research study, it can be plausible to equate the entrepreneur's business developmental stage to his external environment. This allows for the application of Grave's model to explore the question: What will the corresponding internal levels of existence be? In essence, what will the entrepreneur's corresponding active internal coping-values (world-views / beliefs / intent) be in relation to his external environment, operationally defined as the developmental stage of his business venture?

From this perspective, the literature review focused on Graves' theoretical model, considering the principles of the model, critique and possible utility of the model in terms of the objectives of this study. From the literature reviewed, it was interpreted that there can be a multi-directional relationship between businesses development and the development of the entrepreneur's coping-value system. From this perspective, follow the claims that Graves' theoretical framework

describes in a universal sense human nature and provides a unifying framework with utility for the holistic or integral analysis between subjective decision-making and existential (objective) actions.

As an addition to Graves' theoretical framework, the literature review also identified the integral theory model development by Wilber (2001, 1998; 1997) as a possible model with principles that may offer utility and guidance on the process of multi-level, integral research. He promoted the integration between science and religion, defining science as the methods for discovering knowledge, and religion (human knowledge) as the force that generates meaning. To explore this interrelationship, he developed the four-quadrant model, as a framework to review and evaluate evolutionary and/or developmental theories, frameworks and explanatory schemes. This four-quadrant model can be used as a guide to gain insight into the multi-directional interrelationship that the internal realm of a human being has on the external face of society as a manifestation of their actions and *vice versa*.

From a literature review perspective, the theoretical models and frameworks identified with utility to the objectives of this research study all appear to be development models. Therefore, it is possible to borrow from the principles of Wilber's model as it offers utility and guidance to develop a research framework for this multi-level, integral research study.

In summary, the chapter on the literature review, considered principles and concepts, critiques on and possible utility of theoretical models, frameworks as well as explanatory schemes under each of the three broad topics of interest. The literature review aimed to identify theoretical models, frameworks and explanatory schemes with utility value that can influence the development of a theoretical framework for the objective of this research study.

The key theoretical models, frameworks and explanatory schemes identified in the literature review with high utility value to the objectives of this research study relate to: business developmental stage models; Graves' theoretical model (A system conception of personality – levels of existence theory); and Wilber's integral model.

From a utility perspective, important to this study is the developmental, evolutionary concept commonality present in all of these models, with the key notion that development is a process of ever-increasing complexity. This relates to (1) the principle that a developmental stage with higher complexity evolved from a stage with lower complexity; and (2) the principle that higher developmental stages include the fundamental elements present in lower developed developmental stages. This is indicated in the concept of *hollens* or as Brodie (2011) stated, there seems to be a process of finding a new purpose for existing parts without significantly diminishing of its old functions.

Hence, for this study the important principle discussed in the literature is that it is not necessarily the presence or absence of attributes or elements at various developmental stages, but rather the level of complexity they represent that seems to form an interrelationship.

### 1.7.2 Chapter 3: Theoretical framework

The purpose of Chapter 3 is to induce from the principles in the literature review, a proposed interrelationship framework that can be used to guide the research processes of this research study. The research objective to be guided by this induced interrelationship framework, is to explore the implied interrelationship between the dominant coping-values (world-view) of the entrepreneur (the interior subjective ‘why’) and the developmental stage of the entrepreneurial business (the exterior objective, ‘how’).

Chapter 3 starts with an overview to frame the contextual setting of this research study. With the assistance of a schematic contextual setting framework, the theoretical frameworks and models identified with utility in the literature review are contextualised in terms of their relative setting in the broad and complex subject field of entrepreneurial business development.

In the processes to induce a proposed interrelationship model for this research study, the basic principles of the selected theoretical models and frameworks were considered. The three theoretical models and frameworks that influenced the research study the most are: business developmental stage models; Graves’ levels of existence theoretical framework; and Wilber’s integral theory.

Chapter 3 ends with an induced interrelationship model for this research study that indicates the expected principle of emerging non-linear complexity to support the plausibility of an expected interrelationship between the objective characteristics and the subjective characteristics present at the various developmental stages of the entrepreneurial business venture.

As a business evolves into more advanced stages of development, the need arises to deal with more complex, external (objective) challenges presented by the internal and external operating environments of the business. Consequently, there is the expectation that the active dominant coping-value system (the interior subjective being) of the entrepreneurs who manage these more complex businesses, will be of a more complex nature to enable them to cope with these higher external complexities.

However, as observed in the literature on these theoretical development models, understanding of real life conditions can be more complex and it is not to be expected that all people or businesses will evolve through all the developmental levels as indicated in these models.

### 1.7.3 Chapter 4: Research method and data collection

Chapter 4 discusses the systematic methodical approach used in this research.

With a focus on entrepreneurial business, the proposition of this study is to add systematically to the richness of the current descriptive characteristics of business developmental stages. The aim is to contribute by deepening insight through the identification of additional characteristics that are subjective in nature, as well as the interpretation of the interrelationship between the objective and

subjective characteristics. In essence, a research approach that promotes research of a multi-level or integrated nature.

The research follows a systematic three-step methodical approach to explore the proposition of adding systematically to the richness of the descriptive characteristics of business developmental stage models.

The first step was to utilise the findings of prior research on the empirical identification of business developmental stages. For this step, the research applied multi-variate statistics in the form of cluster analysis on survey data, to identify on an empirical basis, possible business developmental stages or paths based on business variable data that relate to organisational context and structure.

The second step was to explore possible subjective characteristics that can be associated with the business developmental stages identified in the first methodical step. For this methodical step, the research study used descriptive statistics on the survey data to identify, through the application of a systematic process, thematic coping-value system patterns that can be associated with the identified business developmental stages.

The third methodical step was to identify, through a process of inductive reasoning, subjective and objective interrelating characteristics within each developmental stage.

Under each methodical step, the chapter considered the operational procedures and challenges associated with the execution of each methodical step.

From a research data perspective, considering the research objective and above methodical research process, the study obtained survey data pertaining to the objective variables used for the classification of business ventures into various developmental stages. The study also obtained subjective data to assess a person's preferred coping-value system profile in accordance to Graves' theoretical levels of existence framework.

For the purpose of data collection, appropriate data collection survey instruments were identified in the literature that had been used successfully previously in academic research studies that are relevant to the purpose of this study. After considering the reliability and validity of these identified survey instruments, it was decided to utilise these instruments in this research project.

With due ethical consideration, the survey instruments were utilised to collect research data pertaining to business context and structure as well as the entrepreneurs' thematic coping-value systems.

In the data collection processes due consideration was given to: (1) identifying an appropriate data source; (2) considering the operational definition of the research population; (3) optimising the sample collection process; and (4) the ethical requirements for research of this nature. Applying an online data collection process, a data sample of 121 records was recoded from a survey population of 20 000 people.

When compared to other research of this nature, a sample size of 121 compared favourably and was regarded to be sufficient in size for the purpose of this research study.

#### **1.7.4 Chapter 5: Research data analysis**

Chapter 5 discusses the systematic analysis of the collected survey data, applying the methodical approach discussed in Chapter 4.

The aim of the first methodical step was to classify, on an empirical basis, businesses into various business developmental stages. The result from this first step is twofold:

- The business clusters identified indicate the various levels of development to be present in the data set. This enables the study to investigate interrelationships at various developmental levels; and
- The characteristics of the structural and contextual variables identified in each business cluster group represent the objective characteristics of the respective business cluster groups.

The second methodical step focused on the process to identify a thematic coping-value profile for each business development cluster identified in the first methodical step. The result of step two was to identify the characteristics of the active thematic coping-value system profile that is an interpretation of the dynamic state of preferred dominant logic, based on Graves' open system of values theory framework, to be present in each business cluster group. The identified thematic coping-value system profile characteristics represent the average subjective characteristics of the entrepreneurs in the respective business cluster groups.

The focus of the third methodical step was to investigate the interrelationship of these subjective characteristics.

Following this systematic methodical approach, it was possible to identify five business clusters, each at a different developmental level. Applying descriptive statistics to the business contextual and structural survey data it was possible to identify the objective characteristics associated with each business cluster group. This aided the classification of the five business clusters into one of three possible signposts that aim to indicate an apparent business development pathway.

Following a systematic approach, applying descriptive statistics on the survey data, it was possible to identify a unique thematic coping-value system profile pattern in each cluster group that represents the average subjective dynamic state of preferred dominant logic for the entrepreneurs to be present in each business cluster group. The characteristics of these average thematic coping-value system profiles represent the subjective characteristics in each business cluster group.

In summary, based on the data analysis it was possible to identify five business clusters representing different levels of development. Through the application of descriptive statistics on the survey data, it was possible to identify objective and subjective characteristics for each business cluster.

This data analysis formed the basis for the objective of this study, i.e. to investigate the implied interrelationships between the configurations of the objective characteristics and subjective characteristics to be present at the various developmental stages of entrepreneurial businesses.

### **1.7.5 Chapter 6: Exploring the interrelationship of objective and subjective cluster characteristics**

Influenced by Wilber's integral framework, Chapter 6 explores the interrelationship between the coping-value profile characteristics of the entrepreneur (that is subjective in nature) and the structural and contextual characteristics of the entrepreneurial business venture (that is objective in nature).

As discussed in the previous chapters, an interrelationship is expected based on the principle of an increase in complexity that is associated with developmental processes. Viewing the findings from the data analysis process, some of the clusters seem to support this principle of an increase in complexity that is associated with developmental processes. The observation of clusters with exceptions to this theoretical expectation is discussed with reference to the literature on the subject field of business developmental stages.

Influenced by Wilber's (2001) notation that no subject is an island unto itself and that the objective exterior manifestation interconnects with the subjective interior consciousness, the remainder of Chapter 6 explores subjective and objective interrelationships within each business cluster group identified in the research data. Using the two sets of objective and subjective characteristic configurations identified in Chapter 5 as signposts, interrelationships were induced between the objective characteristic configurations and the subjective characteristic configurations as identified within each business cluster group.

In summary, the findings support the notion that interrelationships can be induced between the structural and contextual business characteristic configurations of a business venture (that are objective in nature) and the entrepreneur's coping-value system configurations characteristics (that are subjective in nature).

### **1.7.6 Chapter 7: Research summary and recommendations**

The last chapter of this research study, Chapter 7, gives a short summary of the study, considers the key limitations and discusses the key findings. The chapter closes with a consideration of this study's academic and practical contribution.

## 1.8 SUMMARY

As an introduction into this study, Chapter 1 is a contextualised overview of the study. It starts with the research setting, indicating some elements for consideration in a research study of this nature, leading into the discussion of the research focus and research question that form the main objective of this study.

The focus of this study aims to contribute to the current rich understanding of entrepreneurial business development. Considering the complexity of this phenomenon, some delimitations and assumptions were discussed from a practical research perspective and to curtail ambiguity. A discussion on the research plan and design indicate the systematic approach and methodological processes utilised during the research project to achieve the set research objectives of this study.

To assist with the navigation in this document and as a structural overview, Chapter 1 ends with an overview of the content to be expected in each of the chapters of this document.

Figure 1.6 below is a visual representation of the logical flow of this research project. To assist with the contextual navigation within this document, Figure 1.6 indicates how the relevant chapters below relate to the logical flow of this research study.

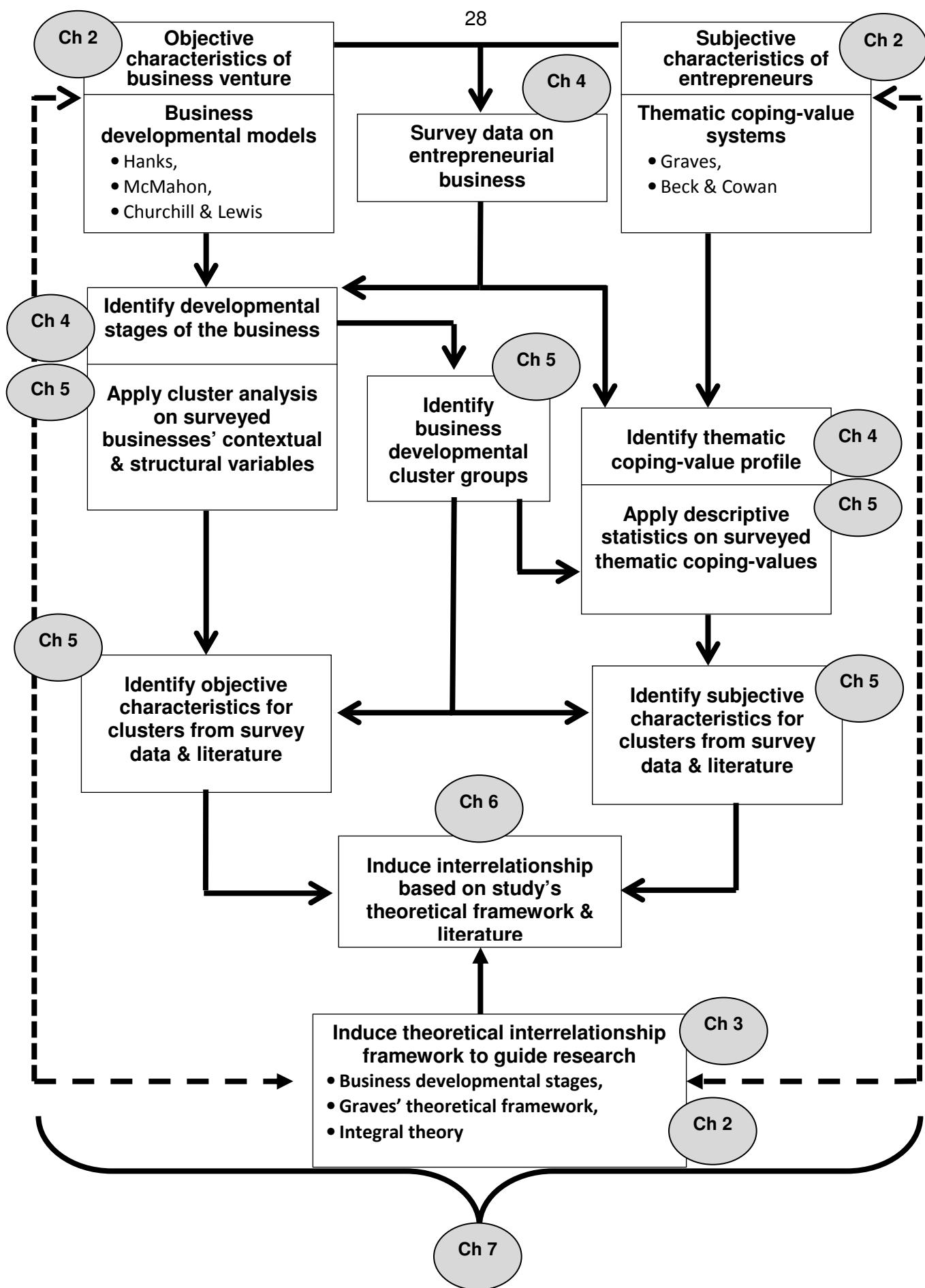


Figure 1.6: Logical flow of the research project in relation to the chapters of the dissertation

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 INTRODUCTION

Considering the integral aim of the research study, the literature topics also include literature that is not primarily focusing on entrepreneurial business development. As the research focus is to explore the advocated benefits of an integral approach to gain deepened insight through the understanding of the interrelationship that contextualises the objective in nature and subjective in nature elements in the developmental process of entrepreneurial business, the literature review is structured as follows:

First, the literature review evaluated some basic principles to be considered in the application of an integral approach. Then theoretical developmental models were identified that explore subjective and objective elements that can relate to entrepreneurial businesses. Part of the literature review processes was to evaluate the utility of the identified theoretical models to explore insight through the application of an integral approach in the subject field of entrepreneurial business development. The literature review evaluated these models for utility in accordance to the key principles required for the application of an integral approach.

With a research focus on entrepreneurial business development, this study takes into consideration the view of Stokes et al. (2010). In essence, they believed that in the case of entrepreneurial business, there is a need to consider the contextual interrelationship between the objective element of how to manage a business venture and the subjective element of the entrepreneur's intent, his goals and objective in relation to the business venture (Stokes et al., 2010).

Accordingly, the literature review was structured to focus on the following three broad literature themes:

- From an integral perspective, literature on Wilber's integral theory as a model that offers utility to explore interrelationships between subject fields of an objective and subjective nature.
- From an objective perspective, literature on the subject field of business development, exploring the integral utility of business developmental stages theoretical framework.
- From a subjective perspective, literature on the subjective field of an adult person's subjective intent that influences his decision-making processes. The literature explored the integral utility of Graves' open theory of values theoretical framework

The literature review ends with a summary on the utility of these models in an integral research approach to explore deepened insight through the contextualisation of interrelationships.

## 2.2 INTEGRAL EXPLANATORY FRAMEWORK

### 2.2.1 Introductory overview

As Stokes et al. (2010) suggested, for entrepreneurship to be successful, there is a need for activities and processes to enable the achievement of outcomes or results, but then the question arises: To what extent do these results of the activities and processes align with the intentions and goals of the entrepreneur?

This highlights the interrelationship that seems to exist between the entrepreneur's intent and the business venture's level of success. In essence, from an entrepreneurial business development perspective, there seems to be a need to consider the development of the business in the context of the intent of the entrepreneur.

This resonates with Sperry's (1993) view that a way of thinking, that integrates mind and matter, facts and values, religion and science, offers a more realistic insight into the kind of forces that create and move mankind and society.

Wilber (2001; 1998) promoted the integration between science and religion, defining science as the methods for discovering knowledge, and religion as the force that generates meaning. To explore the relationship between scientific knowledge and the forces that generate meaning, he proposed a universal model that can be used to review and evaluate the multi-directional impact, the interrelationship that the human's internal realm has on the external face of society and the contextual manifestation of their actions; and *vice versa*.

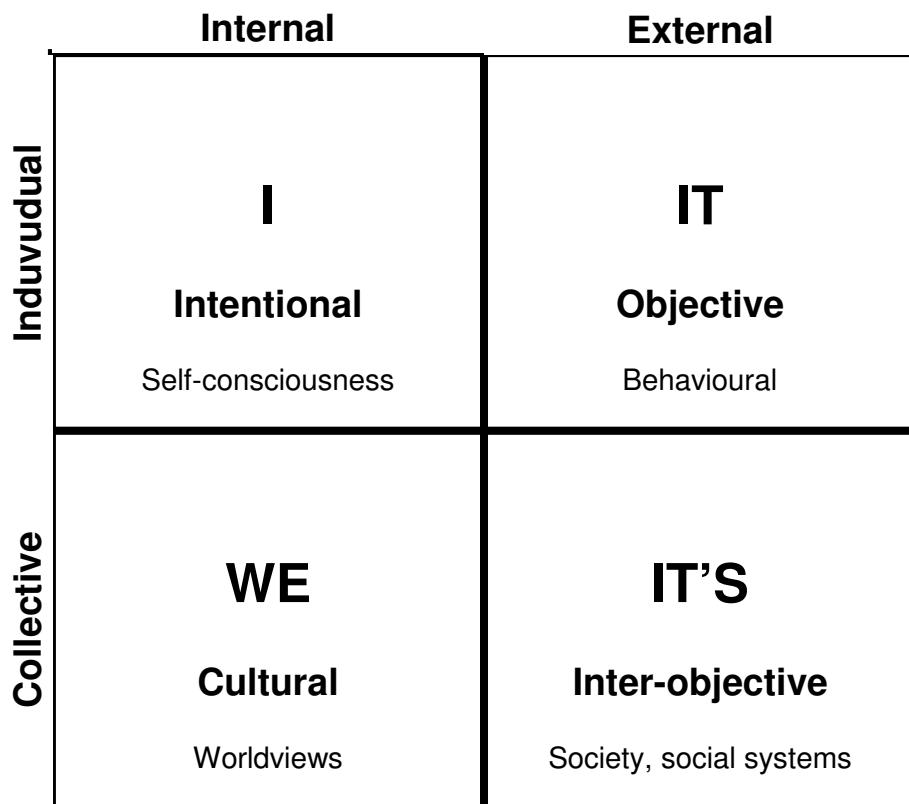
### 2.2.2 Overview of Wilber's integral theory

In the words of Wilber (1997), "objective exteriors can be seen, but all depth requires interpretation". The point is that we need insight into both the exterior and interior to understand our world in context. From this perspective, validity in our objective exterior world is obtained through empirical evidence; however, to obtain validity in the human's subjective interior world, we have to use interpretation and hermeneutics (Wilber, 1997).

Exploring this duality between the objective empirically driven and the subjective interpretatively driven realms, Wilber (1997) summarised various developmental and evolutionary models over time. He found that these models fell into one or more of four major classes or categories. As a result, Wilber (1997) developed the four-quadrant model (Figure 2.1) with classification categories for: intentional, behavioural, cultural, social.

This four-quadrant model provided Wilber with utility to evaluate the theoretical developmental processes, as portrayed by the various development models and frameworks, in one or more of the four development categories. Following this process, Wilber observed an interrelationship in the various stages of development or evolution between these four major categories of

development (Wilber, 1997). As indicated in Figure 2.1, this enabled Wilber to explore the objective empirically driven external world in context to the subjective interpretatively driven interior world.



**Figure 2.1 Wilber's universal four-quadrant model**

Source: Adapted from Wilber, 1997.

Considering Figure 2.1 above, the nature of these four classification categories of development can be grouped according to an internal or external nature perspective and from an individual or collective nature perspective.

The two external classes focus on the behavioural and social classification categories and are located on the right side, top and bottom of the four-quadrant model (Figure 2.1). Development models of an external nature have in common that they are empirical in nature and can be observed by the sense of their existence, as they exist in a sensorimotor world-space (Wilber, 1997).

The two internal classes focus on the individual intentional and cultural (world-view) classification categories and are located on the left side, top and bottom of the four-quadrant model (Figure 2.1). Development models of an internal nature have in common that they represent the internal perspective of human development and evolution, and refer to the subjective items that use interpretation and hermeneutics (Wilber, 1997).

To identify contextualised developmental points of interrelationships between the focus areas of the four quadrants of his model, Wilber's model uses the concept of '*holons*' to identify possible points of simple location to represent developmental levels or stages across developmental models (Wilber, 1997).

Populating the four quadrants of his model with various developmental models, Wilber observed that all four of these quadrants consist of various developmental or evolution waves and streams (*holons*) representing various points of single location that seem to interrelate. He therefore observed that no subject seems to be an island unto itself. Consequently, Wilber (1997) observed that the subjective consciousness of the left side appears to contextually interconnected with the objective exterior right side of the four-quadrant model. As a result, one of the key utilities of Wilber's integral model is that it explores the contextual interrelationship between developmental theories, models, frameworks and/or systems (Wilber, 1997).

Considering developmental theories and concepts from an evolutionary concept perspective, it has been observed that development is a process that evolves from a state of simplicity to a more complex state. Brodie (2011) defined evolution as the process of how things become increasingly more complex. He also cautioned not to confuse evolution with difficulty or optimisation, as the evolutionary increase in complexity is not an achievement through a planned process of engineered optimisation. The process of evolving into higher levels of complexity is more of a haphazard nature, finding a new purpose for existing parts without significantly diminishing its old function (Brodie, 2011). The developmental stages with higher complexity tend to include the fundamental elements of the stages with lower levels of complexity. This resonates with Wilber's (2001) view that from a developmental process perspective, all levels of development have an important role to play. Accordingly, the point of view that it is not possible to bypass any level of development without negative consequences or impact on future sustainability.

Aligned to the purpose of this research, the literature review only considered the potential utility value of the four-quadrant integral framework. The aim of the research and literature review was not to provide an in-depth discussion on the validity perspective of the four-quadrant model. In a process of assessing the utility value of his integral model, Wilber (1997) compared it against other main thinkers and found that the key principles of his model seem to be largely uncontested by serious scholars who studied these principles.

From this perspective, Wilber (1997) associated three different language types with the four-quadrant model (Figure 2.1). Wilber assigned:

- To the interior, intention of the individual (top-left), the use of the 'I' language;
- To the interior cultural world-view of the collective (bottom-left), the use of the 'We' language; and
- Both the objective exterior quadrants (the top and bottom-right), the use of the 'It' language.

Wilber (1997) highlighted how these three language types of 'I', 'We', 'It' are comparable to:

- Sir Karl Popper's 'three worlds': Subjective, Cultural, and Objective;
- Habermas' three validity claims: Subjective truthfulness of 'I'; Cultural justness of 'we'; and Objective truth of 'its';
- Plato's: The 'Good' as the ground of morals, or 'we'; the 'True' objective truth or 'it'; and 'Beautiful' the aesthetic beauty in the 'I' of each beholder;
- The three major domains of Kant's three critiques: Critique of 'Pure' (science or 'its'); Critique of 'Practical Reason' (morals or 'we'); and Critique of 'Judgment' (art and self-expression of the 'I').

As Wilber (1997) summarises, the four-quadrant model tends to make intuitive sense, as the most basic distinctions that can be made are: singular and plural; inside and outside. Furthermore, based on the data, represented by various evolutionary and development models, it has been observed that evolution also makes these simple distinctions.

According to Wilber (1997), the value of this four-quadrant model is that the development of this model is not *a priori*, but *a posteriori* based on findings and data searches across various disciplines. The single points of location identified and used in each quadrant to develop the four-quadrant model seem to be largely uncontested by serious scholars who studied these concepts on their own terms (Wilber, 1997). Accordingly, for the purpose of this research study, Wilber's original research work was assumed as useful and to be well founded.

### **2.2.3 Summary on Wilber's integral theory**

In summary, from a multi-level research approach perspective, the four-quadrant integral framework offers potential utility to explore the possibility of contextual interrelationships in the broad subject field of entrepreneurial business development. More specifically, the four-quadrant model can guide exploration of potential contextual interrelationships between the objective developmental stage of the entrepreneurial business and the subjective intent of the entrepreneur. Therefor the key principle to be considered is the ability to identify single points of location in developmental models that indicate a developmental level that is based on an increase in complexity.

From this perspective, the next two sections focus on developmental models that seem to offer utility to explore the objective developmental process of the business venture and the subjective developmental processes of an adult person's intent. The review also considered to what extent these models offer the ability to identify points of single location that indicate various developmental levels based on an increase in complexity.

## 2.3 BUSINESS DEVELOPMENTAL FRAMEWORKS

### 2.3.1 Overview

Entrepreneurship includes the complete life cycle of an entrepreneurial business venture and the career of the entrepreneur (Stokes et al., 2010).

McMahon (1998, citing the work of O'Farrell and Hitchens, 1988) summarised the paradigms on understanding the successful life cycle of business ventures, (business development) into mainly four groups:

- i) From the subject field of economics, stochastic models that suggest there is no dominant model due to the many elements affecting business development;
- ii) From industrial economics, static equilibrium theories that are predominantly focused on economies of scale and minimisation of unit cost;
- iii) Models based on the strategic management perspective considering how the owner or manager responds to business and personal environmental indicators; and
- iv) With its origins in the subject field of economics, business developmental stage models and theories that view business development as a series of stages that a business may pass through in an enterprise life cycle.

McMahon (1998) concluded that the stochastic approach and the static equilibrium theories, from industrial economics, with their somewhat rationalistic and mechanistic features may provide some insight in selected phenomena of interest relating to business development. However, these models and frameworks are less than adequate as broad conceptual frameworks for research on understanding small business development and policy-making (McMahon, 1998).

McMahon (1998) indicated that the strategic management paradigm holds the most promising context sensitive explanatory framework for business development. The basis for this is the owner-manager nature of small businesses and the research evidence suggesting that strategic awareness is a key factor to business development. The strategic management paradigm, for example, will consider the notion that not all owner-managers have the desire and/or capacity to develop their business, preferring an overriding strategy of marginal to comfortable survival at the present developmental stage of their organisation's business (Wiklund et al., 2003; McMahon, 1998; Hanks et al., 1993; Churchill & Lewis, 1983).

However, the complexity of strategic management models makes it difficult to measure the proposed concepts and there is still the question about whether owner-managers are consciously strategic in their management style (McMahon, 1998). McMahon (1998) concluded that from the four dominant paradigms, business developmental stage models and theories are the most prevalent approach used by researchers and policy-makers to explain and understand the development of small businesses. Since 1962, business developmental stage models and theories

seem to be the most frequently-used approach to gain insight into and understanding of the phenomenon of business development.

The multiplicity of these business developmental stage models and theories has been increasingly scrutinised with scholarly rigour, with attempts to ground them in an empirical as well as an experiential base (McMahon, 1998). In addition, perspectives from the strategic management models are not negated in business developmental stage models (McMahon, 1998).

For the purpose of this research, the remainder of the literature review explored business developmental models as the objective framework that is concerned with the successful development of the entrepreneurial business venture.

### **2.3.2 Business developmental stage models**

The purposes cited for research using business developmental stage models vary from the need to develop management insight into the current challenges of a business (Greiner, 1998; Terpstra & Olson, 1993; Scott & Bruce, 1987; Churchill & Lewis, 1983; Thain, 1969), to aid as a teaching/consulting tool (Levie & Lichtenstein, 2010; Churchill & Lewis, 1983; Thain, 1969) and to produce insight into policy development (McMahon, 1998; Churchill & Lewis, 1983).

Business developmental stage models can be sub-classified into general development models applicable to all businesses, or a type of business, start-up, size (small, corporate), or industry-related business development models (Levie & Lichtenstein, 2010; Scott & Bruce, 1987).

During the second half of the twentieth century, business developmental stage models proliferated. This period was characterised by a few studies that questioned the relationship between business development and progress, with most research omitting the cost of environmental externalities in their cost benefit analysis, basically relying on the instinctive appeal of the predetermined nature of the underlying organic development metaphor of the business developmental stage models (Levie & Lichtenstein, 2010).

#### ***2.3.2.1 Conceptual origins of business developmental stage models***

Levie and Lichtenstein (2010), in a comprehensive study of 104 literature sources of business developmental stage models, traced the conceptual origins of the various business developmental stage models to five theoretical frameworks:

- i) In terms of popularity, Greiner's evolution revolution model came first (Levie & Lichtenstein, 2010). This model is based on European psychologists' theory that an individual's behaviour is primarily determined by prior events and experiences and not by the future (Levie & Lichtenstein, 2010; Greiner, 1998);
- ii) The second most popular framework, the stages of corporate development of Christensen and Scot, was inspired by Rostow's stages of economic and civilization development linking corporate growth to the notion of development from a state of simplicity to a state of complexity (Levie & Lichtenstein, 2010);

- iii) As a third origin, Rhenman referred to “morphogenesis” of an organisation, i.e. a learning process that will create similar patterns in organisations in the same environment (Levie & Lichtenstein, 2010);
- iv) The fourth origin is from Lippitt and Schmidt, based on Gardner’s work, with the idea that organisations have a life cycle like humans and plants, from youth, to adolescent, to adult (Levie & Lichtenstein, 2010); and
- v) The fifth conceptual origin for business stage models is in the product life cycle of growth, maturity and decline (Levie & Lichtenstein, 2010).

These conceptual origins of business developmental stage models can be categorised into two major paradigms: (1) considering the organisation from an internal perspective (the evolution revolution and life cycle origins); and (2) considering the organisation from an external perspective (the stages of corporate development and morphogenesis origins) (Levie & Lichtenstein, 2010).

Levie and Lichtenstein (2010) observed in the 104 relevant literature sources, that a high percentage of business developmental stage models are based on a combination of the above-mentioned conceptual origins. Considering the five identified conceptual origins of business developmental stage models, a core similarity of most of these business developmental stage models is the common paradigm that organisations develop as if they are developing organisms (Levie & Lichtenstein, 2010; Lester & Parnell, 2005; McMahon, 1998).

From this organismic development paradigm, business developmental stage models offer three key propositions on business development (Levie & Lichtenstein, 2010):

- i) Distinctively different stages of development that can be identified;
- ii) The sequence and order of these stages are predetermined and predictable; and
- iii) The development is from a primitive state to a more advanced or complex state.

### ***2.3.2.2 Critique on business developmental stage models***

Substantial critique on business developmental stage models relates to their empirical validity (McMahon, 1998; Hanks et al., 1993; Quinn & Cameron, 1983).

Greiner (1998) defended this challenge on validity by raising the concern that empirical research focusing on business development, at that time, tended to omit the critical dimension of time. As a result, these research studies seemed as if they did not attempt to create models to understand the business developmental process. From this perspective, Greiner (1998) made the point that one should not necessarily wait for conclusive evidence before educating management on the developmental process, highlighting the underlining heuristic value of business developmental stage models at that time.

McMahon (1998) observed the increased scrutiny of business developmental stage models, over the last decade or so, with much more scholarly rigour. Sound attempts have been made to ground business developmental stage models with an empirical as well as an experiential base. From the perspective of this research study, the one element of business developmental stage model theory that is empirically accepted is that businesses operate in a definable stage for some period of time (Levie & Lichtenstein, 2010; Miller & Friesen, 1984; Churchill & Lewis, 1983).

Some of the other key criticisms of business developmental stage model theory include:

- The perceived absence of agreement on the number of developmental stages (Levie & Lichtenstein, 2010);
- The sequential order of developmental stages and the notion that businesses have to pass through all the stages (Levie & Lichtenstein, 2010; McMahon, 1998; Hanks et al., 1993; Miller & Friesen, 1984; Quinn & Cameron, 1983);
- The predominant use of size and age as measures, not taking into account innovation, value adding and complexity (McMahon, 1998; Churchill & Lewis, 1983); and
- The predominant focus on organisations' internal dynamics, without contextualising their spatial environment (McMahon, 1998).

The discussion below includes references to these major elements of critique on business developmental stage model theory.

### ***2.3.2.3 Integral concepts within business developmental stages framework***

To consider the utility of business developmental frameworks for use in research of an integral nature, the underlying key principles identified in the four-quadrant integral framework need evaluation. In essence, the two key principles are: (1) the ability to identify points of single location; and (2) the ability to measure the level of complexity that relates to these points of single location, in order to evaluate the developmental level of the subject matter under review.

### ***2.3.2.4 Points of single location, the stages of business development***

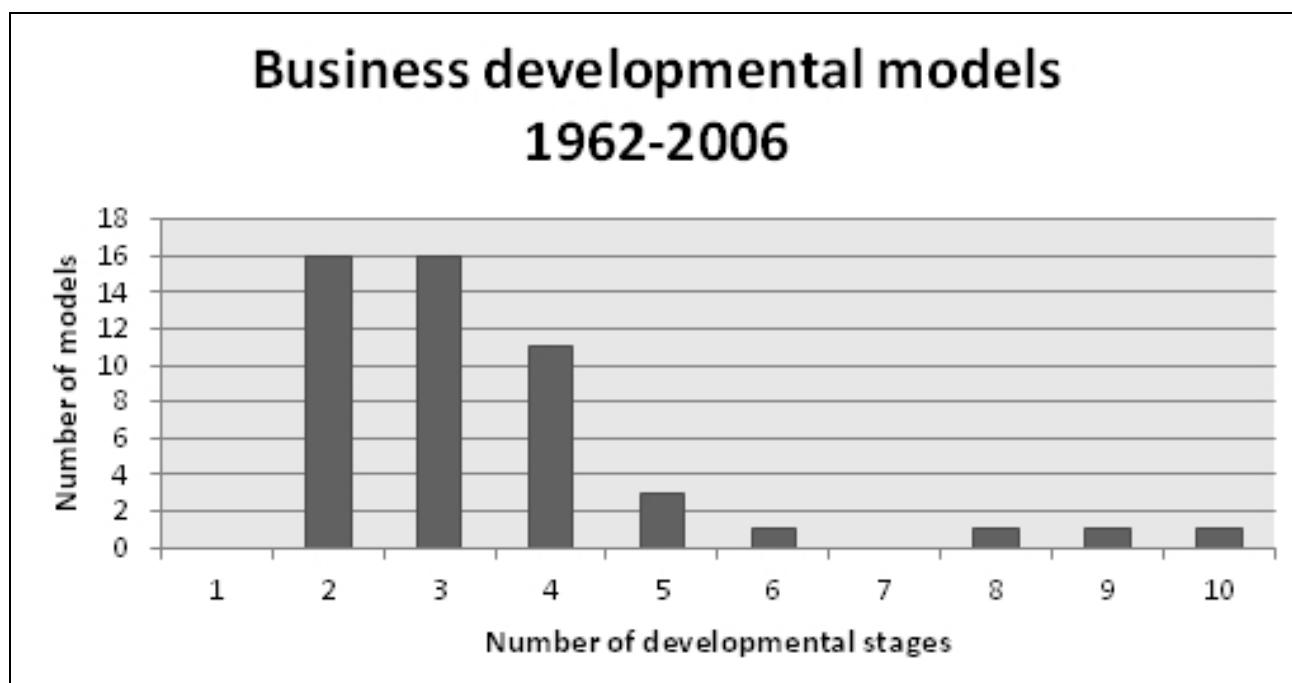
One of the principles of business developmental stage models is the ability to identify a series of stages that businesses develop through (Greiner, 1998; Scott & Bruce, 1987; Miller & Friesen, 1984).

At various timeframes or stages of businesses' development, they experience similarities that can be classified (Miller & Friesen, 1984; Churchill & Lewis, 1983) into a framework or a unique configuration of variables related to the organisations' context or structure (McMahon 1998; Churchill & Lewis, 1983). This framework or configuration increases the understanding of the nature, characteristics, and challenges of businesses in similar stages of their development (Churchill & Lewis, 1983). From a learning perspective, each developmental stage emerges from the previous and each stage causes and contributes to the next stage (Churchill & Lewis, 1983;).

This is one of the elements of business developmental stage model theory that is empirically accepted, i.e. that businesses operate in a definable stage for some period of time (Levie & Lichtenstein, 2010; Greiner, 1998; Miller & Friesen, 1984; Churchill & Lewis, 1983). Business developmental stage models in general follow the birth and growth analogy with a few defined developmental stages within (Levie & Lichtenstein, 2010; Greiner, 1998; McMahon, 1998; Hanks et al., 1993; Scott & Bruce, 1987; Churchill & Lewis, 1983) that increase in complexity as businesses develop (Greiner, 1998; Scott & Bruce, 1987; Miller & Friesen, 1984; Churchill & Lewis, 1983; Quinn & Cameron, 1983).

As mentioned above, one of the substantial critiques against business developmental stage models is the inconsistency in the number of stages (Levie & Lichtenstein, 2010). Some authors have challenged the empirical validity of these models, claiming that business developmental stage models tend to assume validity based on wisdom, following a heuristic classification of schemes, rather than endeavouring to establish validity in a rigorous manner (McMahon, 1998).

As indicated above, business developmental stage models differ in the number of stages (Levie & Lichtenstein, 2010; Lester & Parnell, 2005; McMahon, 1998; Hanks et al., 1993). Figure 2.2 below is based on an analysis by Levie and Lichtenstein (2010), of 104 literature sources on business developmental stage models. The graph indicates that the number of business developmental stages seems to range from two (2) to ten (10), with the most models indicating between two (2) and five (5) developmental stages.



**Figure 2.2: Number of stages of business developmental stage models**

Source: Levie and Lichtenstein, 2010: 323.

Researchers use business developmental stage models in an effort to describe a similar pattern of business development. Consequently, business developmental stages may vary per business developmental stages model depending on how the researcher defines an actual stage (Lester & Parnell, 2005).

Hanks et al. (1993) identified the predominant *priori* approach to validity, and the low levels of empirical rigour as a possible explanation for unexpected variances in the number of stages found in analyses of business developmental stage models.

It has been observed that models with more developmental stages tend to break down general stages into much more specific time periods, while models with fewer stages tend to overgeneralise, integrating some developmental stages (or periods) in an effort to present a simpler depiction of business development (Lester & Parnell, 2005).

Considering this rather wide spread of possible business developmental stages that exist between business developmental stage models, cognisance should be taken of whether the model under review is presented as a theoretical proposition or whether it has been tested or studied empirically (Lester & Parnell, 2005).

In principle, business developmental stage models have high face validity (Levie & Lichtenstein, 2010). People's reaction to business developmental stage models stems more from hindsight than foresight. Greiner (1998) remarked that people's reaction to these models is a useful test for validity, as they see them as obvious and natural for depicting organisational development. In this regard, Levie and Lichtenstein (2010) referred to a study where 100 percent of start-up entrepreneurs could relate their business to one of the developmental stages presented to them at a seminar.

Reviewing sources cited by Levie and Lichtenstein (2010) on business developmental stage models and additional literature, the following three key stages emerged with various sub-stages that differ between models (Greiner, 1998; McMahon, 1998; Hanks et al., 1993; Miller & Friesen, 1984; Churchill & Lewis, 1983):

- i) The start-up stage;
- ii) The success or expansion stage; and
- iii) The take-off or mature stage.

To address this validity challenge on the number of business developmental stages, Hanks et al. (1993) used a taxonomical method of clustering configurations of variable attributes, rather than a typological method to tighten the business developmental stage model construct (McMahon, 1998; Hanks et al., 1993). Applying this taxonomical approach, six stages (four developmental and two disengaged stages) emerged. In their comparison to other models, Hanks et al. (1993) found support for other models with one or more stages that relate to the organisations' start-up phase, expansion phase and maturity phase (McMahon, 1998).

Lester and Parnell (2005) noted that the strongest empirical support (to date) substantiates a four-to five-stage business developmental stage model, and concluded on the generally accepted use of five business developmental stages, regardless of how these stages are labelled.

Considering business developmental stage models in context of the research aim, the focus is on entrepreneurial business, and not necessarily large corporations. This by no means indicates that large corporations cannot be entrepreneurial businesses. It rather acknowledges the notion, as indicated above, that only a few businesses seem to develop from start-up to large corporations, and focusing only on these few successes will exclude a large segment of successful entrepreneurial businesses. Hence, refining the literature review to the aims of the study, less focus was placed on business developmental stage models that focus on large corporations.

With a research aim of exploring interrelationships, the identification of business developmental stages formed an important underlying function in this research study. From this perspective, the literature review focused more on business developmental stage models developed from an empirical perspective instead of models developed from a theoretical propositions perspective.

Based on the above research considerations, the following literature and related research studies on business developmental stage models were considered for the purpose of this research study:

- The model of Hanks with an increased focus on academic rigour, an empirical validity perspective (McMahon, 1998; Hanks et al., 1993);
- The model of Churchill and Lewis (1983) for its high face validity, a heuristic perspective; and
- From a time dimension, the longitudinal study of Miller and Friesen (1984).

In addition to the above selected literature, in an attempt to bridge and/or contextually support the findings observed, the following authors' work also influenced this research project:

- The work of Levie and Lichtenstein (2010) with their review on 104 literature sources of business developmental stage models; and
- McMahon's (2000; 1998) consideration of business developmental stage models as theoretically sound and empirically validated broad conceptual frameworks that can be used by research to explore the business development phenomenon.

Collectively the work of these key sources take into consideration the research work of various others in the development of original or refined business developmental stage models, with a high coverage of the various conceptual origins of business developmental stage models and the academic work performed to test the validity of business developmental stage models.

The business developmental stage model by Hanks et al. (1993) classified business into four developmental stages that increase in complexity at each next stage of development, the stages being: (1) start-up; (2) expansion; (3) maturity; (4) diversification; and, two disengaged stages (McMahon, 1998; Hanks et al., 1993).

The business developmental stage model by Churchill and Lewis (1983) classified business into five developmental stages that also increase in complexity at each next stage of development, the stages being: (1) existence; (2) survival; (3) success; (4) take-off; (5) resource maturity; and, they identified one disengaged stage.

Based on the review of literature, Miller and Friesen (1984) identified four developmental stages that also increase in complexity at each next stage of development, the stages being: (1) birth; (2) growth; (3) maturity; (4) revival; and, a declining or stagnating stage.

Based on their research findings, Hanks et al. (1993) found support for other business developmental stage models with one or more stages that relate to the organisation's start-up phase, the expansion phase and the maturity phase. Using these three generalisable stages as a signpost, Table 2.1 below compares the various stages of the three models selected as a basis for this study, being the models of Hanks et al.(1993), Churchill and Lewis (1983) and that of Miller and Friesen (1984).

**Table 2.1: Summary of the three business developmental stage models from Hanks et al., Churchill & Lewis and Miller & Friesen**

Business Development Phases	Hanks	Churchill & Lewis	Miller & Friesen
<b>Start-Up</b> The birth analogy  A creative stage, trying to prove existence and to survive	<b>Start-up – young</b>  Small with simple organisational structure, highly centralised management, informal  Functional specialisation tends to be low  Key focus product development	<b>Existence</b>  Simple organisation structure, basically the owner – highly centralised, informal  No functional specialisation – the owner responsible for all functions  Key focus product development, sources of customers	<b>The birth phase</b>  Simple organisation structure, centralised management dominated by owner, informal  Key focus attempt to become a viable entity
	<b>Expansion</b>  Slightly larger with a more complex organisation structure, highly centralised management, low formalities  Functional specialisation adopted  Key focus product commercialisation	<b>Survival</b>  Organisation still simple with limited number of employees, management centralised, some formalities  Limited functional specialisation  Key focus profitability, increase returns to earn an economic return on assets	
<b>Expansion / Successes</b> The growth analogy  An economic viable, healthy and successful stage	<b>Maturity</b>  About double in size compared to the previous stage with a more complex organisation structure, centralised management is declining, formalities increase  Increased levels of specialisation	<b>Success</b>  Organisation complexity increases with first professional managers, decline in management centralisation, formalities increase  Increased functional specialisation  Key focus is around business growth – to cap or to expand growth	<b>The Growth Phase</b>  Initiate decartelisation, formalisation starts  Establishes functional structures  Key focus rapid sales growth to accumulate scale
			<b>Maturity Phase</b>  Sales levels stabilise innovation declines, organisation more complex with bureaucracy  Key focus organisation's efficient functioning

Table continues on next page

**Table 2.1: Summary of the three business developmental stage models from Hanks et al., Churchill & Lewis and Miller & Friesen (continued)**

<b>Business Development Phases</b>	<b>Hanks</b> Source: Hanks et al., 1993; McMahon, 1998.	<b>Churchill &amp; Lewis</b> Source: Churchill & Lewis, 1983.	<b>Miller &amp; Friesen</b> Source: Miller & Friesen; 1984.
<b>Mature</b> The notion turning into a mature corporate organisation	<p><b>Diversification</b> Medium-size organisation with tendency to have divisional structures, centralised management is low, high formalities High levels of specialisation</p>	<p><b>Take-Off</b> Organisation complexity increases, decentralised management and possible exit of the start-up entrepreneur, high formalities Functional specialisation – departmentalised Key focus cash flow management, toleration of high debt equity ratios to facilitate growth</p> <p><b>Resource Maturity</b> Organisation has now arrived with advantage of size, financial resources and managerial depth, decentralised management, formal professionalised organisation Key focus to avoid ossification, becoming set in a rigidly conventional pattern, of behaviour, habits, or beliefs</p>	<p><b>The Revival Phase</b> Divisional structures, high formality  Key focus diversification and expanding of product market scope.</p>

Source: Adapted from McMahon, 1998; Hanks et al., 1993; Miller & Friesen; 1984; Churchill & Lewis, 1983.

As per Table 2.1 above, demonstrates it is possible to compare the three models of Hanks et al. (1993), Churchill and Lewis (1983), and Miller and Friesen (1984). This can be achieved by allocating the developmental stages of each model into three overarching business development phases that increase in complexity at each next stage of development: (1) start-up taken from the birth analogy; (2) successes taken from the growth analogy; and (3) mature taken from the notion that entrepreneurial businesses evolve into mature organisations.

The classification in Table 2.1 above illustrates that in general, business developmental stage models have similar stages that form a series of stages that businesses evolve through, from a less to a more complex developmental stage.

### ***2.3.2.5 Attributes of developmental stages***

The heuristic stages in business developmental stage models provide an understanding of the internal composition of the various business developmental stages and explain why they differ (Miller & Friesen, 1984).

Greiner (1998) and Boardman, Bartey and Ratliff (1981) indicated that companies in different industries will have different characteristics. Churchill and Lewis (1983) acknowledged this daunting seemingly unattainable challenge of categorising the attributes of businesses from a diverse spectrum in a systematic method into definable stages. They found that stages emerge if businesses are viewed from the perspectives of age, size, growth rate, pivotal challenges, complexity and capacity to develop. The longitudinal study on business developmental stage models by Miller and Friesen (1984) supported this notion by concluding that there is a configurable nature of key attributes into predictable stages and that each stage differs from the other in a significant manner.

In their comprehensive study of 104 literature sources, Levie and Lichtenstein (2010) summarised the structural attributes considered to identify business developmental stages in the various business developmental stage models. Table 2.2 below is a summary of the most common attributes, and Table 2.3, the most common categories of attributes considered to identify business developmental stages.

**Table 2.2: Most common attributes of business developmental stage models**

<b>Attribute</b>	<b>Category</b>	<b>Mentioned in number of stages models</b>
Extent of formal systems	Systems	52
Growth rate (sales or employees)	Outcomes (age/size/growth)	50
Organisational structure	Structure	49
Nature of top management	Management characteristics	48
Complexity	Structure	40
Age	Outcomes (age/size/growth)	38
Formality of communication system	Structure	38
Size	Outcomes (age/size/growth)	36
Primary focus of organisation	Strategy	36
Management style	Management characteristics	23
Owner involvement	Management characteristics	23
Constraint, problems encountered	Problem	22
Degree of centralization of decision making	Management characteristics	21
Number of top management	Management characteristics	20
Product development and initial marketing	Product characteristics	20
Relationship with environment	External factor	19
Resources or input needed	Problem	19
Diversity	Product characteristics	18
Concept development	Strategy	18
Extent of bureaucracy in management control system	Systems	18
Internal problems	Problem	18

Source: Levie & Lichtenstein, 2010: 321.

**Table 2.3: Most common categories of attributes of business developmental stage models**

Category	Number of stage models
Outcomes age/size/growth)	74
Management characteristics	68
Organisation structure	60
Strategy	58
Systems	54
Problems	49
Process characteristics	44
Product characteristics	42
Staff	33
Marketing factors	24
Innovation	20
External factors	19
Profitability	16
Geography	13
Culture	10
Risk	9

Source: Levie & Lichtenstein, 2010: 322.

Hanks et al. (1993) observed that the attributes used in business developmental stage models include two key dimensions: (1) a dimension of organisational context, usually in terms of size, age, growth rate and focal challenges; and, (2) a dimension of organisational structure in terms of structural form, formalisation, differentiation, organisation levels and centralisation.

Based on the study by Levie and Lichtenstein (2010), (Table 2.3 above) the top six categories of attributes used in the literature to differentiate between the various stages of organisation development are:

- i) Contextual outcomes (size, age, growth);
- ii) Management characteristics;
- iii) Organisation structure;
- iv) Strategy;
- v) Systems; and,
- vi) Problems or challenges facing the organisation.

Levie and Lichtenstein (2010) identified the most common attributes of stages, other than contextual outcomes, as attributes that relate to systems formality, organisation structure, complexity of design and formality in communication. These attributes can be classified under the

categories of systems and structure and reflect the influence of organisation design research on business development (Levie & Lichtenstein, 2010).

From the literature, other key categories and attributes with a high commonality in business developmental stage models include:

- Strategy (Levie & Lichtenstein, 2010; Terpstra & Olson, 1993; Thain, 1969) with attributes relating to primary focus and concept development (Greiner, 1998; McMahon, 1998; Miller & Friesen, 1984; Churchill & Lewis, 1983);
- Management with attributes relating to owner involvement (Scott & Bruce, 1987; Miller & Friesen, 1984; Churchill & Lewis, 1983), degree of centralisation (Greiner, 1998; McMahon, 1998; Hanks et al., 1993), and management style (Greiner, 1998; Terpstra & Olson, 1993; Scott & Bruce, 1987; Miller & Friesen, 1984; Churchill & Lewis, 1983; Steinmetz, 1969);
- Operational problems with attributes relating to resource planning, constraints and internal challenges; and
- Product characteristics with attributes relating to diversity, development and marketing (Greiner, 1998; Terpstra & Olson, 1993; Scott & Bruce, 1987; Miller & Friesen, 1984; Steinmetz, 1969; Thain, 1969).

### **2.3.2.6 Complexity considerations of developmental stages**

Achtenhagen, Naldi and Melin (2010) observed how entrepreneurship studies differ in the measurement and interpretation of entrepreneurial business development if compared to entrepreneurs or practitioners in the real world. Penrose (1959, cited by Achtenhagen et al., 2010) observed how the term ‘growth’ (development) is used in ordinary discourse, with two different connotations: (1) indicating an increase in amount, e.g. increase in employment, sales; and (2) referring to the primary meaning that implies an improvement in size or quality as a result of a process of development. In essence, the distinction is between growth indicating an *increase in amount*; and growth indicating an internal process of *development* (Achtenhagen et al., 2010).

Typical contextual or outcome attributes used to measure and classify an entrepreneurial business in terms of its level of development, like sales volume growth and employment growth, are rather the result of development than a measure of development (Achtenhagen et al., 2010). Achtenhagen et al. (2010) indicated that, from the perspective of an entrepreneur or practitioner, the measurement of development is more multi-dimensional, and includes the development in the complexity of internal processes that contribute to the value of the entrepreneurial business.

As an illustration, Terpstra and Olson, (1993) compared how attributes relating to employee size, organisation age and sales growth are used by various authors as indicators of an organisation’s stage of development. They indicated that employee size is a more important defining attribute in the classification of an organisation’s stage of development, as it has more implications that directly influence the organisation’s structural and managerial challenges.

Furthermore, Terpstra and Olson (1993) also identified a broad spectrum of attributes present in both the start-up and growth stages of a business. This indicates that the same attributes are present in both stages of business development; however, the nature of an attribute's presence in each stage differs. From this observation, it is evident that, it is more than the mere presence of an attribute in a stage that determines the business developmental stage.

Miller and Friesen (1984) and Hanks et al. (1993) indicated that it is not the various attributes, but the increase in complexity that causes each business developmental stage to exhibit significant differences from other business developmental stages. Miller and Friesen (1984) identified three central themes that influence the attributes of strategy, structure, decision-making methods and organisational context (situation):

- i) The increase in administrative complexity as the organisation increases in size and more internal role-players influence and contribute to the organisation's goals and decisions;
- ii) The increase in complexity requires a more sophisticated organisational structure, systems and decision-making style; and'
- iii) The organisation alters between innovative phases to establish organisational competences and conservative phases that exploit these competencies through efficiencies.

The crux is that in any classification method of a business developmental stage model, it is imperative to consider more than the presence, or not, of various attributes at each stage. To classify business into developmental stages, it is important to consider the nature of each attribute in terms of its complexity.

As the basis for this study, three models were selected from the work of Hanks (Hanks et al., 1993), Miller and Friesen (1984), Churchill and Lewis (1983). Table 2.4 below is a basic summary of the key attributes of these models. Table 2.4 indicates the underlying nature of the attributes, divided into the four attribute categories of (1) management characteristics; (2) organisation structure; (3) strategic challenges; and (4) systems, for each of the three overarching business developmental stages, namely the start-up phase, the expansion phase and the maturity phase.

**Table 2.4: Summary of the key attributes of the three business developmental stage models from Hanks, Churchill & Lewis and Miller & Friesen**

Business Development Phases	Attribute category	Nature of attribute	Source
<b>Start-up</b> The birth analogy  A creative stage, trying to prove existence and to survive	Management characteristics	Decision-making is intuitive rather than analytical and based on only a few opinions or factors  Delegation of authority is low	Miller & Friesen, 1984
	Organisation structure	Simple and highly centralised  Specialisation is low	Churchill & Lewis, 1983; Hanks et al., 1993; McMahon, 1998; Miller & Friesen, 1984
	Strategy, problems or challenges	Product development, defining the product  Secure market for the product by: <ul style="list-style-type: none"><li>• Changing, adapting or increase number of same type of product,</li><li>• Pursuing a nice market,</li><li>• Avoiding competition,</li><li>• Using middleman to access market and may have high form of collision</li></ul>	Churchill & Lewis, 1983; Miller & Friesen, 1984; McMahon, 1998
	Systems	Systems are informal. Controls are informal.	Churchill & Lewis, 1983; Miller & Friesen, 1984
<b>Expansion / Successful</b> The growth analogy  An economic viable, healthy and successful stage	Management characteristics	Decision-making more analytical and multiplex  Based on management deliberations	Miller & Friesen, 1984
	Organisation structure	More complex with lower centralisation; however, centralisation still dominating.  Departmentalisation of functional structures  Specialisation increases, make use of specialists	Churchill & Lewis, 1983; Hanks et al., 1993; McMahon, 1998; Miller & Friesen, 1984

Table continues on next page

**Table 2.4: Summary of the key attributes of the three business developmental stage models from Hanks, Churchill & Lewis and Miller & Friesen (continued)**

Business Development Phases	Attribute category	Nature of attribute	Source
<b>Expansion/ Successful (continued)</b> The growth analogy  An economic viable, healthy and successful stage	Strategy, Problems or Challenges	Maintain profitability, develop management for growth  Market differentiation and segmentation.  Preservation of sales volume  Economical production, increase efficiency and profitability of operations  Strategy is tactical of nature rather than long term.	Churchill & Lewis, 1983; Miller & Friesen, 1984
	Systems	System more formal to: <ul style="list-style-type: none"> <li>• Capture management information and</li> <li>• Facilitate departmental coordination and communication.</li> </ul> Controls more formal focus on: <ul style="list-style-type: none"> <li>• Cost control</li> <li>• Budgets and</li> <li>• Performance measures</li> </ul>	Miller & Friesen, 1984
<b>Mature</b> The notion of turning into a large corporate organisation	Management characteristics	Decision-making is analytical, reflective and participative  Decisions are more market orientated, externally focused.  Centralised strategy with delegated operational authority	Churchill & Lewis, 1982; Miller & Friesen, 1984
	Organisation structure	Divisional structures with imbedded departmental structures  High utilisation of specialists	Churchill & Lewis, 1983; Hanks et al., 1993; McMahon, 1998; Miller & Friesen, 1984
	Strategy	Determine how to finance growth  Increase diversification by: <ul style="list-style-type: none"> <li>• Acquisition of other organisations,</li> <li>• Market and product segmentation</li> </ul> Strategy orientation is long-term	Churchill & Lewis, 1983; Miller & Friesen, 1984
	Systems	Sophisticated systems to: <ul style="list-style-type: none"> <li>• Monitor divisional performance</li> <li>• Ensure effective internal communication across divisions and department</li> </ul>	Churchill & Lewis, 1983; Miller & Friesen, 1984

Source: Adapted from McMahon, 1998; Hanks et al., 1993; Miller & Friesen, 1984; Churchill & Lewis, 1983.

In summary, as organisations increase in size, the external and internal environments become more complex. For example, from an external perspective, complexity increases as a result of geographical market expansion, a diverse customer base, higher compliance requirements, to mention but a few. From an internal perspective, complexity increases as a result of managing a larger workforce with the possibility of more senior managers and complicated organisation structures, producing diversified products, increases in transactional and organisational administrative data, communication and control over geographically distributed operations, to mention a few examples.

Accordingly, the nature of the business attributes changes as the organisation's stage of development changes. The general expectation is that the nature of the attribute will increase in complexity at more developed stages.

#### ***2.3.2.7 Transition through the developmental stages***

The conceptual literature on business developmental stage models generally assumes a definite, singular transition through the commonly-defined developmental stages (Miller & Friesen, 1984; Quinn & Cameron, 1983; Steinmetz, 1969). Some of the major critiques against business developmental stage models are this assumed sequential order of transition through the stages and the notion that businesses have to pass through all the stages (Levie & Lichtenstein, 2010; McMahon, 1998; Hanks et al., 1993; Mount, Zinger & Forsyth, 1993; Miller & Friesen, 1984; Quinn & Cameron, 1983).

Levie and Lichtenstein (2010) ascribed this general assumption of transition between stages to the observation that the stages of development models are predominantly modelled on the paradigm of developing organisms. From this perspective, there is a notion that developing organisms evolve in accordance to its predetermined genetic programme over time to adapt to a specific environment to be relatively efficient and effective. To what extent the organism survives and develops, depends on how the environment or habitat supplies the necessary factors required for the development of the organism (Levie & Lichtenstein, 2010).

Stokes et al. (2010) noted that not all entrepreneurial ventures focus on business growth. It was observed that in some cases, usually after achieving the entrepreneur's objectives or intent, he might prefer to stay small from a business venture perspective. Scott and Bruce (1987) and Mount et al. (1993) observed that not all businesses that survive will grow into large businesses; ascribing this to the nature of the industry or the personal desires and ambitions of the entrepreneur. Levie and Lichtenstein (2010) also referred to the notion that very few nascent entrepreneurs express the ambition to develop their business into large organisations.

This entrepreneurial choice or desire to develop their business or not, and in some cases preferring an overriding strategy of marginal to comfortable survival at the present size of their organisations, is also prevalent in the literature on the strategic management perspective approach of analysing entrepreneurial business development (McMahon, 1998).

Various academic studies on business developmental stage models also contradict this notion that organisations follow a linear singular transition through the commonly-defined developmental stages (Achtenhagen et al., 2010; Levie & Lichtenstein, 2010; Miller & Friesen, 1984). For example, the studies conducted by Hanks et al. (1993) identified two disengaged stages and Churchill and Lewis (1983) identified one disengaged stage.

Hanks et al. (1993) termed their first disengagement stage 'life-style'. It is between the first stage of start-up and the second stage of growth. Although not indicated as a disengaged stage, Churchill and Lewis (1983) observed a similar phenomenon in their second stage of development, i.e. the survival stage. In this stage, classified as the typical 'mom and pop' shops, they found that some entrepreneurial businesses will stay in this stage of marginal return and go out of business when the entrepreneur decides to disengage or retire (Churchill & Lewis, 1983).

The second disengagement stage identified by Hanks et al. (1993) is 'capped growth' where an entrepreneurial business successfully achieves a modest size and where the entrepreneur has disengaged from the growth process. Hanks et al. (1993) compared this 'capped growth' stage to the Churchill and Lewis (1983) 'success-disengage' stage. In this stage, the entrepreneurial business attained sufficient product-market penetration and size to ensure economic success and health, usually earning average to above-average profits. Provided there are no significant environmental changes to threaten its niche market, the organisation can stay in this stage indefinitely, sometimes a conscious choice by the entrepreneur.

Other conceptual models also indicated that it is not a given that organisations will progress through all the stages (Greiner, 1998; Adizes, 1988). In some cases, organisations can be in various stages simultaneously, usually a transitional phase (Greiner, 1998; Scott & Bruce, 1987; Churchill & Lewis, 1983; Thain 1969). Organisations can also regress to prior stages of development (Miller & Friesen, 1984; Churchill & Lewis, 1983). Miller and Friesen (1984) also observed that stages may not be in sequential order, but they do alter between innovative phases and conservative phases.

Change is also not seen as smooth processes, but rather the view that the organisation will only change from one stage to another when there is critical mass between the nature of the various attributes. In their study, Churchill and Lewis (1982) found that few companies evolved smoothly from one stage to another and that the different attributes or components of the organisation change at different rates over time. From this perspective, Miller (1987, 1981; cited by McMahon, 1998) suggested that instead of predefined stages, businesses attain a form of *gestalt* (a pattern

that emerges in the nature of the attributes of strategy, structure and environment), that leads to a smaller number of extremely common configurations.

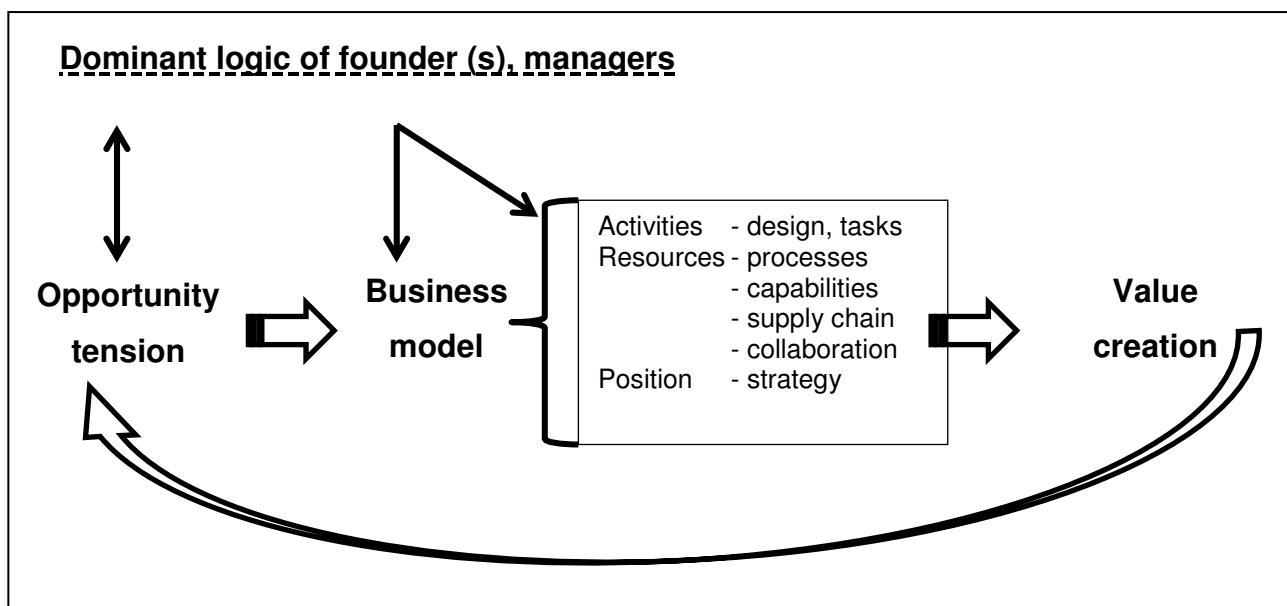
Considering the above literature, the critique on the conceptual principles of business developmental stage models that assume a linear developmental process, seems to be a valid concern. Various authors highlighted the observed reality that entrepreneurial businesses do not develop smoothly, and that it is possible to stay in the same stage of development, or progress to higher, or regress to lower developmental stages.

From this perspective, Levie and Lichtenstein (2010) proposed to move away from the conceptual biological origins that assume development to be in accordance to a predetermined genetic programme over time, where the business adapts its relative efficiency and effectiveness to a specific environment. As an alternative to the biological concept, Levie and Lichtenstein (2010) proposed the use of complexity science as an alternative foundation to describe the transition process of business developmental stage models. They proposed the application of complex adaptive systems and the non-linear dynamics of economics.

Levie and Lichtenstein (2010) believe that a dynamic state approach, described as an open complex adaptive system that operates in disequilibrium, allows for the integration of previous work into a simpler more persuasive business developmental stage model that is more aligned to the observed nature of the entrepreneurial organisation. Similar to business developmental stage models, a dynamic state assumes that businesses develop in a series of fairly predictable configurations (Levie & Lichtenstein, 2010). However, these configurations aim to reflect an optimal relationship between the organisation's business model and its operating environment. This relationship allows for infinite possibilities of change in any number of sequences, initiated from the internal business model or external operating environment (Levie & Lichtenstein, 2010).

Based on dynamic state theory (Figure 2.3), the inherent (internal and external) tension that creates infinite possibilities is referred to as opportunity tension. The extent to which the entrepreneur takes action on this opportunity tension depends on the entrepreneur's desire and passion to act on the opportunity, and is referred to as the dominant logic of the entrepreneur (Levie & Lichtenstein, 2010).

Considering this proposed notion of the entrepreneur's 'dominant logic' as a key consideration for transition between business developmental stages, there is the view that strategies to exploit development opportunities are central to achieving development and that internal and external attributes have only an indirect impact on development. (Wiklund, 1998; cited by Achtenhagen et al., 2010).



**Figure 2.3: Elements of a dynamic state**

Source: Levie & Lichtenstein, 2010: 332.

Thain (1969) observed that the operative forces for and against development represent a mixture of the interaction between motivation and forces of attraction, and for change to take place, it requires a change in the behaviour and approach of the chief executive officer (the entrepreneur).

As an example, Rostow (1960) observed that the entrepreneur who engages in the take-off stage of the economy is a different type of entrepreneur who thinks differently. Hunter (2012) also observed the most important aspect of transition is the willingness of the people to change their customs and traditions. According to Greiner (1998), it is the way management of the organisation reacts to turmoil, that determines if the organisation develops to a next level of stability. Miller and Friesen (1984) seemed to acknowledge that the entrepreneur has to make a strategic choice, and once this choice is made, it warrants changes that will allow the organisation to fit into one of the common business developmental stages.

The above studies show how inappropriate it is to assume that entrepreneurial businesses will develop sequentially through a set number of stages. Reality has shown that the entrepreneurial business can stay in the same stage of development, or progress to higher, or regress to lower developmental stages.

What seems to be more appropriate is to assume that businesses will have the opportunity to progress through various stages of development. To utilise this opportunity to transform to different levels of development will depend on the entrepreneur's choices based on how he thinks about these opportunities.

In essence, from an entrepreneurial business development perspective, this leads back to the observation by Stokes et al. (2010) who expressed the need for business developmental frameworks to consider the interrelationship between the objective element of how to manage a business venture and the subjective element of the entrepreneur's intent, his goals and objective in relation to the business venture.

### **2.3.3 Summary on business developmental stage models**

With its fair share of critique, business developmental stage models are still an acceptable and relevant approach to research to gain understanding of and insight into the development challenges of entrepreneurial business.

Considered from this research study's perspective, it is interpreted that business developmental stage models offer sufficient utility for application in an integral research approach to explore contextual interrelationships. From a utility perspective, there is a need to consider if business developmental stage models are able to identify points of single location, defined by an underlying level of complexity.

As indicated in the literature review, one of the empirical truths of business developmental stage model theory seems to be that businesses operate in a definable stage for a period. Hence, considering the nature of some key attributes of a business at any given time, it is possible to identify the business *gestalt*. This is a configuration of a number of smaller extremely common attributes identified within the business.

Although business developmental stage models differ on the number of stages, from a more empirical perspective the existence of four to five stages seems acceptable as well as possible stages of disengagement.

These four to five stages can be grouped into three commonly-defined overarching business development phases, namely: (1) start-up taken from the birth analogy; (2) expansion taken from the growth analogy; and (3) mature taken from the notion that entrepreneurial businesses evolve into larger sustainable organisations. Disengagement phases are characterised by a marginalised life-style orientated phase and/or capped growth phase (a successful phase with no ambition to mature into a large corporation).

To classify a business into a developmental stage, the most common categories of business attributes used relate to a dimension of business context, (size and age) and a dimension of business structure (as in management characteristics, organisational structure, the sophistication of the business systems, the challenges and strategic focus of the business).

Business developmental stages are not so much identified by the presence or absence of attributes; it is rather the nature of the attribute that is present and the need to consider its level of sophistication and complexity that act as a differentiator to identify business developmental stages.

The general notion is that with higher levels of business development, the complexity of the internal or operational environment and the external contextual environment increases and as a result, demands attributes with higher levels of sophistication and complexity.

As for understanding the processes of development, in reality, not all businesses progress through all of the developmental stages. Development is also not a linear process, and businesses can progress to higher levels of development, regress to lower levels of development, stagnate or disengage from growth, or be in a transitional phase. However, to achieve a higher level of development, businesses will have to progress through the developmental stages from less developed (associated with low complexity) to more developed levels (associated with higher levels of complexity).

In general, there is the understanding that businesses will have the opportunity to progress through various stages of development, starting at a relatively low level of complexity (the start-up phase), with opportunities to progress to levels associated with higher levels of complexity. Utilising this opportunity to transform to different levels of development will depend on the entrepreneur's choices based on how he thinks about these opportunities, i.e. the entrepreneurs 'dominant logic' at the time. The entrepreneur's 'dominant logic' seems to indicate his desire and passion to act on the opportunity tension created by the business' internal, operational environment and the external, contextual environment that the business operates within.

In essence, the choice of the entrepreneur warrants changes that will allow the classification of the business into one of the commonly-identified business developmental stages or disengagement stages associated with business developmental stage models.

The next section focuses on reviewed literature that relates to adult decision-making from a subjective perspective.

## **2.4 ADULT DECISION-MAKING FRAMEWORKS**

### **2.4.1 Overview on decision-making frameworks**

As indicated in the literature review on business developmental stage frameworks, the observation was made that the entrepreneur has to take a decision or exercise a choice to influence his business development. Relating this to the observation of Stokes et al. (2010), some authors are of the opinion that this choice stems from the subjective element of the entrepreneur's intent, his beliefs, goals and objectives in life. Consequently, the focus in this literature review on adult decision-making is not from a mechanistic perspective, but rather a discussion to provide insight into the subjective elements that seem to give meaning to an adult person's decision-making.

Studies on adult decision-making have been conducted in an increasingly diverse set of disciplines including political science, economics, management science, marketing, engineering, geography, education, medicine and psychology. However, the importance of psychological concepts is

increasing in both normative and descriptive research work on decision-making (Cho, Tse & Neely 2012; Slovic et al., 1977).

Efforts to understand the human mind can be traced back to the ancient Greeks and with the rise of modern science in the 17<sup>th</sup> and 18<sup>th</sup> centuries, philosophers attempted to develop objective theoretical ideas (Thagard, 2005). The study of the mind was predominantly the subject field of philosophy until the 19<sup>th</sup> century when experiential psychology developed more rigorous methods for conducting psychological experiments (Thagard, 2005; Schueler, 1997).

According to Schueler (1997), from a cognitive psychology perspective, a person's thinking and emotions affect his behaviour and *vice versa*. Since the mid-1960s, social psychologists have focused on the topic of cognitive consistency, i.e. the tendency of a logical consistency between a person's beliefs and behaviour. In the case of logical inconsistency, termed cognitive dissonance, the person unconsciously seeks to restore consistency by changing behaviour, beliefs or perceptions, into an ordered cognitive style.

From this perspective, cognitive science accepts the notion that people formulate internal mental models of the external world as a mechanism to interact with the reality of the world they live in (Jones, Ross, Lynam, Perez & Leitch, 2011). Mental models are cognitive representations of reality whereby people formulate mental models of the world in their mind, and then use these mental models to reason and formulate explanations (Jones et al., 2011).

In essence, mental models are not accurate representations of the real world, but rather functional models used by people to interact with the world (Jones et al., 2011). Mental models are influenced by a person's goals, motives, and his knowledge structures. Accordingly, mental models also play a role in filtering incoming information, as confirmation bias theory suggests; people tend to seek information that relates to their current mental model of the world, and other information may be rejected (Jones et al., 2011).

Developing models and frameworks that explain how people think and interact with the world seems to be based on research and knowledge across various subject areas. Thagard (2005) observed that cognitive science as the study of the mind can be seen as an interdisciplinary science that requires a diversity of methodologies from various subject fields.

Graves (1973) also referred to the emerging need in his time to focus on the complementary aspects of psychology theories instead of the normal contradictory approach applied, in an attempt to achieve the proposed goal of humanistic psychology, to provide a complete description of what it means to be a live human being. Graves (1971) referred to the benefits of the systems concept that makes it possible to integrate the theories on human behaviour; a task to study the correct relationship among these theories with the intent to reduce confusion and contradiction in the field of behavioural science, and a conclusive attempt to make more sense of it all. Graves (1971) started to collect data to test various theories that related to defining healthy adult behaviour.

Using his research data, Graves (1971) developed a theoretical framework: 'A system conception of personality – levels of existence theory', which is commonly referred to as Graves' open-system theory of values. This framework is based on a transdisciplinary approach to include concepts from a biological, psychological, social and systems approach (Cook, 2008).

Graves' (1973) model is based on the concept of pathways that develop in the person's mind over time. As humans develop, these pathways act subconsciously as filters on the person's thinking (Cook, 2008). These filters are what Beck and Cowan (2006) referred to as a representation of the individual's imbedded culture (world-view). Insight into these world-views can be key into gaining an understanding of how the person will respond to change and opportunity as external or life conditions (including business conditions) change in order to remain competitive (Cook, 2008). From this perspective, the world-views are not to be confused with the development of human traits or abilities. Graves' (1973) open-system theory of values model deals with evolving thinking systems, that seek to explain how people think about the world they live in. In essence, there seems to be the notion that the intent of person influences their decision-making.

Considering Graves' (1973) open-system theory of values model from the objective of this research study, the model seems to offer a framework that focuses on the development of the subjective intent of an adult person, his beliefs, goals and objectives in life that can give insight into the choices that he makes. In the context of this study, the subjective choices are on the development of his business.

The next section discusses the open-system theory of values model as a subjective framework that is concerned with the entrepreneur's intent, his beliefs, goals and objectives in life that can aid in giving insight into the business choices that he makes.

#### **2.4.2 Graves' open-system theory of values**

Graves (1973) open-system theory of values seems to be born from the emerging need at his time to focus on the complementary aspects of psychology theories instead of the normal contradictory approach applied. Graves (1971) advocated the perceived benefits of the systems concept that make it possible to integrate the theories on human behaviour in an attempt to reduce confusion and contradiction in the field of behavioural science. In his attempt to contribute to the proposed goal of humanistic psychology, Graves (1971) developed an explanatory framework applying a transdisciplinary approach to include concepts from a biological, psychological, social and a systems approach.

Over a research period of 22 years, he developed his theoretical model that focuses on the mature human being as a healthy multi-gender adult aged between 18 and 61 years (Graves, 1971).

Research data was collected to test various theories that relate to defining what healthy adult behaviour is. From his data, a few key concepts emerged (Graves, 1971):

- Adult behaviour seems to be a changing hierarchy of processes, not a fixed state of being, that moves between the conception states of expressing oneself and of denying oneself;
- Correlations between a person's hierarchy levels and socio-economic status indicate the behaviour's external relationship, with lower levels focusing on more vital survival challenges;
- Cognitive complexity seems to increase with higher hierarchy levels with a quantum leap in problem-solving ability identified at his theoretical model's category level seven; however, this increased ability to problem-solve seems not to be related to intelligence or temperament;
- A person's behavioural freedom seems to increase with higher hierarchy levels; and
- The hierarchy levels seem to be located in the human brain as systems that respond to different types of stimuli.

Based on these observed concepts from his research data and the emerging 'levels of existence' point of view that emerged in his time, Graves (1974) started to develop his open-system theory of values model. The 'levels of existence' concept, that is imbedded in the open-system theory of values, is based on the underlying three principles of (Graves, 1974; 1973; 1970):

- Man's nature is not a set closed system, but an ever-emergent open system;
- Man's nature evolves from one stable state through a saccadic quantum-like jump to the next; and
- Man's values change from one stable system to the next stable system as his new psychology emerges in each stable state.

This seems to resonate with the research of Schueler (1997), who observed cognitive consistency and logical inconsistency, i.e. the notion that a person's thinking affects his behaviour and *vice versa* and in the case of inconsistency, the person seeks to restore consistency.

Considered from factors that can possibly contribute to inconsistency, psychologists in general agree that it is important that development psychological theories should take into account the interaction between the organism (people) and the environment (Fischer, 1980). In this regard, Graves open system of values theoretical framework includes the notion of internal development levels that increase in complexity to cope with a more sophisticated developed external reality (Graves, 1971).

From this perspective, it seems that Graves' (1974) open system of values model offers utility to this research study, as a pragmatic heuristic framework that can assist in gaining insight into the subjective intent of an entrepreneur, that seems to interrelate with his decision-making process in the development of his business venture.

The aim of the literature review was not to explore the validity of the open system of values model, but rather its possible utility value for use in an integral research approach. For the purpose of this research study, it was assumed that the original research work on Graves' (1974) model, including the coping-value system concept, was well founded, similar to peer-reviewed publications during the period 1999 to 2006 (Cook, 2008). From the literature review, it was noted that, Graves assessed the heuristics value of his theoretical model, comparing it against the main thinkers of his time (Cook, 2008). Considered as a theoretical model on value and belief systems, Payne (2004; cited by Cook, 2008) is of the view that Graves' framework seems to fit other models, whereas other models do not include the scope of Graves work. The principles of Graves' theoretical framework describe in a universal sense human nature rather than personality types, or traits of a gender, racial or ethnic basis, and provide a unifying framework that makes holistic thinking and actions possible (Beck & Cowan, 2006). Considered from an integral approach to gain insight into business management, Wilber observed the application of the principles of Graves' open system of values model (in the Spiral Dynamics format) is used by Beck in hundreds of situations in the field of integral business (Wilber, 2001). As for the heuristic value of the thematic coping-value system, a key element of Graves' open system of values model, it was applied on 50 000 people from around the world with no major exceptions to the general schemata thereof (Wilber, 2001).

The next section is a literature overview of the key basic principles of Graves' theoretical model.

#### **2.4.2.1 Graves' theoretical framework and basic concepts**

Graves (1971) based his theoretical model on his initial research data from eight sets of student groups over a period of eight years. Over this period, independent panels of judges classified the underlying conceptions identified in the data (Graves, 1971). Having access to the student groups during later periods of their studies, provided Graves with longitudinal consistency, as the research population was accessible for more intense follow-up scrutiny (Graves, 1971).

The underlying character of Graves open-system theory of values is a hierarchical infinite system, whereby the mature human being's psychology emerges based on the progressive subordination of older behaviour and coping-value systems into new higher order behaviour and coping-value systems (Graves, 1973; 1970).

Based on Graves' theory, the adult man's psychology develops as he solves certain hierarchically'-ordered existential problems that are crucial to his existence. As he solves these problems, free energy is released in his system that creates new existential problems. With these new problems, there is the activation of different configurations of dynamic neurological systems, to enable the person to cope with these new existential problems (Graves, 1974; 1973; 1970).

In Graves' open-system theory of values, his theoretical framework combines the interaction that transpires between the changes in an individual's psychology, his internal coping-values and beliefs (represented by a configurations of dynamic neurological systems), and the changes in the individual's conditions of external existence, the individual's external causes or life conditions (Graves 1974; 1973; 1970). In essence, it confirms the concept of an internal external interrelationship that psychologists generally agree with (Fischer, 1980).

As existential states emerge, the individual seems to believe that this is the problem he has to face, and accordingly seems to develop a general way of life, a theme for internal existence (Graves, 1974; 1973; 1970). This is referred to in Graves' model as an active thematic coping-value system, which is seen to be appropriate to the person's perception of his current state of external existence (Graves, 1974; 1973; 1970). At each stage of development, the tendency is towards a state of equilibrium between the individual's perception of the external conditions of existence and the individual's psychology, his internal coping-values and beliefs (Graves, 1974; 1973; 1970). At each of these stages of equilibrium (a developmental stage), the person's actions, thinking, judgement and motivation seem to differ and are interrelated to his internal levels of existence (his active psychology), a representation of his active internal coping-values and beliefs (Graves, 1974; 1973; 1970).

Graves (1974; 1973; 1970) summarised an adult's life as a potentially open system of needs, values and aspirations that settle into an approximate closed system, at a specific point in time. In terms of adult's psychological behaviour that represents a state of equilibrium; that is a definable internal level of existence. This definable developmental stage is represented by a thematic coping-value system profile.

With a study aim to explore the interrelationships between the entrepreneur's subjective mind and the objective formation of his business venture, the thematic coping-value system from Graves' theory offers utility to this study.

From this perspective, the next section in this literature review is an overview of the various levels of thematic coping-value systems in Graves' theoretical framework. It is a discussion on the basic nature of the various levels of thematic coping-value systems and an overview of the change processes between the levels of existence from the one stable state of equilibrium to another.

#### **2.4.2.2 Integral concepts within Graves' open-system theory of values**

The next section considers the utility of the thematic coping-value systems in Graves open-system theory of values for use in research of an integral nature. From this perspective, the underlying key principles identified in the four-quadrant integral framework needs consideration. In essence, the two key principles are: (1) the ability to identify points of single location; and (2) the ability to measure the level of complexity that relates to these points of single location, in order to evaluate the developmental level of the subject matter under review.

#### **2.4.2.3 Points of single location – Internal levels of existence**

A state of equilibrium, in accordance to Graves' open-system theory of values, seems to offer the potential to represent a point of single location. As per his theory, a state of equilibrium is where the complexity of the person's internal existence (his subjective world) is in harmony with the complexity of his perceived external world (our objective world).

From his research data, Graves (1973; 1970) identified eight thematic coping-value classifications. Combined with his understanding of the development of humankind, Graves (1973, 1970) induced and recognised pathway patterns, from hunter-gatherers to present time. Each pathway is a heuristic indication of the challenges of the external life conditions and the corresponding heuristic of the internal responses needed to cope within the relevant pathway. Graves (1970) mentioned that his data suggests the development of three higher order development sets, consisting of six repetitive hierarchically stages. The first set of six focuses on the action prone man, the second higher order set focuses on the intellectually prone man and the third higher order set emphasises man's compassionate component, predicting that by then man will have changed himself and will have moved on infinitely (Graves, 1970). The eight thematic coping-values systems that Graves (1970) identified and defined in his theoretical model, relate to the first set of six pathways, from the action prone man and two of the next set of six, from the intellectually prone man.

The process followed to identify these thematic coping-values systems is based on a conceptual framework that links the interrelationship between life conditions, coded as N to S, with an increasing higher order of dynamic neurological system in the brain, coded as A to F (Graves, 1973; 1970). For example, the first level thematic coping-values systems identified is AN, focusing on man's basic physiological needs, followed by an emerging BO, CP DQ etc. (Graves, 1973; 1970). Each code set indicates a state of equilibrium between the dynamic neurological system codes (the coping-values) and the existential problem (life condition) codes (Graves, 1973; 1970). Table 2.5 below includes these code sets of equilibrium.

The above conceptual framework indicates how different sets of human challenges dictate the psychology, the coping-values of every level in Graves' conceptual framework (Graves, 1973; 1970). It also indicates that each identifiable cyclic pattern, the combination between external and internal, is alike (building on the previous) but unlike other cyclic patterns (being different to the previous). Graves indicated that this principle of external interrelationship is an important aspect to understand in a discussion of human coping-values (Graves, 1973; 1970).

**Table 2.5: Summary of Graves' levels of existence**

<b>Beck &amp; Cowan's colour code</b>	<b>"I" = Person orientated We = Group orientated</b>	<b>Graves' Pathway coding</b>	<b>External existence challenge</b>	<b>Nature of internal existence challenge</b>	<b>Internal coping-value system</b>
Beige	I	A-N	Maintaining physiological stability	Automatic Basic survival	Sharpen instincts & innate senses
Purple	We	B-O	Achieving relative safety	Tribalistic Clan well-being	Seek harmony & safety in a mysterious world
Red	I	C-P	Living with self-awareness. World is filled with aggression, hostility, anger, selfishness and is dominated through power	Egocentric Dominance & control	Express impulsively, break free, be strong
Blue	We	D-Q	Achieving peace of mind. World is deterministic, rationally-ordered and characterised by rigid categories for ideas, people, objects and events	Saintly Obedience & stability	Find purpose, bring order, insure future
Orange	I	E-R	Conquering the physical universe. World is rich in natural and human resources, providing vast opportunities for individuals and cultures to create for themselves – “the good life”	Materialistic Autonomy & improvement	Analyse & strategise to prosper
Green	We	F-S	Living with the human element World has been depersonalised through determinism and tarnished through technology that result in a spiritual void to be filled through rediscovering of basic humanity	Personalistic Equality & community	Explore inner self, equalise others
Yellow	I	G-T	Restoring viability to disordered world. The world in danger of collapse due to scarcities created by human abuse of nature and self. Life is a diverse paradoxical and pluralistic experience in which the human must restore nature.	Cognitive Flexibility & natural flows	Integrate & align systems
Turquoise	We	H-U	Accepting existential dichotomies, life is the most precious thing there is, yet the individual life is unimportant.	Experientialistic Living systems & harmonies	Synergise & macro manage

Source: Adapted from Beck, 2013.

#### **2.4.2.4 Attributes of heuristic thematic coping-values systems**

Table 2.5 is an overview of the thematic coping-values systems, identified by Graves (1973; 1970) indicating the nature of the internal existence challenge in each level with its corresponding external existence challenges and the nature of the heuristic thematic coping-values system, used to cope with these challenges at each developmental level of equilibrium.

Appendix M offers a more detailed basic description of the DQ, ER, FS and GT heuristic thematic coping-values system indicating the thematic of the general outlook on the external life conditions, the typical life goals, coping-values, including the ranges of functioning and some transition indicators.

Appendix J also includes the heuristic thematic to describe transition stages between these stages of equilibrium.

Considering the potential utility of these eight identified heuristic thematic coping-values systems, as a developmental framework in the four-quadrant integral theory framework some other key concepts need to be explored.

As mentioned before, each of these eight heuristic thematic coping-value systems represents a temporary closed state of equilibrium between a person's external life conditions and his internal coping-value system (Graves, 1973; 1970). As people interact with various life conditions, they can activate any number of these thematic coping-value systems based on their perception of the challenges of the life conditions they have to interact with (Beck & Cowan, 2006).

To operationalise the open-system theory of values, Graves (1971) worked on a self-assessment survey that collects data on a person's preferred thematic coping-values. The aim with the survey is to assess how active the heuristic thematic coping-values of Graves' framework are within a person (Graves, 1971).

A framework (Appendix K) to identify the predominant heuristic thematic coping-values that a person associates himself or herself with, holds the possibility to identify points of single location. In essence, measuring the number of active heuristic thematic coping-values and the intensity of these active heuristic thematic coping-values results in a heuristic thematic coping-values system profile, that represents a point of single location that is in relation to how the person perceives the challenges of the life conditions they have to interact with.

The next discussion considers the level of complexity that relates to these points of single location, represented by the active heuristic thematic coping-values system profile of a person.

#### ***2.4.2.5 Complexity considerations of coping-values system profiles***

Reviewing the heuristic thematic coping-values systems identified in the research data, Graves (1973; 1970) observed that each of these heuristic thematic coping-values systems seems to be a response to the person's perception of his or her external life conditions. Reviewing the underlying themes of the life conditions that a person seems to respond to, Graves identified a hierarchy in life conditions from less complex to more complex (Graves, 1973; 1970). Accordingly, the heuristic thematic coping-value system in Graves' framework is hierarchical from less to more complex.

From this perspective, Graves developed his open-system theory of values, as a conceptual framework that indicates how different sets of human challenges, from less complex to more complex, dictate the psychology of a person (Graves, 1973; 1970). In essence, the perceived external environment dictates the activation of the heuristic thematic coping-values that range in complexity to cope with the underlying complexity observed in these perceived life conditions.

This principle of the external relationship to cope with perceived life conditions is an important aspect to the underlying level of complexity associated with each heuristic thematic coping-values system.

In general, change from one coping-value system to another is associated with a change from a less complex heuristic thematic coping-values system of thinking to a more complex heuristic thematic coping-value system of thinking (Beck & Cowan, 2006). This is to enable the individual to recognise the external challenges associated with the ever-increasing complexity of life conditions (Beck & Cowan, 2006). However, as indicated below, changes between coping-value systems seem to be a bi-directional process and change can also be from a more complex heuristic thematic coping-values system of thinking to a less complex heuristic thematic coping-value system of thinking, depending on how the person perceives the external challenges associated with the level of existence at the time (Beck & Cowan, 2006). This highlights Graves' remark on the importance of understanding the external environment in a discussion of human coping-values (Graves, 1973; 1970).

From this perspective, the observation that to assess the complexity level of the active heuristic thematic coping-values system profile of a person there is a need to assess the hierarchical level of the corresponding heuristic thematic of the life conditions that are associated with the identified active heuristic thematic coping-values system.

#### ***2.4.2.6 Transition process between levels of existence***

Graves (1974) indicated that change between levels of existence is not an immediate change, but rather a process. This is based on the point of view that an adult has to first fully realise a level of existence, before he can move to a next level of existence (Graves, 1974). He must first pursue the limits of his current coping-value system to enable him to recognise the external challenges

associated with a higher level of existence (Graves, 1974). This process of realisation takes less time at higher hierachal levels of existence (Graves, 1974).

It seems from the above simplistic view that, even in a constantly-changing environment, the individual must first realise the potential of his current coping-values before he can become aware of the challenges (or opportunities) from the changing external environment. From this perspective, as indicated above in the measurement of a person's heuristic thematic coping-value system, there seems to be a thematic coping profile that is active within each person.

It is within the potential of the person to awaken an unlimited configuration of coping-value systems and to allow these coping-value systems to coexist in a coping-value system profile (Beck & Cowan, 2006). As humans interact in various life conditions, being it work, home, or other social formations, several coping-value systems can be active within the individual and being used to mix and match to interact with the life conditions presented in the various social formations (Beck & Cowan, 2006).

The change between coping-value systems seems to be a bi-directional process (Cook, 2008). It also seems that change is between a coping-value system with an expressive "I" nature and a coping-value system with a belonging "we" nature (Cook, 2008). The change process of the coping-values systems can also be classified into three broad phases: (1) the entering phase; (2) the prime or nodal phase; and (3) the exit phase (Cook, 2008). A person's intensity level of exploring the potential of a particular coping-value can change based on the demands of the external life conditions from being highly intense to a dormant resting state (Beck & Cowan, 2006).

#### **2.4.3 Summary on adult decision-making frameworks**

Efforts to understand the human mind date back to the ancient Greeks (Schueler, 1997) and today studies on decision-making are conducted in an increasingly diverse set of disciplines (Slovic et al., 1977). With the emergence of scientific psychology, in the mid-19<sup>th</sup> century, more rigorous methods for conducting psychological experiments were developed (Thagard, 2013; Schueler, 1997). The importance of psychological concepts increasingly emerges in the research on decision-making (Slovic et al., 1977).

Graves (1973) identified the emerging need to focus on the complementary aspects of psychology theories instead of the normal contradictory approach applied. Graves developed a theoretical framework that describes human nature in a universal sense, rather than personality types, or traits of a gender, racial or ethnic basis (Beck & Cowan, 2006). Graves' open-system theory of values seems to provide a unifying framework, which makes it possible for holistic thinking and research, to gain insight into the subjective intent of adult decision-making.

Considered from the objective of this research study, the view is that the heuristic thematic coping-value system of Graves open-system theory of values, offers sufficient utility for application in an integral research approach to explore contextual interrelationships of a subjective nature. In essence, it seems to offer utility to explore deepened insight from the subjective intent of the entrepreneur in his decision-making on the development of his business venture.

Considered from an integral research approach perspective, it was considered whether the thematic coping-value system offers the ability to identify points of single location, defined by an underlying level of complexity. From this perspective, the thematic coping-value system concept from Graves' open-system theory of values model offer utility for use in the four-quadrant integral model. This is possible due to the model's heuristic characteristics, with an underlying element of complexity imbedded in them, as identified at each point of single location, represented by a coping-value system profile (a developmental stage).

## 2.5 SUMMARY ON THE LITERATURE REVIEW

As indicated under the research problem, the development of an entrepreneurial business is an important outcome of entrepreneurial activity. However, as Stokes et al. (2010) pointed out, this might not necessarily be the primary goal of entrepreneurs. From this perspective, one can highlight the need for an integral approach to the subject field of entrepreneurship development research.

The perceived benefits of an integral approach to research were highlighted by the observation of De Clercq et al. (2011) that a single-level investigation on only one focus area of the entrepreneurial business development ecosystem tends to yield incomplete understanding from an overall systems perspective and that its findings need to be complemented with multi-level (integral) investigations.

In an attempt to explore entrepreneurship from an integral perspective, the research study's objective was set to explore the implied dynamic interrelationship between the developmental stage of the entrepreneurial business venture (the objective realm) and the dominant coping-values (world-view) of the entrepreneur (the subjective intent).

In support of the study objective, the literature review focused on three broad topics of interest:

- i) Explanatory frameworks that integrate the external objective world with the subjective subconscious of the human being;
- ii) Explanatory frameworks on entrepreneurial business development phenomenon; and
- iii) Explanatory frameworks on the subjective intent for adult decision-making.

The aim was to identify theoretical frameworks with potential utility that can guide the development of a theoretical model and approach to the objective of this research study. From this perspective, the literature review considered relevant principles, concepts, and possible utility of theoretical frameworks under each broad topic of interest.

The key theoretical models, frameworks and explanatory schemes identified in the literature review with high potential utility value to the objectives of this research study related to: Wilber's four-quadrant integral model, business developmental stage models and the heuristic thematic coping-value system concept in Graves' open-system theory of values model.

As indicated, Wilber's four-quadrant integral model offers utility to explore the interrelationships between the objective external world and the subjective intent of a person. The key principles identified in Wilber's four-quadrant model were utilised to assess the utility value of the other models to be used in the research study. In essence, the research explored the interrelationship between the developmental level of the entrepreneurial business (the objective realm) and the subjective intent of the entrepreneur's decision-making on the development of the entrepreneurial business. From this perspective, both models identified seem to offer utility as they can identify points of single location with underlying measurable levels of complexity as an indication of developmental levels.

The next chapter considers a possible theoretical framework induced from the literature review for use as a basis to guide the research process.

## CHAPTER 3

### THEORETICAL FRAMEWORK

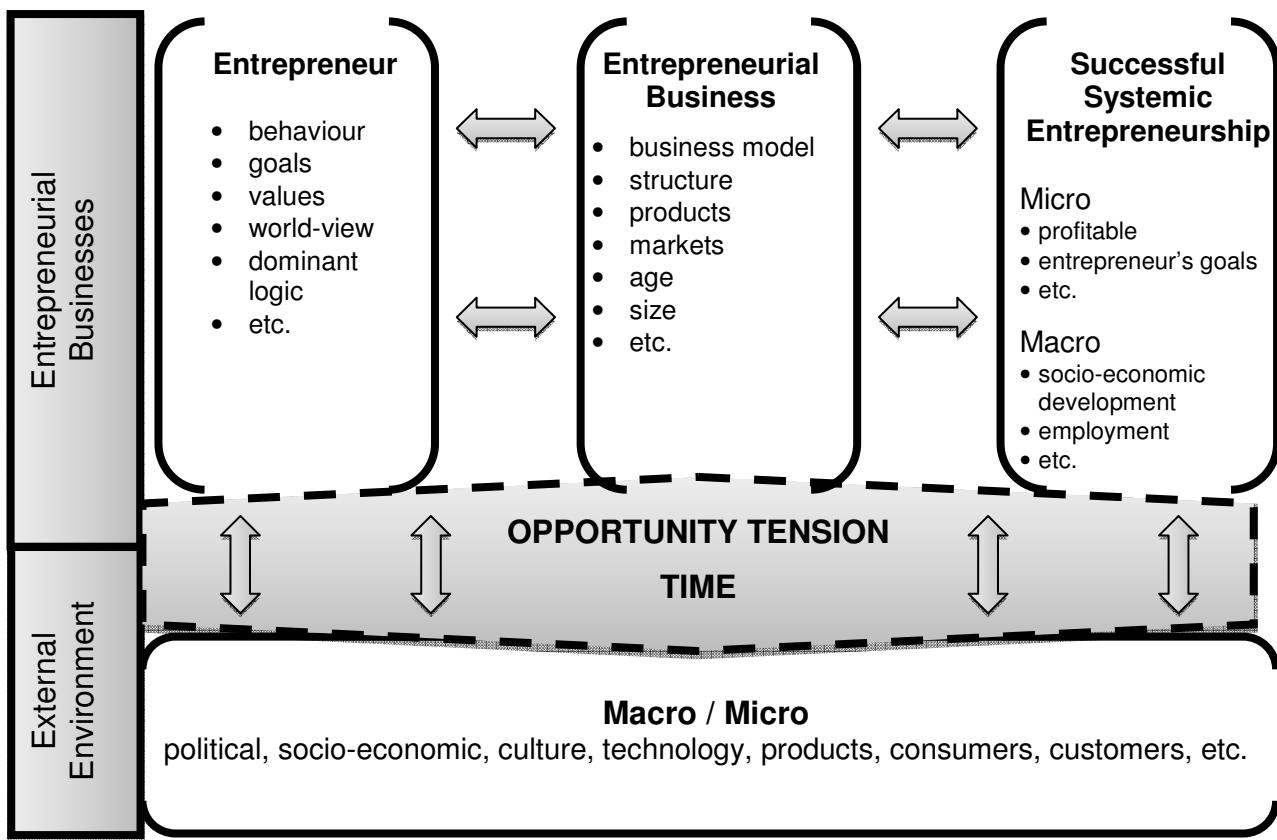
#### 3.1 INTRODUCTION

The purpose of this chapter is to induce, based on the literature review, a proposed interrelationship framework that can be used as a guide for this research. The aim is to explore contextual interrelationships of a subjective and objective nature in entrepreneurial business development. The study aims to gain deepened insight into the implied contextual interrelationship between the subjective intent of the entrepreneur, operationally defined as his/her coping-value system and the developmental stage of his/her business, the objective exterior.

This chapter starts with a summary discussion of the contextual setting of the entrepreneurial business development ecosystem. It considers the setting of the theoretical frameworks and models identified in the literature review with deemed utility for the aim of this research study. Summarising the utility of the theoretical frameworks and models selected, an induced integral model is proposed to guide the study's aim to explore contextual interrelationships in order to gain deepened insight into the understanding of the entrepreneurial business development phenomenon.

#### 3.2 CONTEXTUAL SETTING

Figure 3.1 below depicts a contextual overview of the research setting and literature review related to this study.



**Figure 3.1: Conceptual summary framework of research setting and literature review**

Source: Derived from Levie & Lichtenstein, 2010; Stokes et al., 2010; Walker & Brown, 2004; Churchill & Lewis, 1983; and Thain, 1969.

Referring to the bottom of Figure 3.1, over time entrepreneurial businesses operate in an open external environment. This environment represents elements of a macro nature (political, social, economic, etc.) and of a micro nature (market structures, technology, consumers etc.). These elements create an infinite number of business possibilities labelled as opportunity tension.

The extent to which the entrepreneur acts on these opportunities appears to depend on his desire and passion referred to as his dominant logic (intent/coping-value system). Exercising his intent, is interpreted as an attempt to achieve an optimal or equilibrium relationship between the entrepreneurial business model and the entrepreneur's perception of the external environment. The actions taken by the entrepreneur, based on his intent, seem to influence the development of the entrepreneurial business into one of various definable business developmental stages.

The entrepreneurial business developmental stage seems to influence the realisation of the socio-economic capacity of the entrepreneurial business venture, unlocking the opportunity tension in a micro and macro context, termed levels of systemic entrepreneurial success. Socio-economic capacity realisation of a micro nature, includes the impact on business survival, profitability and

achieving the entrepreneur's goals; and of a macro nature includes the impact on job creation, distribution of wealth and innovation.

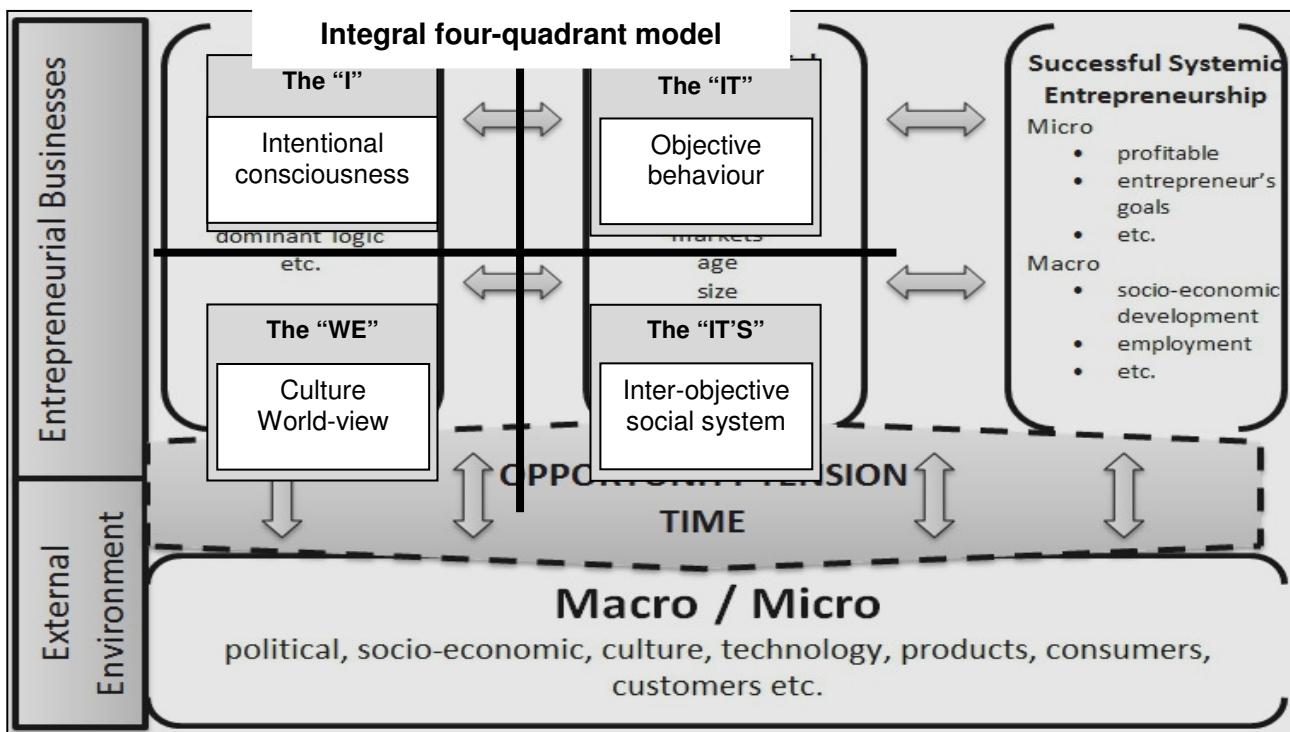
From this discussion, there is the possibility for an induced causality. From an entrepreneurial business perspective, there is an implied interrelationship, where the behaviour of the entrepreneur influences the development trajectory of the entrepreneurial business, that in turn influences systemic entrepreneurial success. However, the systemic entrepreneurial success impacts on the external environment, creating an expectation of constant external change. With this change, there is the expectation of a disturbance of any potential state of equilibrium between the entrepreneurial business and the external environment. This results in a process that continuously creates opportunity tension, where instead of an induced causality, there are rather reciprocal multi-dimensional interrelationships. In essence, it is a complex adaptive ecosystem, with constant change within the multi-dimensional interrelationships presenting themselves in various forms of opportunity tension.

This highlights the need for research to consider the contextual interrelationship between the elements in a specific focus area as well as across focus areas in this complex ecosystem.

Furthermore, various authors (Abdelgawad et al., 2014; De Clercq et al., 2011; Beck & Cowan, 2006; Wilber, 2001; Sperry, 1993; Fischer, 1980) have advocated the benefits to be gained from the consideration of the contextual interrelationship between the objective and subjective nature of the elements in and across focus areas. As observed by Sperry (1993), to gain a more realistic insight into the reality of our world as well as the forces that create and shape it, integrated thinking is required, that takes into consideration the exterior objective and interior subjective drivers of the matter under investigation.

This view highlights the perceived benefits for researchers to consider a multi-level approach to explore contextual interrelationships in a complex social ecosystem. An integral approach, as a form of multi-level research, offers the utility to operationalise research that also considers the contextual interrelationship between the objective and subjective nature of the elements under review.

From this perspective, super-imposing Wilber's integral four-quadrant model onto the complex ecosystem of entrepreneurial business development depicted in Figure 3.1 above, seems to provide the utility to guide the operationalisation of integral research on entrepreneurial business development as indicated in Figure 3.2 below.



**Figure 3.2: Integral theory model imposed onto conceptual summary framework of research setting and literature review**

Figure 3.2 above shows the plausible consideration of research on the contextual interrelationships that may exist between the elements from the entrepreneur's intentional subjective perspective and the elements from the social inter-objective perspective of the entrepreneurial business as a social institution.

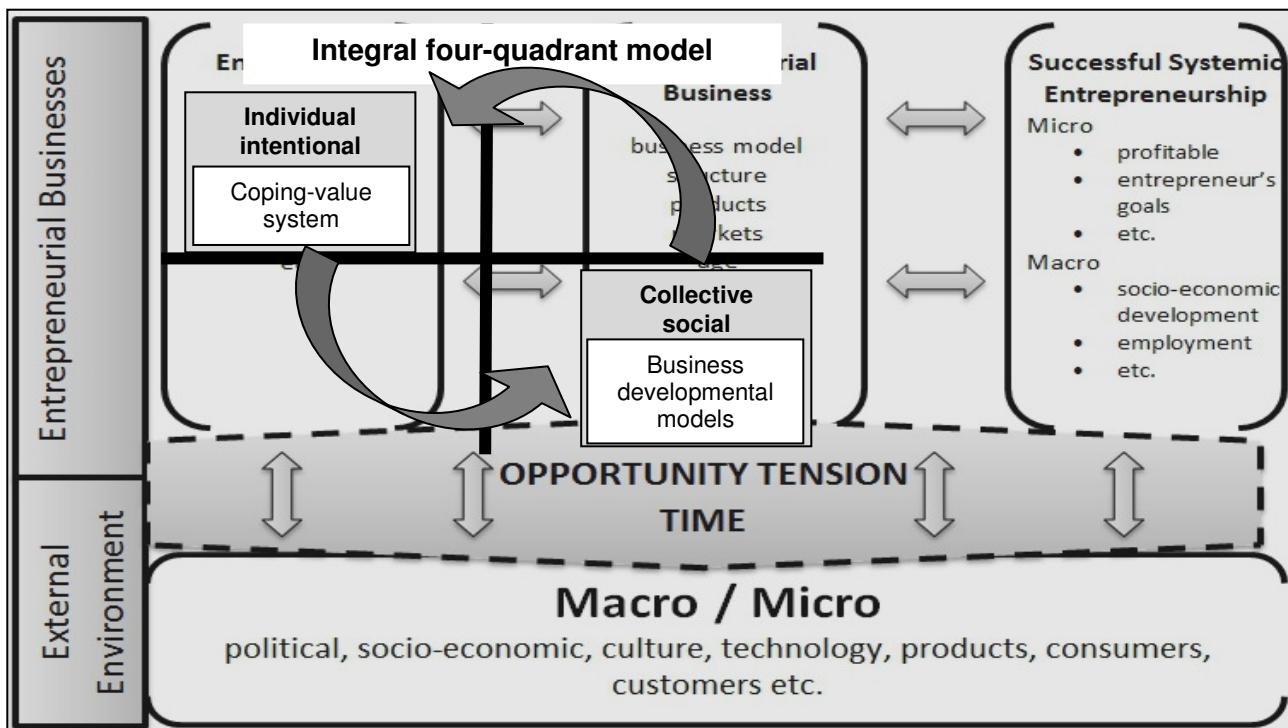
With a research objective to explore the implied relationship between the entrepreneur and his business, from Figure 3.2 above, it is plausible to equate the entrepreneurial business to the exterior inter-objective realm that can be observed and measured by the sense of its existence, in terms of the developmental stage of the business. From the perspective of the individual person/the entrepreneur, there are at least two possible routes:

- To consider the entrepreneur from his exterior objective realm that can be observed and measured by the sense of its existence, in terms of his character or behaviour; or
- To consider the entrepreneur from his intentional subjective realm, exploring meaning, considering the subjective 'why' component, i.e. the entrepreneur's intent.

The aim of this research study is to explore a research approach that is more of an integral nature, that takes into consideration the contextual interrelationship between elements of an objective and subjective nature.

A research approach to explore the possible implied interrelationships between the entrepreneur's exterior objective, his behavioural perspective and the exterior inter-objective realm of the

entrepreneurial business seems to result in a multi-level research approach of a non-integral nature, that focuses more on the objective exterior. To achieve the integral aim of this research study, there is a need to identify and explore the possible interrelationship between elements from the exterior objective and interior subjective perspectives. Accordingly, this study explores the entrepreneur from his intentional subjective realm, considering the subjective ‘why’, intent of the entrepreneur.



**Figure 3.3: Contextual location of the objective and subjective realms explored by the research study**

With reference to the integral objective of this research study, Figure 3.3 above frames the location of the implied contextual interrelationship between: (1) the internal subjective meaning, the entrepreneur's intent, that explores meaning; and (2) the external objective component, that equates to the development of the entrepreneurial business.

To operationalise the research processes to explore potential contextual interrelationships, this research study was predominantly influenced by the concepts of the following three theoretical models identified in the literature:

- i) Wilber's integral four-quadrant model as an explanatory framework that integrates the external objective world with the subjective subconscious of the human being;
- ii) Business developmental models as an explanatory framework on the entrepreneurial business development phenomenon; and
- iii) The coping-value systems model, from Graves' open system theory of values, as an explanatory framework on the subjective intent for adult decision-making.

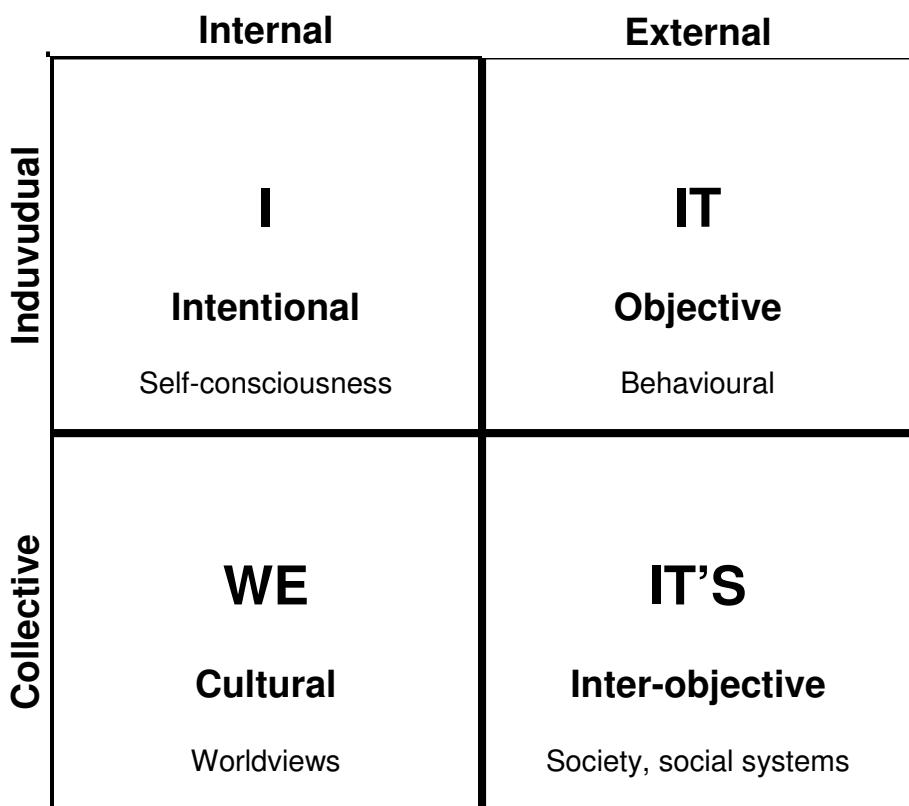
The following section is a summary of the key concepts used from these theoretical models to induce an implied integral interrelationship model for this study.

### 3.3 THE INTEGRAL FOUR-QUADRANT MODEL

Wilber (1998) promoted the integration between science and religion, defining science as the method for discovering knowledge, and religion (belief systems) as the force that generates meaning. By exploring various evolutionary theories, models and explanatory frameworks from science and religion, Wilber developed an integral theoretical framework, the four-quadrant model as indicated in Figure 2.1 and repeated here for ease of reference and reading.

The left side of the four-quadrant model represents the interior subjective realm and the right side of the four-quadrant model represents the exterior objective realm.

In addition to the interior subjective and exterior objective realms, the top half of the model focuses on the evolutionary development of the individual, and the bottom half of the model focuses on the evolutionary development of the collective.



**Figure 2.1: Wilber's universal four-quadrant model**

Source: Adapted from Wilber, 1997.

The four-quadrant model (Wilber, 1997) (Figure 2.1) offers a framework to explore various evolutionary or development interrelationships between:

- The intentional, a subjective quadrant that explores the interior-individual perspective (top-left quadrant);
- The behavioural, an objective quadrant that explores the exterior-individual perspective (top-right quadrant);
- The cultural, an inter-subjective quadrant that explores the interior-collective perspective (bottom-left quadrant); and
- The social, an inter-objective quadrant that explores the exterior-collective perspective (bottom-right quadrant).

The key concepts of the model that influence this research study include:

- The model implies a contextual interrelationship between the objective and subjective realms of the real world as observed by Wilber, who compared various evolutionary and developmental theories, models and explanatory frameworks. The model seems to provide a generalisable universal framework for exploring these implied contextual developmental interrelationships.
- Developmental theories, models and explanatory frameworks explain development as a process from a state of simplicity to a state of greater complexity.
- Developmental theories, models and explanatory frameworks seem to make use of the '*holon*' concept to identify points of single location to represent various levels of development. The elements that are present in the points of single location that represent higher levels of developed, in general can be the same as the elements that are present in the points of single location that represent less developed levels. However, the nature of the complexity of the elements seems to differ at various levels of development. In relation to this study, the understanding is that it is not the absence or presence of elements that defines a development level, but rather the nature of the complexity of the elements.

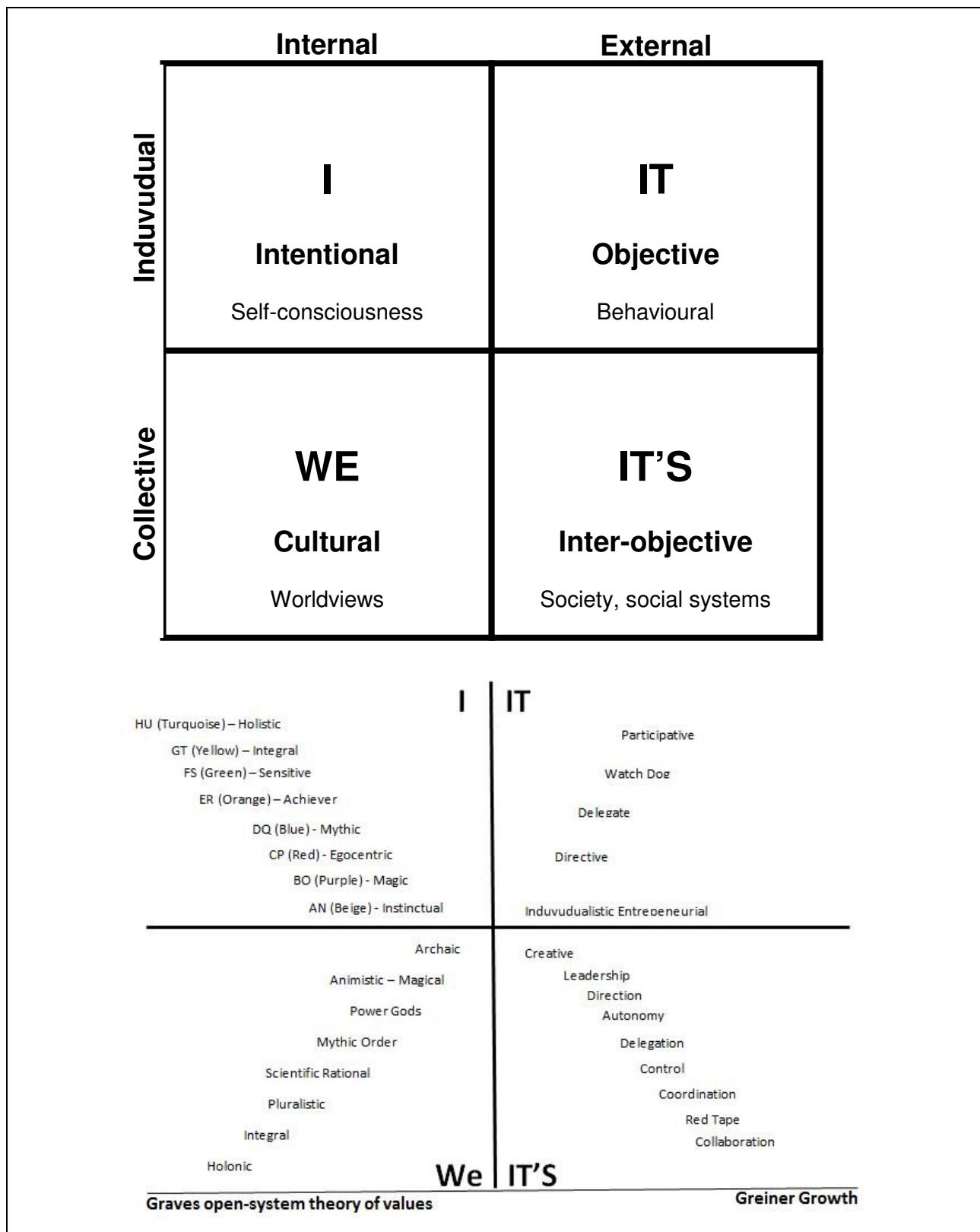
Figure 3.4 below shows a possible practical application of how Wilber's model can assist in guiding this research project. Figure 3.4 is a conceptual visual indication of how Greiner's business developmental stage model, as an exterior objective evolutionary model, and Graves' open-system theory of values model (as discussed in Chapter 2), as an interior subjective evolutionary model, can be depicted in Wilber's integral four-quadrant model.

Greiner (1988) published a conceptual model on the development of organisations in 1972, that is regarded by the Harvard Business Review as a classic. Influenced by the legacies of European psychologists, he extended their theses on individual behaviour to the problems of organisational development (Greiner, 1988). From this perspective, Greiner (1988) showed that similar to individuals, organisations develop through phases based on past events and experiences, rather

than what the future external environment seems to offer. Greiner (1998) identified five developmental phases, each with two sub-stages of a prolonged growth period (termed evolutionary period) and a turbulent period associated with major change (termed revolutionary period). Each period can be identified by the organisation's age in relation to its size and its problems relating to coordination, organisational structure and management issues (Greiner, 1988). From a developmental perspective, the solutions applied to the organisation's problems at one stage contribute to the new problems of the organisation that need to be addressed for the organisation to develop into the next developmental stage.

Considered from the development principles of the four-quadrant model, the view is that Greiner's (1988) model embraces the '*holon*' concept. Each developmental stage can be seen as a point of single location that focuses on the same elements that evolve into higher levels of complexity.

Figure 3.4 is an initial induced conceptualisation of how to explore the contextual interrelationship between subjective and objective elements of developmental frameworks that can contribute to the understanding of the entrepreneurial business development phenomenon. This practical approach to applying Wilber's model represents a typical point of departure to explore the conceptual thinking on the interrelationships between the evolutionary developmental levels of the exterior objective (the entrepreneurial business developmental stage) and the entrepreneur's interior subjective (his coping-values that influence his reasoning and decision-making processes).



**Figure 3.4: Concept model for integral review of entrepreneurship**

Source: Adapted from Wilber, 2001; 1997; and Greiner, 1998.

### 3.4 BUSINESS DEVELOPMENTAL STAGE MODELS

For the purpose of this research study, the entrepreneurial business venture equates to the external objective realm. In the literature, business developmental stage theoretical models are still regarded as an accepted approach to explore and to develop theoretical insight into and knowledge of business success.

These models are used for mainly two reasons. Firstly, from a practical perspective, these models are a relative practical approach to the complex subject of business development and they take into account elements from competing schools of thought. One example is the strategy school of thought that McMahon (1998) identified as one of the most promising but too complex frameworks for practical business development studies.

The second consideration is the evolutionary nature and conceptual origins of business developmental stage models. Considered from a multi-level research approach perspective, it is plausible to explore the contextual interrelationship between business developmental stage models and other evolutionary models based on the principles of Wilber's integral four-quadrant model.

Business developmental stage models are based on the principle that businesses evolve from a simple start-up phase to a more complex mature phase. The empirical study from Hanks et al. (1993) on the number of business developmental stages found support for business developmental stage models with one or more stages that relate to the organisation's start-up phase, the expansion phase and the maturity phase. From this perspective, business developmental stage models are based on identifiable points of single location to represent a defined developmental stage. However, one of the key critiques of business developmental models is the lack in consistency among the various models on the number of defined developmental stages (Levie & Lichtenstein, 2010). Therefore, in the selection of a business developmental stage model, it is important to consider if the model is presented as a theoretical proposition or whether it has been tested or studied empirically (Lester & Parnell, 2005).

This research study considered a combination of the following three business developmental stage models in order to identify the characteristics of business development levels:

- The model of Hanks with an increased focus on academic rigour, an empirical validity perspective identifying four developmental categories and two disengaged categories (McMahon, 1998; Hanks et al., 1993);
- The model of Churchill and Lewis (1983) for its high face validity, a heuristic perspective, and its focus on small businesses, identifying five developmental categories and one disengaged category; and
- From a time dimension, the longitudinal study of Miller and Friesen (1984), considering the transition of businesses from one developmental category to the next, identifying four developmental categories and one declining or stagnating category.

Collectively, these three research studies took into consideration the research work of various others in the development of original or refined business developmental stage models and provide a high coverage of the various conceptual origins of business developmental stage models and the academic work performed to test the validity of business developmental stage models.

The key concept of the business developmental stage models that influences this research study is the notion that businesses evolve through definable points of single location that increase in complexity. The businesses move from the start-up phase through the survival phase to achieve the successful or mature phase, making it possible to diversify into the take-off growth phase. Figure 3.5 below includes an indicative visual representation of the hierarchical nature of these developmental stages.

As indicated in the literature on business developmental stages and as per the findings of these three selected models for this study, it is not assumed that all businesses will develop and transition through all the stages. Businesses can stagnate into a disengagement phase of life-style business or capped growth. It is also possible for businesses to regress to lower levels.

From a transition perspective, this study referred to Levie and Lichtenstein's (2010) dynamic state approach (Figure 2.3) and the complex ecosystem of the research setting (Figure 3.1) that indicated what seems to be an inherent tension between focus areas in the ecosystem. This tension can be of an objective or subjective nature, and can create infinite possibilities for developmental opportunities. From this perspective, the notion follows that it is the entrepreneur's intent (his internal subjective coping-values of how he perceives this opportunity) that may influence his desire to act, that influences the developmental change of his business venture.

This resonates with Thain's (1969) interaction between motivation and forces of attraction and the requirement of a behavioural change for change to take place. Miller and Friesen (1984) also suggested the need to make a choice, and once the choice is made, it warrants changes that will allow the organisation to fit into one of the common business developmental stages.

From this perspective, the research needs to consider the contextual interrelationship of the entrepreneur's dominant active current logic (intent), seen as the internal subjective coping-values, which appears to affect the perceived opportunity that may influence the decisions made by the entrepreneur.

### **3.5 COPING-VALUE SYSTEM FROM GRAVES' OPEN SYSTEM THEORY OF VALUES**

For the purpose of this research study, the entrepreneur's active dominant logic (intent) equates to the intentional interior subjective realm.

Using a transdisciplinary approach, Graves (1973) developed an explanatory framework, generally known as the open system theory of values. Based on Graves' theoretical model, the adult man's psychology develops as he solves certain hierarchically ordered existential problems crucial to his

existence. As he solves these problems, free energy is released in his system that enables him to identify new existential problems and with these new higher order (more complex) problems identified, a (more complex) higher order of coping-value systems become active within the person (Graves, 1974; 1973; 1970).

For the purpose of this research study, Graves' open system theory of values was considered as a heuristic framework with the aim to explore the interrelationship between the interaction of a person's external life conditions and his subjective world-view in the form of his active coping-value systems. As existential states emerge, the individual believes that these are the problems he has to face, and accordingly develops a general way of life, a theme for existence, based on a thematic coping-value system appropriate to his current perception of the state of existence (Graves, 1973; 1970). As Graves (1970) summarised, an adult lives in a potentially open system of needs, values and aspirations, and then settles into an approximate close system in terms of his psychological behaviour, a state of equilibrium, a definable development level or stage. In this approximate close system, the complexity of a person's coping-value system is aligned to cope with the complexity associated with the theme of the external level of existence.

From this perspective, the coping-value system model of Graves' open system theory of values offers the utility of definable points of single location with indicative levels of complexity to represent various levels of development. This makes it plausible to explore the contextual interrelationship between the developmental level of a person's intentional subjective interior and other evolutionary models based on the principles of Wilber's integral four-quadrant model. As Golin (2005) mentioned, Beck had already successfully incorporated Graves' theoretical model into Wilber's four-quadrant model, as a model known as Spiral Dynamics Integral (SDI).

It can be observed that the thematic coping-value systems model of Graves' offers potential heuristic utility to the objective aim of this research study. As Beck and Cowan (2006) indicated, the function of thematic coping-values is to determine the basic priorities of how a human being lives his life, controlling his core decisions, which manifest in his external observable behaviour and choices. From this perspective, it is important to note that Graves' theoretical model deals with the person's mind-set, the intentional subjective interior that develops and not with the development of the person's objective behaviour, traits, skills, abilities or the like.

Based on his research data, Graves (1971) identified eight thematic coping-value profiles representing eight categories of coping-value systems; each a product of the life conditions of its time. These eight thematic coping-value profiles provide a practical heuristic framework to the application of this research study to explore the perceived interior subjective hidden values in the entrepreneur that seem to generate meaning and manifest in his behaviour and decision-making.

### 3.6 PROPOSED CONCEPTUAL RESEARCH FRAMEWORK FOR THIS STUDY

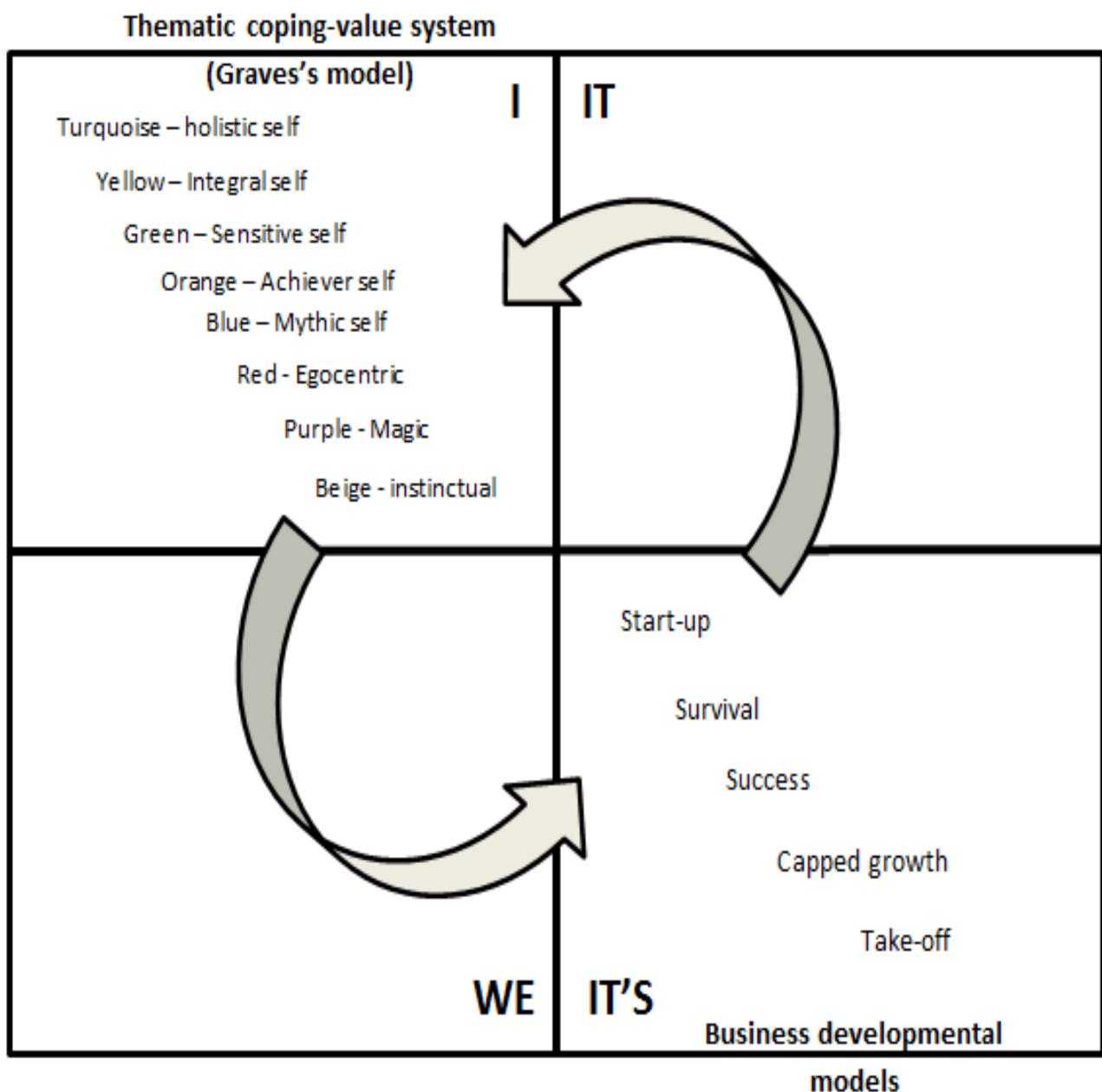
As an attempt to apply an integral research approach to explore for deepened insight into the phenomenon of entrepreneurial business development, the objective of this research study is to explore for potential contextual interrelationships between elements of an objective and subjective nature.

From the objective realm, the study focuses on the entrepreneurial business venture. From the subjective realm, the study focuses on the entrepreneur's intent that seems to influence his decision-making.

To investigate the potential contextual interrelationship between this objective and subjective in nature realms of entrepreneurial business development, this research study operationally defined the subjective and objective elements in accordance to the following two developmental theories:

- The objective perspective is operationally defined as the business developmental stage in accordance to business developmental stage models, i.e. a developmental model with the aim to explore insight into the development of a business venture; and
- The subjective perspective is operationally defined as the person's active coping-value system, i.e. a model from Graves' open system theory of values, a heuristic framework that aims to explore insight into the person's interaction between his internal intent and his external level of existence.

Guided by the key principles in Wilber's integral four-quadrant model, both of these development theories that underlie the operational definitions of the objective and subjective elements include the principles of identifiable points of single location with a measurement relating to complexity to represent a developmental level. Hence, an integral four-quadrant model perspective makes it possible to explore the contextual interrelationship between the subjective coping-values system of the entrepreneur and the objective developmental stage of the entrepreneurial business.



**Figure 3.5: Four-quadrant model combining the theoretical frameworks of business developmental stage models and Graves' levels of existence theoretical explanatory framework**

As Figure 3.5 indicates, from the integral four-quadrant model perspective, it seems to be feasible to research and explore for a potential contextual interrelationship between the intentional subjective perspective of the entrepreneur (top-left) with the inter-objective perspective of the entrepreneurial business venture (bottom-right). Based on the principles of integral theory, no subject seems to be an island on its own and as indicated in Figure 3.5 above, there is an implied contextual interrelationship between the development models depicted in the objective quadrant (bottom-right) and the subjective quadrant (top-left).

To an extent, this implication makes it plausible, based on the principles of Wilber's model, to raise the investigative research question: What is the contextual dynamic interrelationship between the subjective realm (operationally defined as the dominant coping-values (world-view) of the entrepreneur), and the objective realm (operationally defined as the developmental stage of the entrepreneurial business venture)?

To operationalise a research approach to explore the potential contextual interrelationships, guided by the principles of Wilber's four-quadrant model, the research has to identify single points of location to represent the developmental levels. In essence, it has to identify development levels (stages), that are based on the complexity associated with the characteristics that represent the definable single point of location.

From the business' developmental stage theoretical model perspective, the identifiable points of single location are equated to the definable 'business *gestalt*' (clusters), as a configuration of similar business characteristics. McMahon (2000) evaluated the nature of the configurations of the characteristics used to identify the business clusters and found that the various cluster groups suggested the existence of three main development pathways over time. From this perspective, it is possible to classify business clusters based on the cluster characteristics into low, moderate and high-growth development pathway categorical groups (McMahon, 2000). Reviewing the nature of the characteristics associated with each development pathway, the understanding is that the level of complexity increases from the low development pathway to the high-growth development pathway.

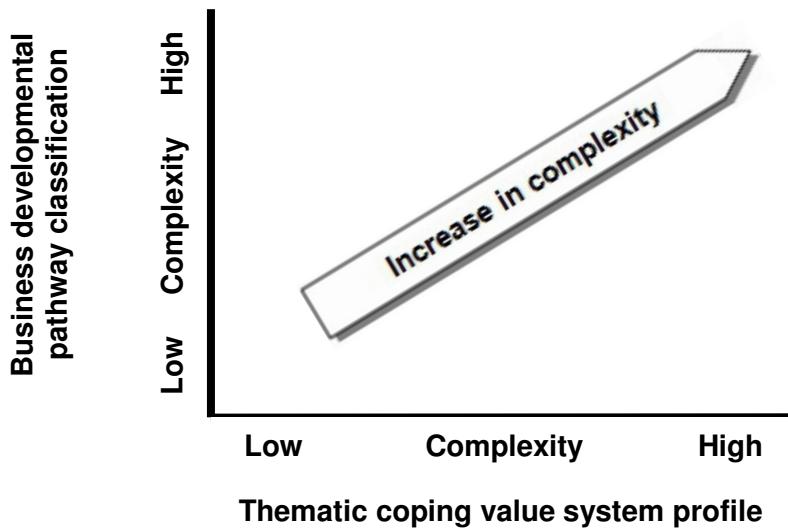
From the perspective of the coping-value system model, the identifiable single point of location is equated to the active thematic coping-value profiles identified in the entrepreneurs. These coping-values vary in complexity to cope with the person's perception of his external levels of existence that increase in complexity as the levels develop.

Being able to identify points of single location (developmental stages), that vary in terms of their levels of complexity, for each of the subjective and objective operational definitions, enable the possibility to induce a theoretical framework to guide the execution of this research study.

Figure 3.6 is an indicative visual representation of the induced theoretical framework of a probable contextual interrelationship between the current business developmental stage pathway of the entrepreneurial business venture and the entrepreneur's current active coping-value system profile. The vertical axis in Figure 3.6 represents the entrepreneurial business developmental pathway arranged from a less complex, low development classification to a more complex high-growth development classification. The horizontal axis represents the entrepreneur's active dominant coping-value profile to cope with his perception of the external world-view. The views are arranged from a less complex survival-orientated external heuristic world-view, to a more complex

heuristic world-view that, for example, focuses on integrated problem-solving to influence the world they live in.

**Expected interrelationship between the entrepreneur's coping-value system and the entrepreneurial business developmental stage**



**Figure 3.6: Proposed model showing the expected trajectory in the interrelationship between the entrepreneurial business developmental stage and the entrepreneur's coping-value system**

As Figure 3.6 indicates and as induced from the selected theoretical models that guide this research study, the potential contextual interrelationship is expected based on the principle of an increase in the complexity associated with each developmental stage. As businesses develop into higher-growth developmental pathways, the need arises to deal with a more complex external objective environment presented by the objective internal and the external operating environments of the business. Therefore, the expectation is that the entrepreneurs who manage these more complex business formations will have an active interior subjective coping-value system profile, that can cope with these higher external complexities.

However, as mentioned in the literature on these development models, real life conditions seem to be more complex and it is not to be expected that all people or businesses will evolve through all the levels of development as indicated in these models.

### 3.7 SUMMARY OF THE THEORETICAL OPERATIONAL RESEARCH FRAMEWORK

The purpose of this chapter was to induce from the literature review, a proposed interrelationship framework that could be used to guide the integral research processes of this research study.

Part of this process was an overview to frame the setting of the research subject under review. With the assistance of a schematic framework, the theoretical frameworks and models identified in the literature review that seem to offer utility to the aim of this study were framed in terms of their related setting in the broad and complex field of entrepreneurial business development.

The three theoretical models and frameworks that significantly guide the research study are Wilber's integral theory, business developmental stage models and the heuristic thematic coping-value system concept in Graves' open-system theory of values model. The key principles of these frameworks that guide the integral nature of this study were summarised.

This chapter ended with an induced interrelationship model for this research study that indicates the expected potential contextual interrelationship based on the principle of an increase in complexity that is expected between the developmental stages of the subjective coping-value system profile of the entrepreneur and the developmental pathway of the entrepreneurial business.

Chapter 4 that follows is an overview of the research method used to operationalise this research study.

## CHAPTER 4

# RESEARCH METHOD, MEASURING INSTRUMENTS AND DATA COLLECTION

### **4.1 RESEARCH METHOD**

#### **4.1.1 Introduction**

The proposition of a PhD research study is to add systematically to the richness of the body of knowledge. This research study aims to gain deepened insight into the phenomenon of entrepreneurial business development. As a method to gain deepened insight, this study employed the advocated points of view on the benefits of contextualisation by applying multi-level research as a process to identify interrelationships across the focus areas of a phenomenon. Considered from a social science perspective, there is the advocated benefit of deepened insight to be gained from an understanding of the contextual interrelationship between the objective matter and the subjective mind as an attempt to gain realistic insight into the reality of our world, as well as the forces that create and shape it.

From this perspective, the aim of the study is to explore deepened insight into entrepreneurial business development, considering the potential contextual interrelationship between the subjective intent of the entrepreneur and the objective development of his business venture.

The previous chapter discussed the development of an induced integral theoretical framework as a form of a multi-level research method. This framework was used to guide this research to explore the potential contextual interrelationship between the subjective intent of the entrepreneur and the objective development of his business venture.

This chapter discusses the operational research plan to explore the practical application of the proposed framework, using sample data collected in a survey on entrepreneurial business.

For the purpose of this study, an entrepreneurial business is operationally defined as an owner-managed business, where the owner has, as a minimum, the responsibility of approving the business strategy. Other operational definitions refer to the entrepreneur's subjective intent, operationally defined as his active coping-values system profile and the development of the entrepreneurial business, operationally defined as the business developmental pathway.

Applying an integral method to explore for potential contextual interrelationships, there is a need to identify points of single location with varying complexity to represent a developmental level. This enables the process to explore the potential contextual interrelationship between developmental levels of a subjective and objective nature.

From this perspective, the operational plan discussed below focuses on identifying points of single location with varying complexity. The plan considers how to collect sample data and the analysis required to identify points of single location with varying complexity in the operationally defined subjective coping-value system of the entrepreneur and the objective developmental pathway of the entrepreneurial business venture.

The identification of these developmental levels in the data makes it possible to determine potential contextual interrelationships that can contribute to deepened insight on entrepreneurial business development, as discussed in the last section of the operational research plan.

#### **4.1.2 Three-stage methodical research plan approach**

From an operational methodology perspective, this research study applied a three-stage methodical approach.

The first methodical step was to identify, on an empirical basis, the presence of business developmental stages in a data sample of entrepreneurial businesses. For this methodical step the study built on the work and models used by Hanks et al. (1993) and subsequently used by McMahon (2000). This methodical step used the multi-dimensional variables that relate to business context and structure to identify, through the application of multi-variate statistics, the presence of business developmental stages in a data sample of entrepreneurial businesses.

On the successful identification of business developmental stages on an empirical basis, descriptive statistics was used to identify the objective in nature business context and structure characteristics configuration of each developmental stage.

The second methodical step was to explore the subjective dimension of the entrepreneur's intent in each identified business developmental stage. This process entails the identification of the entrepreneur's thematic coping-value system profile within the identified business developmental stages. This procedural step applies descriptive statistics to identify the entrepreneur's preferred coping-value system profile that can be associated with the business context and structure characteristics configuration identified within the business developmental stages.

On the successful identification of coping-value system profiles for each developmental stage, the third methodical step was to identify the subjective characteristics within each coping-value system profile that seem to support the nature of the configuration of the objective business context and structure characteristics in each business developmental stage. The identification of subjective characteristics can be seen as an enlargement to the descriptive character of the configuration of the objective business variables of context and structure identified in each business developmental stage. This process also enables the identification on contextual interrelationships between the subjective intent of the entrepreneur and the objective development of his entrepreneurial business. These three methodical steps to operationalise this research study are discussed in the following sections.

#### **4.1.2.1 Identifying business developmental stages on an empirical basis**

Hanks et al. (1993) contributed to improve the empirical rigour of business developmental stage models, by deriving taxonomic rather than typological models for the identification of business developmental stages. Reviewing a wide range of business developmental stage models, they observed that the business developmental stage construct appears to be a multi-dimensional phenomenon. In all the variability amongst models reviewed, Hanks et al. (1993) identified the commonality in these models, observing the use of organisation context and structure to identify or classify developmental levels. Hanks et al. (1993) observed that, within the various models, business developmental stages seem to be recognised by the differences in the pattern and magnitude of the various contextual and structural variables present in the business. Based on this observation, Hanks et al. (1993:13) defined a business developmental stage as “a unique configuration of variables related to organization context or structure”.

In his review of literature pertaining to entrepreneurial business development, McMahon (1998) was of the opinion that this definition used by Hanks et al. (1993) is supportive of the alternative ‘business gestalt’ perspective to business development. This perspective suggests that, what could be seen as developmental stages, might alternatively be perceived as ‘business gestalt’, defined as similar patterns of business characteristics amongst the businesses studied. McMahon (1998) concluded that reliance can be placed on the model used by Hanks et al. (1993) in the identification of business developmental stages. McMahon (1998) considered Hanks’ work during the period 1990 to 1994 to stand out in the current literature of business developmental stage models for the following reasons:

- From a conceptual and methodological perspective, the work stems from Hanks’ doctoral research work in 1990 and represents a cumulation and advancement of knowledge in the field of stage models of business growth;
- The work post-dates a considerable number of other work identified and seems to critically review virtually all significant prior writing and research on the business development construct; and
- The work represents a comprehensive attempt to ground the various stages of business development in empirical observation.

Observing the wide range (3 to 10) in the number of developmental stages advocated in the various business developmental stage models, Hanks et al. (1993) saw the strength of a taxonomic approach using multi-variate analysis, in the form of cluster analysis to identify business developmental stages. Cluster analysis is applied to identify common patterns or relationships in data that relate to business context and structure, in an attempt to identify business developmental stages on a more empirical basis. Cluster analysis is a multi-variate statistical technique used to reduce large data sets to meaningful sub-groups, based on similarities amongst clustering variables (Richarme, 2002; McMahon, 2000; Rasmussen, 1992). In its simplest form, cluster

analysis is a statistical technique to identify ‘natural groups’ within a large data set (Rao, Jayasumana & Malaiya, 2000).

As an exploratory technique, cluster analysis requires minimal distributional assumption regarding the cluster variables (Hair et al., 1995:435 cited by McMahon, 2000). Cluster sub-group division is accomplished by the comparison of the similarity or dissimilarity in characteristics across a set of variables (Richarme, 2002). To form a cluster group, there should be a high degree of variable association (homogeneity) between members of the same group and a low degree between members of different sub-groups (McMahon, 2000; Hanks et al., 1993; Rasmussen, 1992).

Using cluster analysis effectively, users need to answer two basic questions (Rasmussen, 1992): (1) What clustering method is appropriate for the data? and (2) How to determine if the clustering result is a characterisation of the data, instead of merely being an artefact of the clustering method used?

Considering the appropriate clustering method, various cluster methods produce different cluster structures for they relate to different theoretical or empirical bases (Rasmussen, 1992). Studies attempting to evaluate the best method to use do not suggest a single superior method, but indicated that overall, the Ward’s method and group average method seem to perform well (Rasmussen, 1992). In practice, it is advisable to use more than one clustering method to assess the reliability of the resulting cluster structure (Rasmussen, 1992).

Hanks et al. (1993) used Ward’s method of cluster analysis to identify business developmental stages, based on the view of Milligan (1980 cited by Hanks et al. 1993) that this method of clustering is one of the more reliable multiple algorithm methods.

McMahon (2000) systematically built on the work of Hanks et al. (1993), based on their recommendations that a longitudinal study of business developmental stages is needed to trace the changing organisational configurations. McMahon (1998) conducted a critical appraisal of research in the field of business developmental stage models and concluded that reliance can be placed on the approach of Hanks et al. (1993) from a broad and general features perspective. Relying on the work of Hanks et al. (1993), McMahon (2000) also used exploratory cluster analysis. Due to the large data size ( $n=9731$ ) used in McMahon’s (2000) study, the non-hierarchical k-means cluster analysis procedure was primarily used. The k-means cluster analysis procedure is based on nearest centroid sorting with squared Euclidean distance being the similarity measure.

The challenges in the application of cluster analysis include multi-collinearity amongst clustering variables, differences in scale amongst clustering variables and the sensitivity to outliers (Hair et al., 1995: 435 cited by McMahon, 2000) especially using Ward’s method (Rasmussen, 1992; Richarme, 2002). Addressing these challenges associated with cluster analysis, Hanks et al. (1993) used the guidance of Milligan (1980, cited by Hanks et al. 1993) and standardised their data

to exclude outliers with a five-percent (5%) deviation prior to the cluster analysis. Similarly, McMahon used the guidance from Hair et al. (1995:435 cited by McMahon, 2000) and standardised all variables used for clustering and removed potential outliers, with a standard deviation of four percent (4%) or more from the standardised mean value.

From a cluster variable perspective, Hanks et al. (1993) evaluated eight cluster variables and used canonical discriminant analysis to identify the most significant cluster variables. The cluster variables with the highest absolute loadings identified were organisation size, age, employee growth, specialisation and number of levels (Hanks et al., 1993).

McMahon (2000) systematically building on the work of Hanks et al. (1993), used enterprise age, size and employee growth as key cluster variables. McMahon (2000) used the analysis of variance (ANOVA) statistical technique to indicate that the selected cluster variables do differ significantly amongst cluster formations.

Considering the number of clusters, there is no standard technique to determine the appropriate number of clusters (Hanks et al., 1993). The number of clusters and the basis that they are formed on are functions of the clustering method used and can be adjusted to fit the particular application (Rao et al., 2000). Non-hierarchical clustering methods (such as k-means), require *a priori* decision-making on the number of clusters (Richarme, 2002; Rasmussen, 1992). The result of using a hierarchical clustering method is often graphically displayed as a dendrogram indicating the clustering paths (Rasmussen, 1992) as input for the researcher to select a sensible number of clusters. As Mirkin (2011) indicated, clustering methods do result in clusters, but meaningful validations of the classification structures still have to be developed, which include the interactive consideration between cluster number and size.

Acknowledging that various statistical techniques can be used, each with its own set of pros and cons, Mirkin (2011) mentioned that, what was once considered as a purely intuitive concept has changed and is now regarded as a powerful device. Mirkin (2011) highlighted the importance of using additional knowledge from the subject field under research in the validation process of the cluster structure and the selection of the number of clusters and related impact on the cluster size.

Hanks et al. (1993) used statistical techniques relating to cluster tightness and separation to examine useful insight in the processes of choosing the number of clusters. The cluster results were then evaluated against the literature on business developmental stages, assessing the impact that the different suggested numbers of clusters and size have on the unique configuration of the characteristics identified in the various cluster patterns.

In the literature on business developmental stage models, the number of developmental stages varied from three to ten per model, depending on how the researcher defined an actual stage. It is important to consider if the model under review is a theoretical proposition or empirically tested (Lester & Parnell, 2005; Hanks et al., 1993).

From an empirical perspective, regardless of how the stages are labelled, the most supported models indicate a four- to five-stage mode (Lester & Parnell, 2005). The empirical work of Hanks et al. (1993) on business developmental stage models, using Ward's clustering method as a basis, and taking into account the literature on business developmental stage models, identified four business developmental clusters and two disengaged business clusters stages.

The longitudinal empirical work on business developmental stage models of McMahon (2000) using the k-means cluster analysis method and a comparison to the literature on business developmental stage models, indicated that a formation of six to seven clusters is acceptable, depending on the period of the data under review. McMahon (2000) found in general pertaining to business developmental stage models, that a six-cluster solution is potentially the most useful and most amenable to interpretation in his study.

In addition to the identification of appropriate business developmental stage clusters, derived from a few variables that relate to business context and structure, Hanks et al. (1993) and McMahon (2000) applied descriptive statistics on an ex-post characterisation of additional contextual and structural variable information, to enhance the characterisation of the empirically-identified business developmental stage clusters.

This additional contextual and structural information provides character richness that can be used for interpretative purposes, comparing the nature of the character-rich identified cluster structures to the literature and theories on business developmental stage models.

Comparing the nature of the various business developmental stages identified in his study, McMahon (2000) indicated that the various cluster groups identified in the various periods of the study suggested the existence of three main development pathways over time. From this perspective, it is possible to classify clusters based on the cluster characteristics into low, moderate and high-growth development pathway categorical groups (McMahon, 2000).

#### ***4.1.2.2 Identifying possible thematic coping-value patterns within the identified business developmental stages***

The aim of the second methodical step was to identify the entrepreneurs' intent in each of the empirically-identified business developmental stages from the first methodical step above.

Building systematically on the findings of the first methodical step, descriptive statistics was used on the entrepreneurs' preferred thematic coping-value system data, in an ex-post approach of the empirically-identified business developmental cluster stages. The aim was to identify the entrepreneurs' preferred subjective thematic coping-value system profile and to add the characteristics of the subjective thematic coping-value systems variables to each business developmental cluster, to enhance the characterisation of the empirically-identified business developmental cluster stages.

The key difference between the variable data used in the methodical steps one and two is in the underlying nature of what the variable data represents. The first methodical step applies an ex-post characterisation process to identify objective in nature business characteristics in the data. Similarly, the second methodical step applies an ex-post characterisation process to identify subjective in nature characteristics in the data that pertain to the entrepreneur's thematic coping-value system (his subjective intent). A person's thematic coping-value system is equated to his or her thinking system; the *how* he/she thinks about things and not the *what* he/she thinks about things (Laubscher, 2013). In essence, it refers to a person's subjective intent or dominant logic.

Graves (1970) developed the open-system theory of values, a theoretical framework based on the three-part premise of humanistic, organismic and systems. The proposition of this theoretical framework holds that man's nature is not set, but emerges in an open system; that man's nature evolves and changes between one steady-state system to another; and in the process man's values change from one steady-state system to another as his total psychology emerges in a new form (Graves, 1970).

In this approximate steady-state system, adults develop what Graves (1970:134) termed "a *thema* for existence"; i.e. a 'thematic coping-value system' (Table H.1) appropriate for the corresponding 'existential state'. In his research, Graves (1973; 1970) identified eight of these 'thematic existence states', each with its 'own thematic coping-value system' or as Laubscher (2013) indicated, systems of 'how' a person thinks about the existential state.

To operationalise research on Graves' open-system theory of values, one of the considerations is how to measure or determine a person's preferred coping-value system. Graves (1971) worked on a coping-value self-assessment survey that collects data on a person's thematic coping-values to enable the assessment of the degree that the theoretically-identified thematic coping-values are active within that individual.

According to the values test overview (Beck, 1992), the self-administrated and scored values test was developed from Graves' work. The test assesses the preference of seven of Graves' theoretical thematic coping-value systems that the person recognises in him or herself. It also indicates the relative proportions of these thinking systems. This test reflects the preferred assumptions the individual has about living and how he/she establishes priorities (Beck, 1992). The profile results from this values test are used by individuals as a self-awareness tool, or as a counselling device or in a group composite format for typical tasks such as organisational development (Beck, 1992).

This research study used a later version of this paper-based test that has been converted into an online self-administrative survey, termed the coping-view survey instrument (Coping View, 2014). The coping-view survey instrument is a self-assessment instrument that consists of 20 comparative forced-choice questions associated with seven of Graves' theoretical thematic coping-value systems (Coping View, 2014). Survey participants have to indicate their coping-view preference through the allocation of a total of 15 points, distributed across the seven thematic coping-value profiles, for each of the 20 questions. This forces the participant to compare each coping-value system with the opposing others in each question setting (Coping View, 2014).

This typical comparative judgment type of survey, where the participant is forced to allocate the same number of points in each question, results in a data set that is perfectly ipsative in nature and indicates the individual's comparative preference to the seven thematic coping-value profiles. Perfectly ipsative measures are measures that yield the same total scores for all participants (McLean & Chissom, 1986). Perfectly ipsative measures can be achieved via a forced-choice question format where each item is compared to every other item, or where the participants have to assign the same number of points among several scales, or where participants have to rank order a number of variables (McLean & Chissom, 1986). In practice, forced-choice question survey is an acceptable method to overcome measurement challenges associated with single stimulus format questions.

The practice of participant self-assessment surveys is generally used in studies or research that aim to assess elements with a nature that relates to matters of personality, or a person's motivation, interest, well-being, social attitude, etc. (Brown & Maydeu-Olivares, 2012; Brown, 2010). In this regard, one method of surveys is the single stimulus format (e.g. Likert-type) where the participant gives an absolute rating (Brown & Maydeu-Olivares, 2012; Brown, 2010).

Participant biases, extreme or central tendencies, acquiescence or socially desirable bias and the so-called halo effect are all examples of the typical measurement challenges associated with single stimulus format surveys (Brown & Maydeu-Olivares, 2012; Brown, 2010; Matthews & Oddy, 1997). In a forced-choice question survey, it is impossible to endorse all items. Consequently, a forced-choice question survey is seen as an accepted method to overcome these measurement challenges associated with single stimulus format questions (Brown & Maydeu-Olivares, 2011; McDermott & Fantuzzo, 1992; Hicks, 1970).

The use of forced-choice questions, with ipsative scales, is prominent in the areas of personality measurement and the assessment of values and attitudes (McLean & Chissom, 1986). In general, it is accepted, that comparative judgment questions can have advantages over absolute judgment questions, reducing some common response biases (Brown, 2010). However, the use of the forced-choice format in assessments has been controversial as reported in various literature studies (Brown & Maydeu-Olivares, 2012; Brown, 2010). The controversies around ipsative data focus predominantly on score interpretation and traditional methods of validity testing (Brown &

Maydeu-Olivares, 2012; Brown, 2010). As Brown and Maydeu-Olivares (2012) pointed out, the traditional classical test theory approach works well with single stimulus format questions (like the Likert-type scale) where the participant makes an absolute rating, resulting in a normative data set, but performs poorly when applied to forced-choice questions where comparative judgment is used that results in an ipsative data set.

In general, researchers agree that ipsative data distorts internal consistency of survey instruments; but as for the direction and to what degree, it depends on the specific conditions (Brown, 2010; Matthews & Oddy, 1997). Considering ipsative data from a reliability estimation perspective, traditional test procedures such as Cronbach's alpha is inappropriate, for ipsative data violates important assumptions that alpha statistics rely on (Hammond & Barret, 1996; McDermott & Fantuzzo, 1992), for example independence, as items scored in ipsative data are interdependent (Brown, 2010).

In the social science literature, there are many cautions on the use of ipsative data in multi-variate analyses and/or regression analysis procedures (McLean & Chissom, 1986). These warnings relate to the inversion of the correlation or co-variance matrix that is singular when ipsative measurement is used (McLean & Chissom, 1986). In essence, ipsative data scores are interdependent and will always add up to the same value (zero, 100%, etc.) for all participants (Brown & Maydeu-Olivares, 2011; Hicks, 1970). Therefore, if participants want to rate one attribute higher, then they are forced to rate another attribute, or combinations of attributes, proportionally lower so that the total value for all ratings always stays the same; a reciprocal loss associated with the natural economy of ipsative assessments (McDermott & Fantuzzo, 1992).

As McLean and Chissom (1986) indicated, due to the underlying interdependence of ipsative measured data, it is regarded to be inappropriate for any type of multi-variate analysis, for if a correlation matrix or its corresponding covariance matrix theoretically cannot be inverted (a required step in all multi-variate analyses), doing so would result in a solution based on statistical error. As a result, discriminant analysis, canonical analysis, and multi-variate analysis of variance may all produce questionable results when applied to ipsative data. From a regression analysis perspective, the underlying interdependence of ipsative measured data introduces the challenge of multi-collinearity in regression analysis (McLean & Chissom, 1986). McLean and Chissom (1986) recommended to be prudent and not to use multi-variate statistics or regression analysis on ipsative data.

Considering this rather limiting recommendation, it is important to note that these statistical difficulties with ipsative data are based on how the items are scored and do not relate to the format of the items (Hicks, 1970). So in essence, due to the scoring method challenges of ipsative data, it is not recommended to use statistical methods, like multi-variate analysis and regression analysis, for data interpretation and reliability estimation.

From this study's perspective, the survey used to collect data on the individual's thematic coping-values, as mentioned above, applies questions that result in ipsative data and as indicated in the literature, multi-variate analysis and regression analysis seem to be inappropriate methods for reliability estimation and data interpretation. However, this does not indicate that the data is not reliable or cannot be used for interpretation; it is a matter of considering an approach that is appropriate according to the scoring limitations of the ipsative nature of the data.

Reliability indicates consistency in the outcome of the measurements and test results when conducted multiple times (Holwerda & Karsten, 2006). Remenyi (2013) indicated that statisticians use Cronbach alpha as a measure of reliability estimation to test the internal consistence of the data. Holwerda and Karsten (2006) performed reliability tests on some measuring instruments that intended to measure Graves' thematic coping-value systems. The survey instruments tested included the coping-view survey instrument used in this study to measure the preference a person has for seven of the thematic coping-value systems. It also considered the Form A instrument that maps only six of the individual thematic coping-value systems and the Culture Scan, a survey instrument with many independent components, one of them relating to the measurement of only six of the individual coping-value systems.

Holwerda and Karsten's (2006) general conclusion was that, although correlations differ per survey instrument, all the instruments provided certain evidence for correlation and can thus be labelled as reliable and valid. The test scores pertaining to Form A and the Culture Scan performed well with an average alpha of over 70 percent and the coping-view instrument performed at an acceptable level of 66 percent (Holwerda & Karsten, 2006). This relatively low acceptable level of reliability from the coping-view instrument is not surprising, considering that the assessment method applied on perfectly ipsative data stems from statistical techniques that, according to the literature discussed above, seem not to be suitable for application on ipsative data. Holwerda and Karsten (2006) acknowledged that the ipsative nature of the data may have an influence on their assessment results.

From a validity perspective as discussed above, several authors indicated that, due to the inherent nature of ipsative data, it is questionable if this data can be used in quantitative statistical procedures to determine the internal consistency and therefore validity on a statistical basis (Brown, 2010; Hammond & Barret, 1996; McDermott & Fantuzzo, 1992; McLean & Chissom, 1986).

If the traditional reliability test procedure of Cronbach alpha is not feasible, Hammond and Barret (1996) and McDermott and Fantuzzo (1992) indicated the feasible use of the heuristic strategy to assess reliability by examining the stability of test scores across time. As Remenyi (2013) mentioned, eventually the reliability of a questionnaire becomes clear with repetitive use.

The online version of the coping-view instrument, used by this study, had been used on 5 111 people distributed in 48 countries as at June 2011 (Cooke, 2015).

In the field of developmental psychology, it is important to distinguish between calibrated measures, (quantitatively refined) and soft measures (not quantitatively refined), and the appropriate use of these two broad classifications of measures (Stein & Heikkinen, 2009). Stein and Heikkinen (2009) indicated that it is appropriate to use soft measures for research, but if the intent is to use the measure for comment on the individual performances, then calibrated measures are required.

Reliability of the data that relates to this methodical step of the study is considered from a soft measure perspective due to the ipsative nature of the data that is not conducive to quantitative refinement. The reliability pertains more to the ability of detecting intra-dependency patterns in the data and not the normative absolute values of variables on an inter-individual basis.

From an interpretation perspective, the literature below indicated the prudent approach to use ipsative data to consider the whole pattern within a defined group and to evaluate the relative intra-dependency of various data variables and not to consider the variables independently, but rather in their collective interrelatedness within the group. Data with an ipsative nature can be used to identify the relative pattern (profile) amongst data variables based on how the various data variable scores collectively interact with each other within the same group.

Hicks (1970) indicated that ipsative data yields estimate values of variable data that are relative to the values of other variables assessed and as a result, intra-individual score differences among several variables are investigated. This is a key difference in the preferred application of normative data that yields absolute levels of the variables assessed and compare variables on an inter-individual basis, against each other, being it from an individual, group or across individual or group basis (Hicks, 1970).

In normative data, the acceptable norm is to use statistical techniques to calculate the variance of significance for the values of a specific variable and if found significant, then the influence of this specific variable is considered. With ipsative data, the norm is to consider the interdependence of the variables, with the aim of identifying variable patterns that indicate how a change in the scoring of variables influences the scoring of other variables.

In the interpretation processes of the data, this key differentiation between normative and ipsative data is important, as McDermott and Fantuzzo (1992) indicated, the application and interpretation of any measurement must be guided by its enabling and limiting properties.

From this study's perspective, multi-variate statistics were not used on the coping-value survey data due to the ipsative nature of the data. As a result, no statistical comparison of significant differences between the coping-value system variables was calculated for thematic coping-value system variables data that is present within the identified business developmental stage groups.

Instead, descriptive statistics were used to aid the identification of thematic coping-value system profiles within business developmental cluster groups. These profiles were identified, based on their collective interdependent relatedness to each other within business developmental cluster groups.

Practitioners that use ipsative survey measuring instruments in the subject field of psychology have indicated that it is common to use findings from ipsative data as complementary to empirical findings derived from the use of normative data (McDermott & Fantuzzo, 1992). The approach in this research study was no different. It built systematically on the findings of the first methodical step above that identified, on an empirical basis, business developmental stages in normative data using statistical cluster analysis. To increase the character richness of the empirically-identified business developmental stages, descriptive statistics were utilised in an ex-post characterisation of additional business variables utilising data relating to the business context and structure. In a similar approach, this methodical step continued to use descriptive statistics to explore in an ex-post manner the identification of additional subjective thematic coping-value system profiles, to enrich the characterisation of the empirically-identified business developmental cluster stages.

A systematic approach was applied to identify the thematic coping-value patterns within the identified business developmental stage cluster groups. The average pattern of thematic coping-value systems was observed in the survey results to assist in the identification of thematic coping-value system profiles for each business developmental cluster group. Part of the process included the comparison of the average thematic coping-value systems pattern to the survey's total average thematic coping-value systems pattern.

Some additional considerations can aid in the later interpretation of how the heuristic characteristics of the identified thematic coping-value system profile interrelate to the person's external existence. These considerations include the assessment whether the coping-value pattern identified stems from a possible first order or second order application of the seven coping-values measured. The key significance of this relates to how the individual (or group in this case) approaches the application of the thematic coping-value systems that he or she associates with himself or herself. First order application of the thematic coping-value system seems to stem from a selfish perspective based on own gain, while second order application of the coping-value system seems to be from an existence perspective, focusing on solving the problems that human existence creates (Beck & Cowan, 2006; Graves, 1970). A typical characteristic observed is that people who centralised their preference around first order thematic coping-value systems tend to reject other people's coping-value beliefs that are opposing their own preference of coping-value systems (Graves, 1970). As a result, first order application of a thematic coping-value tends to disregard the points of view of other thematic coping-values; whereas second tier application of a thematic coping-value acknowledges the contextual application of other thematic coping-values

and explores the proposition they offer to solving the problems that human existence creates (Beck & Cowan, 2006).

One of the data analysis operational tasks is to identify the key thematic coping-values that are most probable to describe how people think about phenomena. In essence, a process is needed to identify the thematic coping-values that can be used to interpret insight into a person's dominant logic. Adults live in potentially open systems in terms of needs, values and aspirations that often settle in approximate close systems and adults have the behavioural degrees of freedom afforded to them at this approximate close system (Graves, 1970).

From this perspective, no person lives purely in just one thematic coping-value system, but people are a blend of various thematic coping-value systems as they transition through phases of awareness (Beck & Cowan, 2006; Graves 1970). In general, these phases of awareness relate to: an entering stage; to a peak stage; and eventually to an exit stage of a thematic coping-value system (Beck & Cowan, 2006; Graves 1970). In peak stages, there is usually a strong core thematic coping-value system supported by two or three softer thematic coping-values (Beck & Cowan, 2006). In a transition, entry or exit stage, there is usually a combination of two core thematic coping-value systems from an expressive and sacrificial nature (Beck & Cowan, 2006).

#### ***4.1.2.2.1 Thematic coping-value profile identification process followed in this research study***

Applying a systematic approach to the identification of the most probable key thematic coping-values preferred by the entrepreneurs grouped in a business developmental cluster stage, the basic operational guidelines below were applied to the survey data of this study.

Based on descriptive statistics, the first operational procedure was to identify within the group, the three to four thematic coping-values with the highest average score allocation, as an indication of the thematic coping-values the group prefers to apply as their dominant logic.

The second operational procedure was to assess the potential level of application (first or second tier) of the preferred thematic coping-values identified. This procedure includes the review of the rejection scores for possible indicators to strengthen the possibility that the thematic coping-values identified in the previous procedures are the dominant thematic coping-values in the group profile and if there are any indicators to strengthen the probability, that these values are active from a first or second tier perspective.

With reference to the basic guidelines for the administration and interpretation of the coping-value survey instrument (Beck, 1992), variances in the average coping-value scores of ten to twenty percent (10-20%) compared to the survey instrument's global average data seem to be useful for investigation. When working with a specific survey data set, much smaller variances compared to the survey average can be useful for investigation (Beck, 1992).

The third operational procedure was to consider the probable transition stage of the above identified coping-value systems in accordance to the partners that can be identified in the three sub-classification structures of the survey data:

- i) The self-perspective that indicates the individual's preferred thematic coping-values from a personal perspective and his/her personal existential challenges;
- ii) The work-perspective that indicates the individual's preference of thematic coping-values that he/she uses in his/her active daily operational environment and its existential challenges; and
- iii) The world-perspective that indicates the individual's preference of thematic coping-values that he/she uses for interaction with society and the existential challenges of this societal environment.

This comparison assists in the identification of the nature of a probable transition stage of entering, peaking or exiting of a thematic coping-value system. It considers if there is a possible up- or down-stretch between thematic coping-value systems considered from a self-perspective. This comparison can also assist with the conformation of the assessment of probable first and second tier application of the key thematic coping-values identified.

#### ***4.1.2.3 Exploring the supportive interrelationships of the identified characteristics***

The third methodical step was to consider how the characteristics of the entrepreneurs' identified thematic coping-value system profiles, if any, can contribute to support and/or explain the contextual and/or structural characteristics identified in the empirically-identified business developmental stages.

From this perspective, literature on the characteristics and related interpretation of business developmental stages and the characteristics and interpretation of thematic coping-value systems were compared to the research findings of the first two methodical steps described above. The aim of this comparison was to identify potential contextual interrelationships to explore deepened insights and a possible better understanding of entrepreneurial business development, based on the findings of the analysis of this study's research data.

#### **4.1.3 Summary of the research method**

This study used an integrated method in order to promote research that is more of a multi-level nature. Part of the research processes attempted to add systematically to the richness of the descriptive characteristics of entrepreneurial business developmental stage.

In his review of the multiplicity of prior research and models that have attempted to explain the dynamics of entrepreneurial business development, McMahon (1998) noted that the research and models originate from a broad scope that is not confined to the perspective of a particular academic discipline or to a single explanatory paradigm. He found that the increased scholarly focus on business developmental stage models and their general use to explore the development

potential phenomenon of the entrepreneurial business, provided the proposition to add systematically to the richness of this explanatory framework (McMahon, 1998).

With an aim to identify contextual interrelationships, this research study built on business developmental stages following a systematic three-step methodical approach to explore the proposition of adding systematically to the richness of the descriptive characteristics associated with business developmental stage models:

- i) The first step was to utilise the findings of prior research on the empirical process to identify business developmental stages. For this step the research study applied multi-variate statistics, in the form of cluster analysis on survey data, to identify on an empirical basis, possible business developmental stages or paths based on business variable data, pertaining to context and structure.
- ii) The second step was to explore possible subjective characteristics that can be associated with the identified business developmental stages identified in the first methodical step. The research study applied descriptive statistics on survey data to identify thematic coping-value system profiles that can be associated with the identified business developmental stages.
- iii) The third methodical step was to consider how the subjective in nature characteristics of the thematic coping-value system profile identified in the business developmental stage can contribute to support and/or explain the presence of the observed objective in nature business context and structure characteristics identified in the empirically-identified business developmental stages. By implication, this methodological step in the research study, also contribute to the validity of the various variables identified within the business developmental stage.

In essence, the first two steps of the three-step methodical approach of this research study created the enabling environment for the third-step to investigate the objective of this research study. The objective was to explore the possible contextual interrelationships between the entrepreneur's subjective intent (world-view) and the objective development of his business venture. The next section is an overview of the measuring instruments used to collect data for this research study.

## **4.2 MEASURING INSTRUMENTS**

### **4.2.1 Introduction**

To explore the implied interrelationship between the entrepreneur's subjective thematic coping-values system and the objective business developmental pathway, as indicated in the proposed model in Figure 3.6, it is necessary to identify or develop measuring instruments to collect data that can be used to classify businesses into developmental stages and to identify people's preferred thematic coping-value system profiles.

During the literature review on business developmental stages and Graves' theoretical levels of existence model, the following measuring instruments with utility value to this study were identified:

- For the purpose to measure the objective business developmental stages, the questionnaire and analysis method used by Hanks et al. (1993); and
- For the purpose to identify the subjective preferred thematic coping-value system profile of the entrepreneur, the Coping View test questionnaire, that is based on seven of the eight thematic coping-value systems in Graves' theoretical levels of existence model.

The discussions below consider the appropriateness of selecting these measuring instruments for the purpose of this study, with basic explanations of each measuring instrument.

#### **4.2.2 Measuring business developmental stages**

As mentioned in the literature review above, one of the critiques on business developmental stage model theory is the observation that these models tend to follow a heuristic classification of schemes, resulting in a significant inconsistency in the number of stages. To address this validity challenge, Hanks et al. (1993) focused on the empirically-driven strength of taxonomies and through multi-variate analysis, utilising clustering configurations of variable attributes, they tightened the business developmental stage model construct (McMahon, 1998; Hanks et al., 1993). Through applying this taxonomical approach, a common pattern of six stages (four developmental and two disengaged stages) emerged from the data (Hanks et al., 1993).

With the availability of an empirically-driven measuring instrument and analysis approach designed with the core purpose to identify on an empirical bases various developmental stages in a dataset of business ventures, there seems to be no need to invest additional resources in the development of a specific measuring instrument for this study.

McMahon (1998) considered the work of Hanks et al. (1993) to be standing out in the current literature and concluded that reliance can be placed on the model used by Hanks et al. (1993) in the identification of business developmental stages. For the purpose of this research study the questionnaire in Appendix A, as adapted from Hanks et al. (1983), formed the basis for collecting data to be utilised in the classification of entrepreneurial business ventures into various stages of development.

Churchill and Lewis (1983) acknowledged the daunting, seemingly unattainable, challenge of categorising the attributes of businesses from a diverse spectrum in a systematic method into definable stages. However, they found that stages emerged if businesses were viewed from the perspectives of age, size, growth rate, pivotal challenges, complexity and capacity to develop (Churchill & Lewis, 1983).

Hanks et al. (1993) consulted various other business development models to identify a relevant list of business attributes that can be used to classify businesses into developmental stages. The questionnaire used by Hanks et al. (1993) uses questions that focus on business contextual variables in the form of age, size and current employee growth rate and business structural variables in the form of vertical differentiation, structural form, formalisation, specialisation and centralisation. To assess these contextual and structural business variables, the questionnaire consists of multiple questions using Likert scales, forced-choice options and nominal category scales.

Considering the literature review on the identification of business developmental stages, the questionnaire includes the critical components of organisation age, size and variable characteristics that can be used to explore levels of operational complexity. Refer to Appendix A for the business stage questionnaire.

#### **4.2.3 Measuring a person's preferred thematic coping-value system**

To map and explain the complexity of human behaviour, a component of Graves' open theory of values framework focuses on people's coping-value system. Thematic coping-value systems are associated with people's deep motivational intent that theoretically exposes their preferred heuristics about living and how they establish priorities.

To operationalise Graves' open theory of values framework to analyse and provide insight into how people establish living priorities, there is a need for a measuring instrument to assess a person's preferred active coping-value system profile.

With Graves' involvement, Beck and Cowan (Cook, 2008) developed the Values Test (VT) and the earlier versions Psychological Map, Form A and B, as measuring instruments to determine the active composition of a person's preferred coping-value system profile (Beck, 1992).

With internet technology, the coping-view survey instrument was developed as an online self-administrated measuring instrument, based on the VT test and Form A, to identify a person's preferred coping-value system profile. The measuring instrument is based on seven of the eight coping-value systems identified in Graves' open theory of values framework.

The coping-view survey instrument (Appendix B) uses constant sum scaling to answer 20 sets of syntax-loaded questions.

Boroditsky (2011) referred to a strong body of empirical evidence that shows how languages shape thinking, providing insight into the origins of knowledge and the construction of reality. The coping-view survey seems to be an example of using language in the form of competing thematically-inclined syntax statements to assess a person's preferred thematic coping-value system as a representation of his or her dominant value system used to construct his or her reality.

Word interpretation is an inherent risk in self-administrated syntax-loaded surveys, for words can mean different things to different people (Beck, 1992). Wilber's (1997) view, that objective attributes can be observed, but subjective attributes require interpretation, resonates with the values test overview guidelines. The guidelines (Beck, 1992) state that the reasoning behind the assignment of points to the survey questions can be the most meaningful part. Furthermore, exploring the decision-making process is much more important than arguments about the stimulus of words and administrative conditions. Using an online platform, by implication this can be a limitation. Applying a quantitative-orientated process of this nature in the form of an online self-administrated survey, does not allow the researcher to observe additional qualitative in nature data on a person's reasoning behind the assignment of points.

The possibility of deception is also an inherent risk with surveys that have the intent of interpreting people's behaviour. People do not perceive themselves accurately and some people will report what they want to be and not what they actually believe (Beck, 1992). In an attempt to mitigate the possible risk of deception, the coping-view survey is administrated before sharing the theoretical understanding of the framework it relates to and the corresponding measurement method of the survey.

As mentioned above, the constant-sum scoring format of this self-administrative coping-view questionnaire results in ipsative data. Therefore, as indicated in the literature, traditional statistical techniques seem not to be an appropriate method for validity estimation of this survey instrument. This in itself does not indicate that data from this survey instrument is not reliable or cannot be used for interpretation; it is a matter of considering an approach that is appropriate according to the scoring limitations of the ipsative nature of the data.

As Holwerda and Karsten (2006) indicated, considered from a validity perspective, one needs to assess if the survey measures what is intended. Considered from a reliability perspective, one needs to assess the consistency in the outcome of the measurements and test results when conducted multiple times. In the absence of traditional statistical techniques, Hammond and Barret (1996) and McDermott and Fantuzzo (1992) indicated the feasible use of the heuristic strategy for assessing reliability by examining the stability of test scores across time. As Remenyi (2013) indicated, eventually the reliability of a questionnaire becomes clear with repetitive use.

The online version of the coping-view survey, has been used on 5 111 people distributed in 48 countries as at June 2011 (Cooke, 2015). Considered from an academic use perspective, Cook (2008) used the coping-view (Values Test) survey instrument successfully in his research study, with the limitations that the survey instrument is not fully validated from a traditional academic perspective. Cook (2008) referred to the validation work performed by Holwerda and Karsten (2006), who applied traditional test procedures, such as Cronbach's alpha. However, as discussed above it seems to be a questionable approach to test data of an ipsative nature through the application of traditional test procedures such as Cronbach's alpha.

In a pilot study, Cook (2008) performed a comparative test between the survey results of the VT survey instrument Form A and the coping-view (Values Test). The survey instrument Form A is a validated instrument measuring six of the eight thematic coping-value systems (Cook, 2008). Comparing the results from these two survey instruments, confirmed the reliability of the coping-view (Values Test) survey instrument and supports the findings of Holwerda and Karsten (2006) on the reliability of the coping-view (Values Test) survey instrument (Cook, 2008).

The assessment is that the coping-view survey instrument is an acceptable measuring instrument, with challenges relating to the assessment of validity from a statistical perspective. This is due to the constant-sum scoring format of the coping-view survey instrument that results in data of an ipsative nature.

For the purpose of this study, the online Coping View survey instrument, with its noted limitations, was selected for the following reasons.

The online coping-view survey instrument is an adapted version of the VT that was developed with the involvement of Graves (Cook, 2008), who's research data forms the basis for the development of the thematic coping-values systems. The VT test was based on the Form A Values Test that had been tested and developed with Hurlbut (Cook, 2008). The Form A survey instrument is a validated instrument measuring only six of the eight thematic coping-values systems compared to the Coping View survey instrument that measures seven of the eight thematic coping-values systems.

With the availability of the coping-view survey instrument, there seems to be no need to invest additional resources in developing and testing a specific measuring instrument for this research. From a reliability perspective, the coping-view survey instrument is supported by a large electronic database of test results. From an academic research perspective, it was previously used to identify people's preference for seven of the eight thematic coping-values identified in Graves' open system theory of values framework. Classifying the coping-view survey instrument as a soft measure, its acceptable use in research is noted as discussed above. With a research approach to use the data and findings from this instrument in combination with the empirical processes in the identification of business developmental stages, the acceptable use of soft measures to complement other research has also been noted in the discussed above.

#### **4.2.4 Summary of measuring instruments**

Considering the research objective of this study, survey data was needed pertaining to: (1) the objective variables that can be used for the classification of business ventures into various developmental stages; and (2) subjective data that can be used to assess a person's preferred thematic coping-value system profile in accordance to Graves' open system theory of values.

From the literature review, appropriate data collection survey instruments were identified that had been used successfully in previous academic research.

After considering these identified survey instruments from a reliability and validity perspectives, it was decided to incorporate this prior work into this research study, as there seems to be no need to develop and test specific survey instruments for the objective of this research study.

The following section describes the data collection method of this study.

### **4.3 DATA COLLECTION APPROACH**

#### **4.3.1 Overview**

The research method discussed above indicated the type and nature of data collected for the research objectives of this study. The study required three broad sets of data:

- i) Data pertaining to objective variables that can be used to classify business ventures into definable developmental stages;
- ii) Data pertaining to subjective variables that can be used to identify a person's preferred thematic coping-value system profile in accordance to Graves' open system theory of values framework; and
- iii) Literature references to consider how the characteristics of the identified thematic coping-value system profile contribute to support the context and/or structural characteristics identified in the various business developmental stages.

For the business context and structural variable data, as mentioned above, this study systematically built on the work of Hanks et al. (1993) and used the survey instrument from Hanks et al. (1993) to collect data on eight business variables, i.e. three context and five structural variables.

From an entrepreneur's subjective thematic coping-value system perspective, the study used the online coping-view survey instrument developed from Graves' work. This instrument is a self-administrated instrument that assesses a person's preference to seven of Graves' thematic coping-value systems. The instrument indicates the relative proportions or profiles of these thematic coping-value systems that the person recognises in him or herself.

#### **4.3.2 Data source**

The nature of the data source needed for the objective of this research study required the researcher to obtain data that refers to natural persons, in the form of the entrepreneur and their business venture. The current interpretation by data base gatekeepers of the national policy and legislative frameworks pertaining to the protection of personal information limits access to South African public and institutional databases.

Consulting authoritative research institutions in South Africa that focus on economic and socio-economic research, an appropriate commercial research-orientated database was identified as a data source for this research study. The Interactive Direct Business database consisted of 300 250 individuals actively involved in 47 416 businesses and are also used by Bureau of Economic Research at Stellenbosch University (Buys, 2014a).

The database consists of South African businesses developed through the scrutiny of publicly available sources, such as the media, business forums and institutions. Potential database participants identified provided their consent to be included in the research database (Buys, 2014b).

#### **4.3.3 Sample selection**

The research objective focuses on entrepreneurial business, operationally defined as an owner-managed business, where the owner has, as a minimum, the responsibility of approving the business strategy. It was evident that a database of 300 250 individuals actively involved in 47 416 businesses included a substantively large component of non-entrepreneurs if compared to the above operational definition.

A focus group discussion, consisting of database and measuring instrument representatives, research academics and statistical consultation academics, resulted in the following practical considerations from a data collection perspective. The survey was to be limited to a filtered segment of the database that was indicative of business entrepreneurs, based on the person's title as recorded in the database. As this filtering process would only result in a probable indication of business entrepreneurs, a qualifying question was included in the survey questionnaire, to be utilised during the data analysis process to identify the business entrepreneurs as per the operational definition of the research study.

In an attempt to manage the data response rate positively, the two selected survey instruments (Appendix A and Appendix B) discussed above were merged into one survey instrument, with a qualifying question intended to identify business entrepreneurs as per the operational definition of this research study (Appendix C).

#### **4.3.4 Ethical considerations**

From an ethics consideration perspective, the research was considered as low risk, researching an uncontroversial topic by means of surveys, offering little potential for discomfort or inconvenience to adult participants of ordinary social status.

Informed consent was obtained from participants through the survey invitation, before they started with the survey. To protect their personal information, data used from this survey was aggregated for analysis and reporting of the findings.

#### 4.3.5 Data collection method

After obtaining the required research ethical clearance, a survey was conducted over a period of nine weeks, using an online survey platform, inviting participants by e-mail during the survey period.

From an administrative perspective, an online test reduces various risks, such as data capture errors and similar administrative and calculation errors associated with pen and pencil tests.

Filtering the identified database on the pre-selected titles (Managing Directors, Owners and Chief Executive Officers), resulted in a data population of 20 000 individuals. E-mail invitations were sent in batches of 3 200 per day and followed by two invitation reminders, resulting in a combined total of 60 000 e-mails.

From a response rate perspective, 51 478 e-mails were traced as opened, with 1 164 clicks, resulting in 335 individuals attempting the survey questionnaire and 121 successfully completing the online survey questionnaire.

A low response rate was anticipated, considering the survey method (online self-administered via e-mail invitation, compared to traditional mail with pencil and paper methods) (Anseel, Lievens, Schollaert & Choragwicka, 2010; Deutskens, De Jong, De Ruyter & Wetzels, 2006).

In addition to the survey method used, the nature of the population surveyed (business owners who can be equated to executives) also seemed to contribute to a lower response rate. There is an expectation that survey response rates will be lower for executives than for managers, employees and/or consumers in general (Anseel et al., 2010).

Combining two surveys also contributed to a more difficult and time-consuming survey instrument. As a result, a lower expected completion ratio could be expected, as indicated between the recorded number of participants who attempted the survey (335) compared to the number of participants who completed the survey (121).

When conducting a survey for research purposes, the response rate should not be the only consideration. There should be a dual consideration to determine whether the survey method will meet the needs of the research study, while not depleting too many resources. From this perspective, the data analysis techniques used in this research study were considered to guide the assessment of an appropriate sample size.

A key procedure of the research was to identify business clusters within a data set, to enable the research aim of identifying interrelationships between the elements of the identified business clusters.

Noting the empirical limitations of typologies, as applied by Churchill and Lewis (1982) with a sample size of 83, and Miller and Friesen (1984) with a sample size of 36, taxonomic approaches were explored as a method to increase the empirical rigour in the identification of business clusters

in a data set. Smith, Mitchel, and Summer (1985, cited by Hanks et al., 1993) explored the use of taxonomic classifications but their study was limited due to a small sample size of 27. Building on this foundation work, Hanks et al. (1993) set an empirical acceptable standard for using a taxonomic classification method to identify business clusters in a data set, using a sample size of 126.

This study applied the tested methodology from the work of Hanks et al. (1993) and from this perspective, a sample size of 121 was regarded as sufficient to identify business clusters in a sample data set to be used for the explorative purpose of this study.

From a biographical perspective, the sample data was taken from a South African commercial business database. Companies are predominantly from Gauteng (43%) and Western Cape (27%), with eight percent of the companies operating on a national level and four percent operating in two provinces in South Africa. From an industry perspective, the major classifications indicated professional, scientific and technical activities (22%), followed by manufacturing (17%), information and communication (14%) and a relatively large segment indicating other services (10%).

#### **4.3.6 Data collection summary**

In summary, the survey instruments identified and discussed in this chapter were utilised in an online self-administrated survey process to collect data on business context and structure as well as on the entrepreneur's thematic coping-value system.

The data was collected utilising a survey after ethical considerations. In the data collection process, due consideration was given to the identification of an appropriate data source based on the operational definition of the research population.

The data collection resulted in a data sample of 121 records from a population of 20 000. A sample size of 121 was regarded to be sufficient for the purpose of this research study if compared to other research of this nature. The sample size of this study compared well to the key literature that influenced this research study: Hanks et al. (1993) worked with a sample size of 126, Churchill and Lewis (1982) worked with a sample size of 83, and Miller and Friesen (1984) worked with a sample size of 36.

### **4.4 SUMMARY OF RESEARCH METHOD AND DATA COLLECTION**

The previous chapter discussed this study's use of an integrated research method in order to promote research that is of a multi-level nature. This chapter discussed the operational research plan to explore the practical application of the proposed framework, using sample data collected in a survey on entrepreneurial business.

This chapter started with a discussion on the systematic three-step methodical approach of this research study. In essence, the first two methodical steps in the data analysis created the enabling environment for the third-step, i.e. to investigate the objective of this research study. The objective

was to explore the implied dynamic interrelationship between the entrepreneur's dominant coping-values (world-view) and the development of his business venture.

Appropriate measuring instruments for the purpose of this study were discussed. Consideration was given to the literature that influenced this study in an attempt to identify relevant survey instruments. Two survey instruments were identified and after considering the reliability and validity of these instruments, it was deemed appropriate to incorporate this prior work into this research study.

With due ethical considerations, the survey instruments identified were utilised in an online self-administrated survey process to collect data for the purpose of this study. The data collection process resulted in a sample size that is regarded as sufficient in size for the purpose of this study, if compared to prior studies of a similar nature.

The next chapter focuses on the data analysis process in accordance to the methodical research steps set out and discussed in the beginning of this chapter.

## CHAPTER 5

### DATA ANALYSIS

#### 5.1 INTRODUCTION

The data analysis and findings that follow are presented in accordance to the three-stage methodical approach discussed in Chapter 4. The first section of this chapter focuses on the principle analytical procedure for the empirical identification of business clusters within the research data. Profiling the nature of the business characteristics of the identified business clusters enables the process to associate them with theoretical business developmental classifications in the literature. This is followed by a systematic process to identify thematic coping-value profiles related to the empirically-identified business clusters.

The research focus was on entrepreneurial business, operationally defined as an owner-managed business, where the owner has, as a minimum, the responsibility of approving the business strategy. The sample data collected, represented by the 121 participants who completed the online survey, was assessed for compliance to the operational definition. For this purpose, a qualifying question was included in the research survey questionnaire to identify the research target group. The data analysis that followed was performed on the 100 survey participants who had indicated that they comply with the study's operational definition of an entrepreneurial business as defined above.

#### 5.2 THE IDENTIFICATION OF BUSINESS DEVELOPMENTAL STAGES

As mentioned above, this research was influenced by the research of Hanks et al. (1993) and McMahon (2000) and used a similar approach to empirically identify business cluster in the sample data and subsequently profile the nature of the business characteristics of the identified business clusters.

##### 5.2.1 Cluster identification

To identify business clusters within the data set, the study used cluster analysis as the principle analytic procedure. The literature review showed that Hanks et al. (1993) built on the work of Smith, Mitchell, and Summer (1985) who explored the use of taxonomic classification as a higher-level measure which is more amenable to empirical analysis in order to provide greater specificity for the identification of business clusters. In essence, the work of Hanks et al. (1993) validates the use of cluster analysis as an empirical method to identify business clusters in a dataset of multiple independent business variables.

For the purpose of this study, the aforementioned literature was used as a guide to identify an appropriate clustering technique, taking into account the data sample size. This also informed the selection of the business variables used in the cluster analysis procedure and the navigation of the inherent challenges associated with cluster analysis as well as the selection of the optimal number of clusters.

The independent business variables selected for cluster identification related to: (1) organisation age; (2) size in terms of employees; and (3) growth rate in terms of employees. Hanks et al. (1993) and McMahon (2000) found in their respective studies that these three variables were significant in the cluster identification process.

Organisation age, employee size and employee growth rate also provide a representation of different organisation characteristics.

Based on discriminant function analysis in the study of Hanks et al. (1993), organisation size relates to the discriminant function associated with organisation complexity. Organisation age and employee growth rate relate to the discriminant function associated with organisation dynamism and organisation age and size relate to the discriminant function associated with organisation maturity.

The review work of Levie and Lichtenstein (2010), analysing 104 business developmental models published in scholarly works between 1962 and 2006, also indicated that organisation age, employee size and employee growth rate are the most used independent variables in the various procedures applied in these articles to identify business developmental stages.

With multi-collinearity identified as a sensitivity in the successfully application of cluster analysis (McMahon, 2000), the theoretical view is that these three independent business variables are not expected to be correlated. Considered from an organisation age and size perspective, not all businesses grow over time; in fact, some businesses may explicitly select not to develop. From an employee growth rate perspective, this is seen to be more dependable on how the organisation perceives the current opportunity tension in the economy. Some businesses may view opportunity tension as positive, hence the expectation of employee growth, while others may view it as negative or flat, hence the expectation of low or negative growth rates.

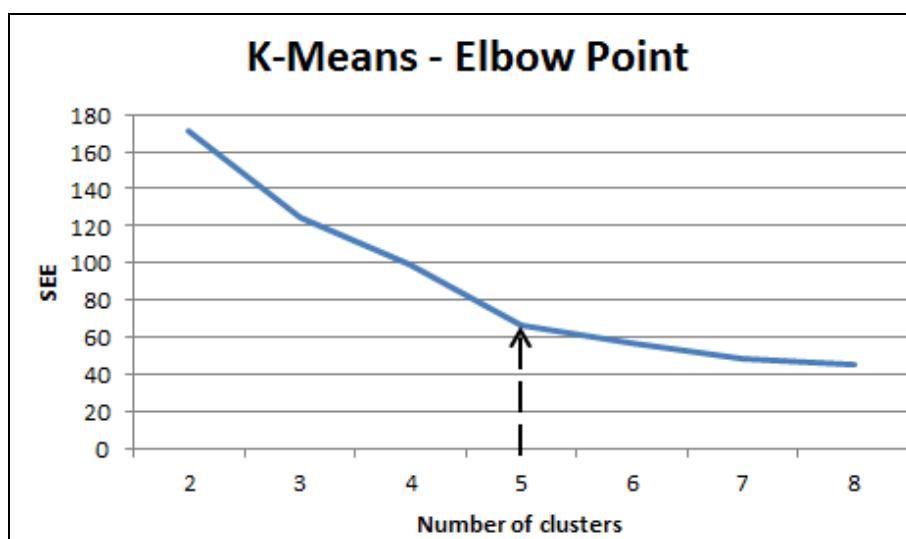
Multi-collinearity is one of the key challenges to consider with the effective application of cluster analysis with other key challenges that relate to the differences in scale amongst clustering variables and the sensitivity to outliers (Richarme, 2002; Hair et al., 1995:435 cited by McMahon, 2000; Rasmussen, 1992).

Using a similar method as applied by Hanks et al. (1993) and McMahon (2000), the research sample data was standardised and outliers with a standard deviation of four and more were removed, reducing the number of businesses to analyse from 100 to 97.

Rasmussen (1992) recommended the prudent approach to make use of more than one clustering method and to compare the resulting cluster structures to assess the reliability of the proposed cluster solution. This study used Ward's method, as used by Hanks et al. (1993) and the k-means method, as used by McMahon (2000), on the sample data collected.

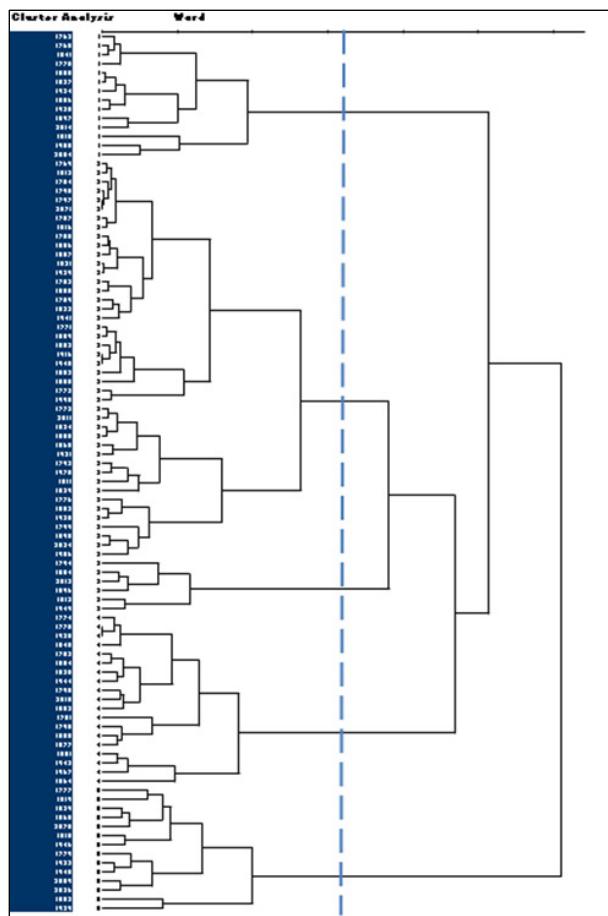
One of the key differences in the execution of the two clustering methods is that the k-means algorithm needs the number of clusters to be specified before execution. The hierarchical clustering method of Ward does not need the number of clusters to be specified and presents the hierarchical results of possible cluster groups, using a tree structure dendrogram.

There is no standard technique for determining the appropriate number of clusters (Hanks et al., 1993). In the case of k-means, one of the oldest approaches to assess the suggested optimal number of clusters is the elbow technique (Kodinariya & Makwana, 2013).



**Figure 5.1: The sum of squared errors of prediction (SSE) of the data for various number of clusters using the k-means method**

Using the k-means method, Figure 5.1 above is a visual representation of the sum of squared errors of prediction (SSE) of the sample data for various number of clusters. This visual representation, at the elbow point, suggests a five-cluster grouping solution for the k-means clustering method. Compared to the visual dendrogram (Figure 5.2) using Ward's method, a five-cluster grouping seems plausible as an acceptable solution for the sample data set.

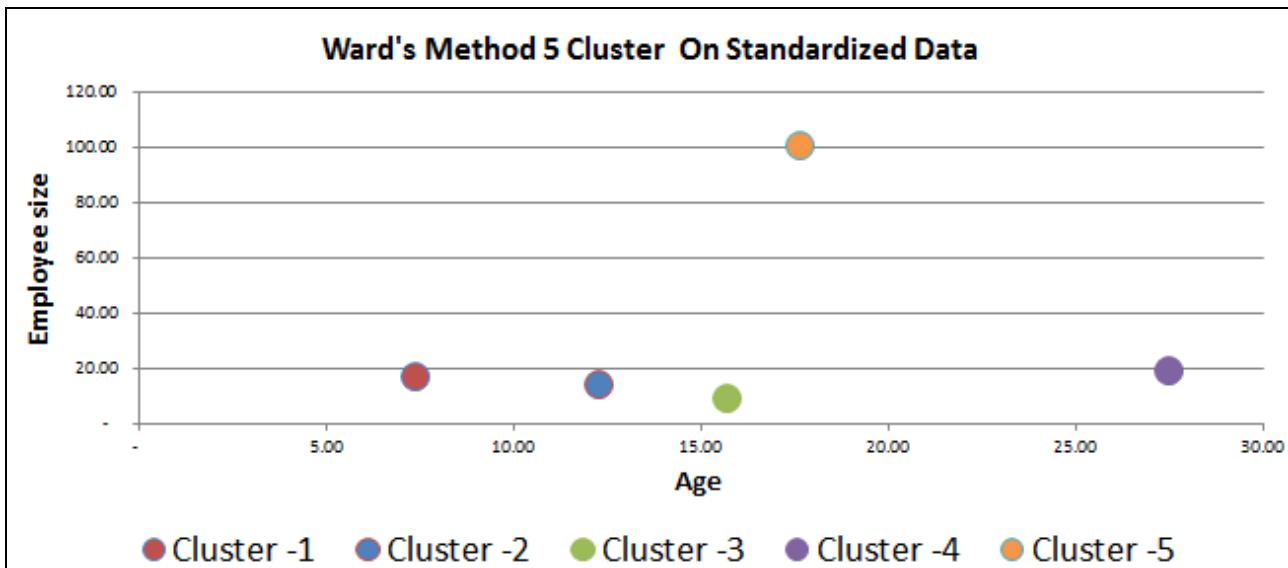


**Figure 5.2: Cluster dendrogram using Ward's clustering method**

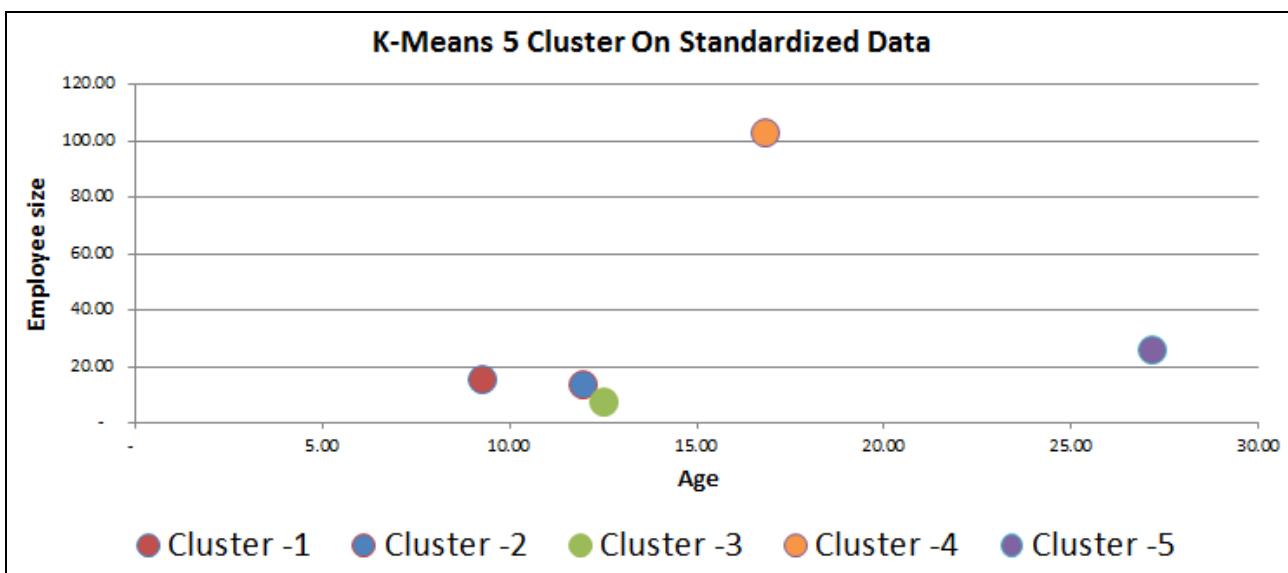
Mirkin (2011) acknowledged that various statistical techniques can be used to select the number of clusters, with each of these having its own set of pros and cons. He observed the now-accepted important procedure to use additional knowledge from the subject field under research to validate the identified clusters (Mirkin, 2011).

A five-cluster solution compared favourably to prior research. In the case of Hanks et al. (1993), six clusters were identified as an optimal solution. McMahon (2000) evaluated business data for four yearly periods and selected a six-cluster solution as potentially being the most useful and most amenable to interpretation. Lester and Parnell (2005) referred to empirically-derived business developmental stages models, observing the appropriateness of five to six developmental stages.

Comparing the clustering results obtained from the two clustering methods, Figure 5.3 and Figure 5.4 below visually present the average scores of the two cluster variables, business age and size (in terms of the number of employees), used in the cluster identification process. Comparing these two visual representations of the identified cluster groups, it can be observed that the two clustering methods resulted in relatively consistent cluster structural groupings using a five-cluster solution.



**Figure 5.3: Ward's five-cluster solution based on the two cluster variables, i.e. business age and size in terms of employee numbers**

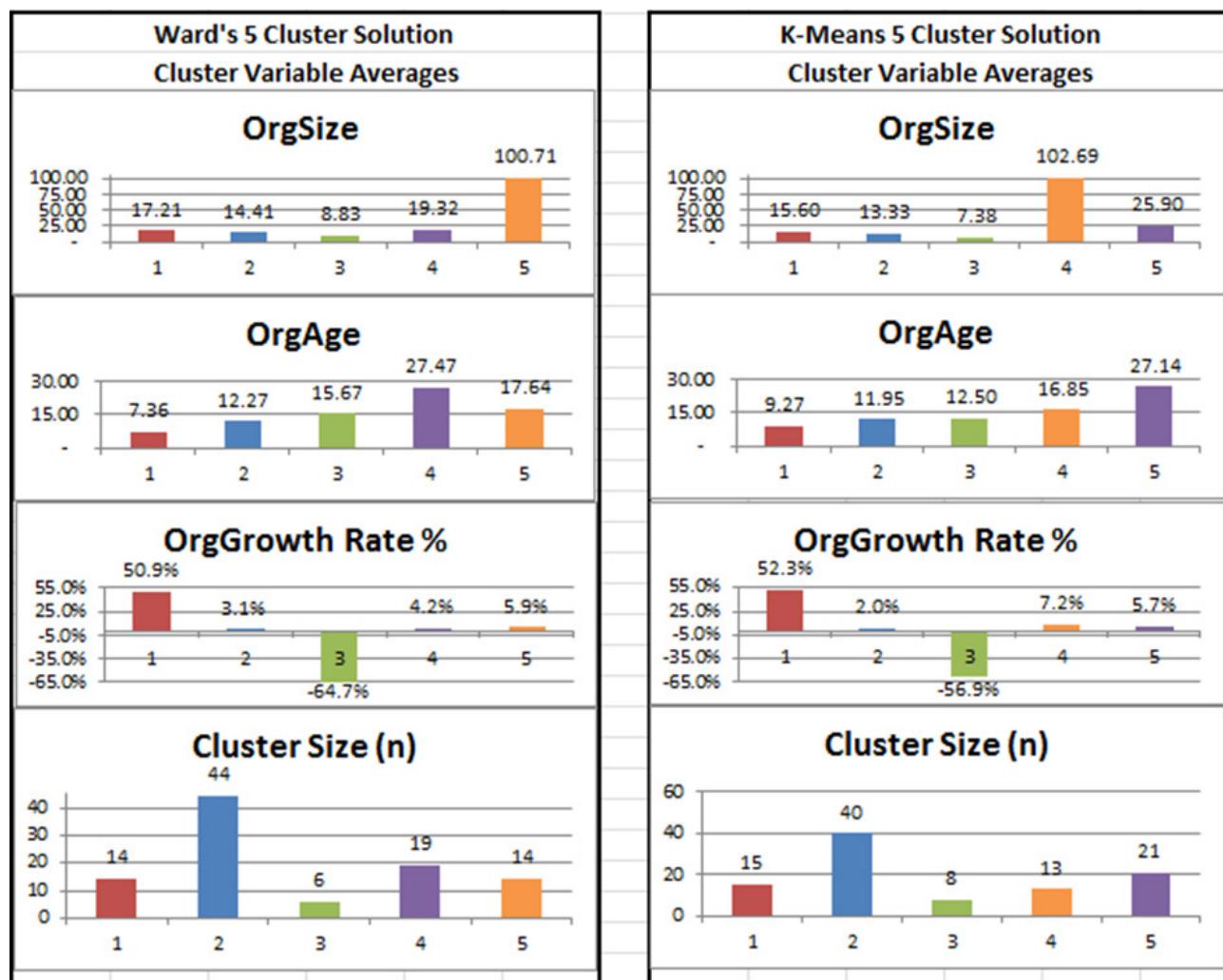


**Figure 5.4: K-means five-cluster solution based on the two cluster variables, i.e. business age and size in terms of employee numbers**

Comparing the average values of the variables, observed in the clusters that resulted from the application of the two clustering methods, it is not expected that these average values will compare in absolute terms, but rather compare in relative terms, as different cluster methods will produce different answers, for they are based on different theories of origin.

Comparing the average values of the cluster variable data (Figure 5.5 below) between Ward's method and the k-means method, the average values of the variable data seem to compare exceptionally well.

From a cluster size perspective, cluster three using Ward's method is the smallest with only six cluster elements (eight using the k-means). Comparing the characteristics of cluster three to the other cluster structures identified, based on the three cluster variables selected, the average growth rate of cluster three varies significantly from the other clusters and seems to hold potential additional interpretation value. Based on comparative literature, accepting a relatively small cluster size of six, as observed in cluster three, seems to be appropriate. The smallest cluster size used by Hanks et al. (1993) that still added interpretative value, was a cluster size of seven (7), based on a data sample size of 126.



**Figure 5.5: Comparison of Ward's and K-means five-cluster solution, cluster variable average**

From the literature review, Ward's method was described as a method that performs well overall (Rasmussen, 1992) and considering that Hanks et al. (1993) used this method successfully on a data set of similar size ( $n=126$ ) to this study, Ward's method was used for the remainder of the data analysis in this study.

### 5.2.2 Statistical analysis

**Table 5.1: ANOVA: Single-factor calculations for the three cluster variables**

<b>ANOVA: Single factor calculations for the three cluster variables</b>									
ANOVA - Organisation Age				Alpha		0.05			
Sources	SS	df	MS	F	P value	F crit	RMSSE	Omega Sq	
Between Groups	4174.96	4	1043.74	35.65392	0.00000	2.470681	1.380043	0.5883126	
Within Groups	2693.226	92	29.2742						
Total	6868.186	96	71.5436						
ANOVA - Organisation Size				Alpha		0.05			
Sources	SS	df	MS	F	P value	F crit	RMSSE	Omega Sq	
Between Groups	87414.96	4	21853.74	77.20157	0.00000	2.470681	2.291808	0.7585901	
Within Groups	26042.79	92	283.0738						
Total	113457.8	96	1181.852						
ANOVA - Organisation Growth				Alpha		0.05			
Sources	SS	df	MS	F	P value	F crit	RMSSE	Omega Sq	
Between Groups	5.86823	4	1.467058	55.45051	0.00000	2.470681	2.54276	0.6918699	
Within Groups	2.43405	92	0.026457						
Total	8.30228	96	0.086482						

From a statistical perspective, considering the ANOVA calculations (Table 5.1) the P-values and F-crit values for the three cluster variables selected suggest that these clustering variables do differ significantly between clusters in the solution.

Appendix D represents a summary of this study's cluster variable data. Appendix E is a summary of McMahon's (2000) cluster results and Appendix F shows the cluster results of Hanks et al. (1993). Appendix G is a basic comparison of the findings of the three studies based on McMahon's (2000) approach of associating clusters to one of three developmental classifications.

Comparing the results of the average values of the variables of the clusters observed in this study (Appendix G), based on Ward's clustering technique, with the results of prior research in the subject field, a five-cluster solution seemed to be appropriate.

In terms of the effective use of cluster analysis, Rasmussen (1992) indicated the need to test the validity of the clustering results from a characteristic perspective to confirm that the cluster results are a characterisation of the data in relation to the subject field and not merely an artefact of the clustering method used.

With reference to the subject field of business developmental stages, the descriptive characteristics of business developmental stages are less specific and are addressed in broad categorical terms, for example, formal versus informal, or centralised versus decentralised (McMahon, 2000).

To enable this study to identify the nature of the descriptive characteristics of the identified business clusters, descriptive statistics of eight independent business variables were used in combination with the literature on business developmental stages. These variables were also selected based on the literature on the subject field of business developmental stages, utilising the work of Levie and Lichtenstein (2010), McMahon (2000), Hanks et al. (1993), Miller and Friesen (1984) and Churchill and Lewis (1983).

To assist in the identifying of the descriptive characteristics of the business clusters, survey data collected on business variables include:

- i) Organisation age;
- ii) Employee size;
- iii) Employee growth rate;
- iv) Vertical differentiation;
- v) Structural form;
- vi) Formalisation;
- vii) Specialisation; and
- viii) Centralisation.

McMahon (2000) and Hanks et al. (1993) also used an approach that subsequent to the identification of business clusters, profiled the nature of the descriptive characteristics of the identified business clusters. Identifying the nature of the descriptive characteristics of business clusters enabled them to interpret and associate the business clusters with business developmental stages in the literature.

From this perspective, the customary and much criticised approach of research on developmental stages is to attach particular meaning to clusters by characterising them as a certain phase or stage of development through which a business may pass. McMahon (2000) followed a more pragmatic approach to view the nature of the business characteristics of clusters as indicative signposts for apparent association with developmental classifications. McMahon did not attempt to attribute significance to the clusters other than to construe with which developmental classification the clusters associate.

McMahon (2000) indicated (Appendix E) that the various cluster groups identified in the various periods of his study suggested the existence of three main developmental classifications. He found that it is possible to classify clusters based on the nature of the cluster characteristics into low-growth, moderate and high-growth developmental categories.

Evaluating the decision to use these three developmental classifications this study, the nature of the key characteristics used to identify the three developmental stages was considered as described in the text below. Concerned about repeatability, the processes of classifying business clusters into developmental stages were tested on the data of McMahon (2000) and Hanks et al. (1993) as indicated in Appendix E and Appendix F.

To aid with the better understanding of the nature of the characteristics to be expected in the three developmental classifications, Appendix H is a summary of the relevant cluster characteristics from this study, with a more detailed description of the common characteristics identified in prior literature by McMahon (2000) and Hanks et al. (1993). This summary gives an indication of the underlying nature of the characteristics associated with the high-growth, moderate and low-growth developmental classifications.

However, it should be noted that it is not expected that the descriptive characteristics of the business clusters identified should correspond in all material and absolute values. It should only be possible to interpret with which developmental classification the cluster can be associated, based on the nature of the descriptive characteristics of the business.

Using this classification approach, it was possible to associate the five business clusters identified in this study to one of the three business developmental stages. Appendix G is a summary of the results of earlier similar research as undertaken by McMahon (2000) and Hanks et al. (1993).

Considering the results as per Appendix G and guided by Appendix H, classifications can be made into low-growth, moderate and high-growth developmental categories.

### **5.2.2.1 *High-growth classification***

The underlying key characteristics of a high-growth classification (Table G.1) indicate that, in approximately 15 years, the business will employ about 100 or more employees and grow at about five percent (5%) or more per year. From the organisation's operational and structural perspective, the tendency is to be functionally structured, with relatively high formalisation and relatively lower centralisation if compared to other organisations in the moderate-growth classification.

### **5.2.2.2 *Moderate-growth classification***

The underlying key characteristics of a moderate-growth classification (Table G.2) indicate that, in approximately 15 years, the business will employ less than 100 employees. It also includes younger businesses that after eight years will employ about 20 employees, growing at a rate of 30 percent or more. From the organisation's operational and structural perspective, the tendency is to be almost functionally structured, with a relatively lower level of formalisation and a relatively higher level of centralisation if compared to organisations in the high-growth classification.

### **5.2.2.3 Low-growth classification**

The underlying key characteristics of the low-growth classification (Table G.3) indicate that, in approximately 15 years, the business will employ less than 20 employees. The low-growth pathway business is described as a smaller business that can be similar in size to a start-up or young moderate-growth business, but is a relatively older business. From the organisation's operational and structural perspective, structure and formalisation tend to vary, but centralisation seems to be relatively high if compared to moderate and high-growth businesses.

### **5.2.3 Summary on the identification of business developmental stages**

In essence, using cluster analysis as a primary analytical approach, it was possible to identify on an empirical basis in the survey sample data, business clusters that can be associated with developmental stage that seem to be reliable and valid from a subject field perspective.

In the case of this research study, it was possible to classify the identified five business developmental stage clusters into one of three potential developmental classifications that are supported by the findings of prior research.

From this perspective, the findings from this research study's data analysis seem to be supportive of prior research on the empirical approach of a taxonomic method, using cluster analysis, to identify business clusters and their associated developmental stages, utilising business variables that relate to business context and structure.

In summary, applying multi-variate statistical analysis, more specifically cluster analysis, as a primary analytical approach on the survey data, it was possible to identify on an empirical basis five business development clusters in the survey data, utilising three cluster variables.

It was possible to identify the nature of the descriptive characteristics of the identified business clusters, with survey information pertaining to business context and structure through the application of descriptive statistics in combination with literature on business developmental stages.

Considering the recommendations of Rasmussen (1992), it is a good practice to validate the identified clusters, confirming that the cluster results are a characterisation of the data in relation to the subject field under review and not merely an artefact of the clustering method used. From this perspective, the characteristics of the identified clusters were compared with literature in the subject field of business developmental stages.

Compared to the literature, the nature of the contextual and structural characteristics of the identified clusters, compared reasonably well from a general configuration perspective to the findings of prior studies in the subject field that applied cluster analysis to identify business developmental stages and/or business development patterns on an empirical basis.

As Table 5.2 below indicates, it was possible to associate the five clusters identified in the research data, based on the nature of the characteristics of the business context and structure configurations, with three developmental classifications identified in the literature. McMahon (2000) used these pathways as pragmatic classification signposts to indicate an apparent business development pathway.

**Table 5.2: Business clusters identified in survey data, associated with developmental classifications in the literature.**

Study survey's cluster findings		
Low-growth classification	Moderate growth classification	High-growth classification
Cluster 3	Cluster 1	Cluster 5
Cluster 2		
Cluster 4		

To an extent, the results of this data analysis support prior research on the empirical approach of a taxonomic method, using cluster analysis, to identify business developmental stages.

The next section attempts to identify thematic coping-value system profiles within the five identified business developmental clusters.

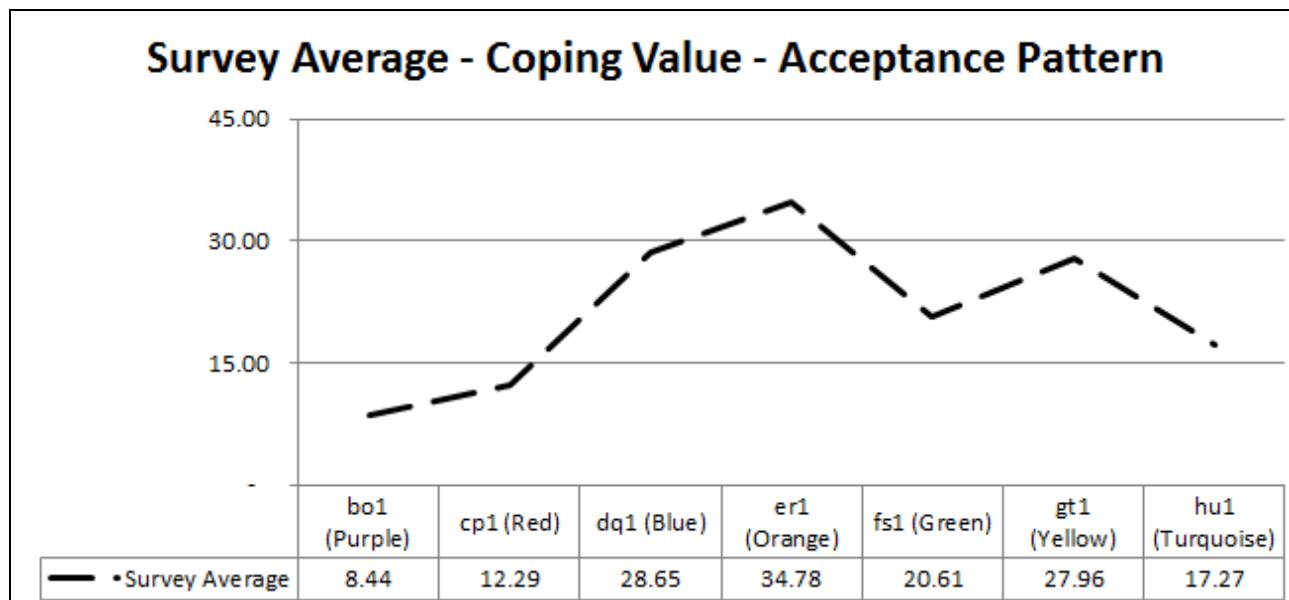
### **5.3 THE IDENTIFICATION OF THEMATIC COPING-VALUE SYSTEM PROFILES WITHIN EACH BUSINESS DEVELOPMENTAL STAGE**

#### **5.3.1 Overview of survey's thematic coping-value profile patterns**

With the business developmental stages empirically identified in the survey sample data above, the next methodological step in the research data analysis was identifying thematic coping-value system profiles that can be associated with the identified developmental stages.

As explained in Chapter 4, due to the ipsative nature of the thematic coping-value data collected in the survey process, descriptive statistics was applied in the identification processes of thematic coping-value system profiles within the five identified business development clusters.

Figure 5.6 below is a visual representation of the survey's average scores, indicating the average thematic coping-value system pattern that the survey participants recognised in themselves, based on their self-assessment.



**Figure 5.6: Coping-value variable average preference scores for the survey sample**

To analyse the findings from this sample data, the application of a systematic approach was applied, to identify the thematic coping-value system profile that reflects the average entrepreneur's assumptions about living and how he/she establishes priorities within each of the five identified business developmental cluster groups. In essence, this process was used to identify the average entrepreneur's assumed preferred heuristic current thinking system that is associated with their dominant logic, per identified business developmental cluster group.

Figure 5.6 shows that on average, survey participants associated themselves with the ER thematic coping-value, as indicated in Table J.1. Based on Graves' (1970: 149-150) open system of values theory, the ER thematic coping-value have an end value of "materialism". In essence, the ER thematic coping-value system "values the entrepreneurial attitude" (Graves, 1974: 83). Similarly, the basic guideline for administration and interpretation guide of the values test overview (Beck, 1992: 12) associated the ER thematic coping-value with "an entrepreneurial and option-oriented mind-set".

In summary, if compared to the other seven thematic coping-values of Graves' open system of values theory, the ER thematic coping-value system is associated with entrepreneurship.

Considering that the sample data represents business entrepreneurs, this finding of a high survey average association with the ER thematic coping-value system, that is associated with entrepreneurship, is to be anticipated from the sample data.

Within the context of the average participant associating him or herself highly with the ER thematic coping-value system, the assessment that follows explores the preferred average profile pattern of the thematic coping-value systems that survey participants, grouped per identified business development cluster, recognised as a cluster group in themselves and in what relative proportions.

Thematic coping-value systems are complex adaptive systems that change dynamically as internal and external life conditions change (5DVS, 2014a). Although Graves' levels of existence framework identify only eight, and the survey instrument only collected data pertaining to seven of these eight thematic coping-value systems, the combination of thematic coping-value system profile patterns are relatively infinite. Each thematic coping-value system profile is an indication of the current dynamic state, or centre of gravity, of the preferred dominant logic of a person or group (5DVS, 2014a).

To identify the various average profile patterns of the dominant thematic coping-value systems preferred by the survey participants in their respective cluster groups, a systematic approach was used based on the guidelines of Appendix K.

The first step was to identify the key thematic coping-values that the group associated themselves with and in theory preferred to apply as their dominant logic. This was done by considering the average score values of the top three to four thematic coping-values present in the group.

The second procedural step was to consider the average thematic coping-value rejection scores, to assess the relative intensity and probable dissonance and transition stage of entering, peaking or exiting of the identified key thematic coping-value systems and the potential level of their application from a first or second-tier level of thinking.

The third procedural step was to consider the three sub-classification structures (the self-perspective, work-perspective and world-perspective) to assess the probable transition stage of entering, peaking or exiting of the identified key thematic coping-value systems from a self-perspective in the form of a possible up- or down-stretch in the group's average preference of the key thematic coping-value systems. This procedure also assisted with the assessment of the level of applying the preferred thematic value system, being it from a first or second-tier level of thinking.

The survey's average profile pattern of coping-value variables was considered in this three-step approach as an indicative guideline to assist in the visual identification of how the intra-group thematic coping-value variable patterns differ within the various identified developmental stage groups.

Based on the values test overview's (Beck, 1992) basic guideline for administration and interpretation guide, variances in the average coping-value scores of ten to twenty percent (10% to 20%) compared to the survey instrument's global average data, are useful for investigation. Working with a specific survey data set, much smaller variances compared to the survey average can be useful for investigation. Reviewing the rejection score variances, this study considered variances of ten percent (10%) or more in the identification of the preferred thematic coping-value profile. Appendix J is a summary of Graves' eight thematic coping-value systems and Appendix I is a visual representation of the thematic coping-value profile patterns within the five business developmental clusters, as derived from the survey sample data.

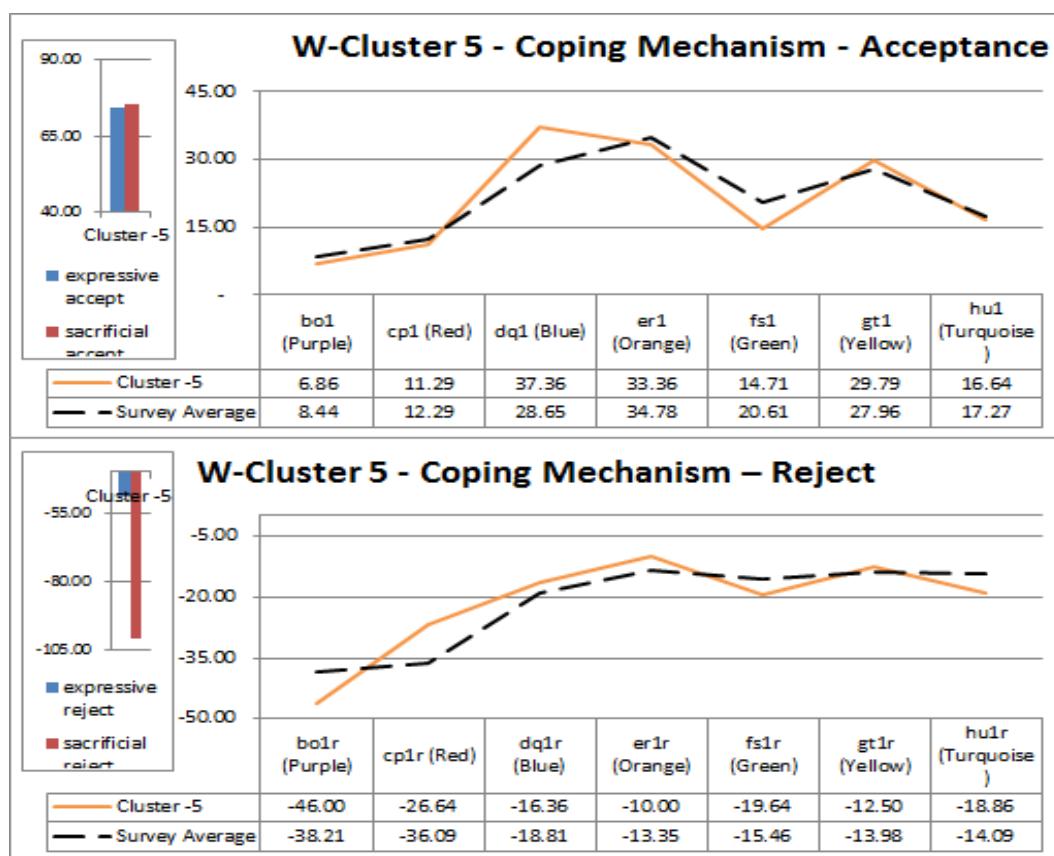
The next section discusses the thematic coping-value system profiles identified in the business developmental clusters starting with the business developmental clusters associated with the high-growth, then medium, flowed by low-growth developmental clusters.

To aid with readability, the seven thematic coping-value systems are labelled to indicate the theme that they represent as indicated in Appendix J. From this perspective, the BO thematic coping value is labelled ‘tribalistic-safety’, the CP labelled as ‘egocentric-exploitative’, the DQ labelled as ‘authoritative-conformist’, the ER labelled as ‘strategic-materialistic’, the FS labelled as ‘humanistic-sensitive’, the GT labelled as ‘integrative-systemic’ and the HU labelled as ‘experientialistic-holistic’.

### 5.3.2 Average thematic coping-value profile of the business development cluster group 5

#### 5.3.2.1 Cluster average profile of acceptance and rejection scores

Figure I.1 in Appendix I is a representation of the average thematic coping-value pattern that the participants of the business development cluster group 5 associated themselves with.



**Figure 5.7: Business development cluster 5 participants' coping-value average profile scores**

Figure 5.7 shows that this group associated themselves with three thematic coping-values, being ‘authoritative-conformist’ (score 37.36), ‘strategic-materialistic’ (score 33.36) and ‘integrative-systemic’ (score 29.79). As for the other thematic coping-values, all scores are relatively lower with

'experientialistic-holistic' (score 16.64), 'humanistic-sensitive' (score 14.71), 'egocentric-exploitative' (score 11.29) and 'tribalistic-safety' (score 6.86).

Considering the rejection scores in relation to the preferred association scores, 'authoritative-conformist' (score -16.36), 'strategic-materialistic' (score -10.00) and 'integrative-systemic' (score -12.50) are relatively low rejection scores compared to the average total rejection scores for the total survey population. The average rejection scores for participants of this group are lower than the survey average with, 'strategic-materialistic' 33.5 percent lower, 'authoritative-conformist' 14.9 percent lower and 'integrative-systemic' 11.8 percent lower. This relatively low level of rejection may be an indicator of a strong association with the thematic coping-values labelled as 'strategic-materialistic', 'authoritative-conformist' and 'integrative-systemic'.

Other scores of interest are the relatively low rejection scores for the 'egocentric-exploitative' and relatively high rejection of the 'tribalistic-safety', 'humanistic-sensitive' and 'experientialistic-holistic' thematic coping-value systems if compared to the survey average. From an acceptance perspective, the relatively low acceptance is noted at 40.1 percent lower for the 'humanistic-sensitive' thematic coping-value system.

From the above, the possible interpretation is that this group can be in a peak or transition stage. From a peak stage perspective, there is a relatively high association with the 'authoritative-conformist' and 'strategic-materialistic' thematic coping-value systems with corresponding relatively low rejections scores, if compared to the survey average. From a transition stage perspective, there is a possible transition between the sacrificial 'authoritative-conformist' and expressive 'strategic-materialistic' and 'integrative-systemic' thematic coping-value systems.

Beck and Cowan (2006) observed that in a peak stage, there is usually a strong core thematic coping-value system supported by two or three softer thematic coping-values and in a transition stage there is usually a combination of two core thematic coping-value systems from an expressive and sacrificial nature.

Seeing that the potential peak identified above relates to two instead of one strong thematic value system and that it is of a sacrificial and expressive nature, from a classification perspective, the interpretation is that this group is in a transition stage between the sacrificial 'authoritative-conformist' and expressive 'strategic-materialistic' and 'integrative-systemic' thematic coping-value systems.

This group's rejection scores of the 'egocentric-exploitative' thematic coping-value is 33.5 percent less than the average total rejection for the whole survey sample group. Compared to their relatively normal acceptance score for the 'egocentric-exploitative' (11.29) thematic coping-value, this relatively low rejection can be a possible indicator of tolerance for the 'egocentric-exploitative' thematic coping-value.

The values test overview (Beck, 1992) indicated that a lower than average rejection of 'egocentric-exploitative', is often an indication of a person who has experienced a strong 'egocentric-exploitative' thematic value system in the past and now finds it relatively easy to deal with 'egocentric-exploitative' behaviours in others, helping them to be productive.

This group rejected the 'tribalistic-safety' thematic coping-value 16.9 percent more than the average total rejection for the total survey population. Compared to their relatively low acceptance score for the 'tribalistic-safety' (6.86) thematic coping-value, this relatively high comparative rejection can be a possible indicator of dissonance for the 'tribalistic-safety' thematic coping-value.

The values test overview (Beck, 1992) indicated that many people in the world of business and management find the 'tribalistic-safety' thematic coping-value system to be quite far from their perceived self-image and people with a high rejection score may have real difficulty managing those who operate strongly in a 'tribalistic-safety' thematic coping-value system. A rejection may also indicate that people moved out of the way of thinking associated with the 'tribalistic-safety' thematic coping-value system, and focus on proving how dysfunctional this thematic coping-value system is.

This group rejected the 'humanistic-sensitive' thematic coping-value 21.3 percent more than the average total rejection for the total survey population. This group's acceptance score for the 'humanistic-sensitive' thematic coping-value is not only relatively low (14.71), but also relatively lower (40.1%) than the average total acceptance for the total survey population. This relatively low acceptance and high rejection in comparative terms to the survey average can be a possible indicator of dissonance for the 'humanistic-sensitive' thematic coping-value within the participants of this cluster group.

The values test overview (Beck, 1992) indicated that the 'humanistic-sensitive' thematic coping-value system is frequently rejected when seen as a welfare state, socialistic, paternalistic model and equated the thinking to a political system. From this perspective, people who associate themselves with a strong 'strategic-materialistic' thematic coping-value system may perceive the 'humanistic-sensitive' thematic coping-value system's thinking as ambiguous, undirected and standing in the way of progress (Beck, 1992).

Considering this group from a first and second-tier thinking perspective, the observation is that there is an awareness of second-tier thinking based on the 'integrative-systemic' thematic coping-value included in the transition stage identified above and the active rejection of the 'experientialistic-holistic' thematic coping-value system of thinking. The interpretation is that this group can be in a transition stage at the more complex spectrum of the first-tier thematic coping-value systems, influenced by the 'integrative-systemic' second-tier thematic coping-value system of thinking.

Considering this group's willingness to consider other thematic coping-value systems from an open/arrest/closed perspective, the relatively open transition stage with an indication of second-tier support, may be an indication of an open/arrest status.

In summary, the interpretation is that this group can be in a transition stage, between the sacrificial 'authoritative-conformist' and expressive 'strategic-materialistic' and 'integrative-systemic', rejecting the sacrificial 'humanistic-sensitive' and tolerant towards the 'egocentric-exploitative' thematic coping-value system. This transition seems to be supported by second-tier thinking and they may be in an open/arrest change state.

### **5.3.2.2 Group 5 Thematic coping-value profile: sub-category influences**

Figure 5.8 and Figure 5.9 below represent the thematic coping-value pattern that the participants of the business development cluster group 5 associated themselves with, divided into the contextual sub-categories in terms of their self-perspective, work-perspective and world-perspective.

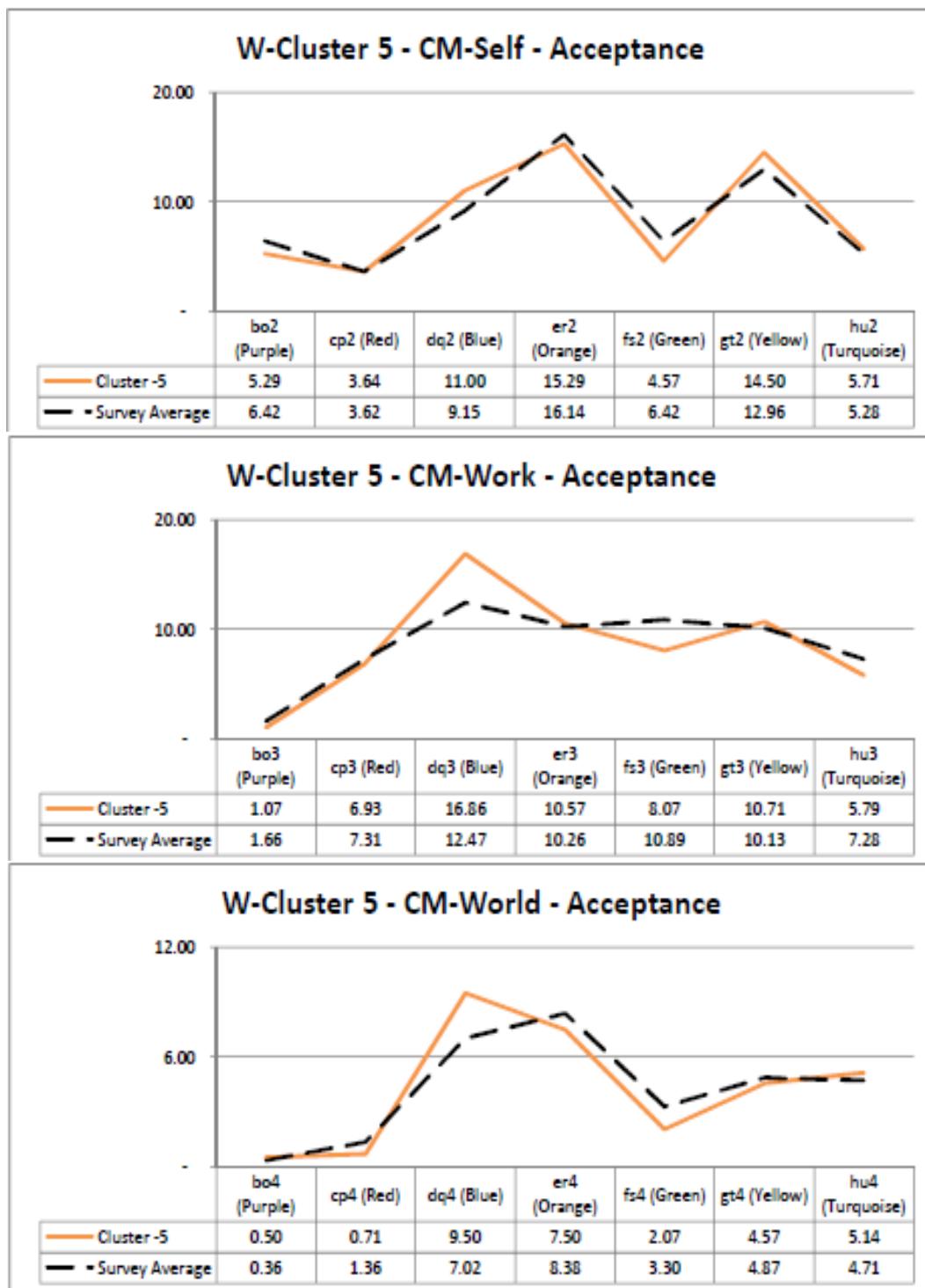
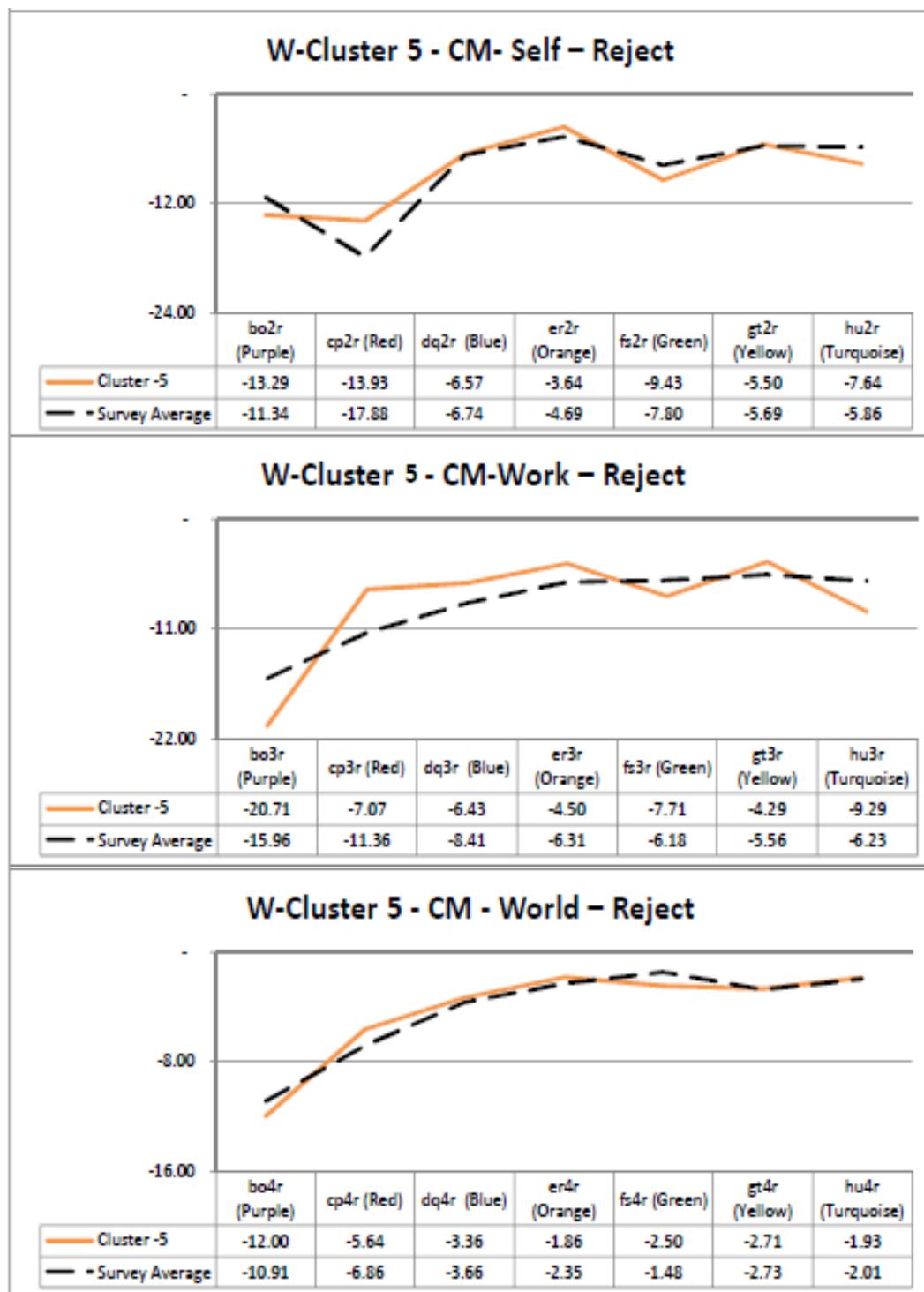


Figure 5.8: Business development cluster 5 participants' coping-value average profile acceptance scores per sub-category



**Figure 5.9: Business development cluster 5 participants' coping-value average profile rejection scores per sub-category**

### **5.3.2.2.1 Self-perspective sub-category**

Considering cluster group 5 from the contextual self-perspective, the relative preference scores were for the ‘strategic-materialistic’ (15.29), ‘integrative-systemic’ (14.50) and ‘authoritative-conformist’ (11) thematic coping-value system. From a rejection score perspective, compared to the survey average, there is a relatively low rejection for the ‘strategic-materialistic’ thematic coping-value system. Other score values of interest are the relatively low rejection scores for the ‘egocentric-exploitative’ and relatively high rejection of the ‘tribalistic-safety’, ‘humanistic-sensitive’ and ‘experientialistic-holistic’ thematic coping-value systems compared to the survey average. From an acceptance perspective, there is a relatively low acceptance for the ‘humanistic-sensitive’ thematic coping-values system.

From the self-perspective, considering that the ‘strategic-materialistic’ and ‘integrative-systemic’ coping-value systems are both of an expressive nature, it can be observed that this group may be peaking at the ‘strategic-materialistic’ (15.29) based on relatively high acceptance and low rejection scores, with a possible supportive ‘integrative-systemic’ (14.50) and ‘authoritative-conformist’ (11.00) thematic coping-value systems. The relatively high rejection and low acceptance of the ‘humanistic-sensitive’ thematic system can be an indication that this group is aware of the ‘humanistic-sensitive’ thematic coping-value system, but actively rejects this thematic coping-value system. The relatively high rejection and normal acceptance of the ‘tribalistic-safety’ and ‘experientialistic-holistic’ thematic value systems can be an indicator that this group is aware of this thinking system, but actively rejects this thematic value system of thinking. The relatively low intensity in the ‘egocentric-exploitative’ thematic value system, based on normal acceptance, low rejection, can be an indication that thinking associated with this coping-value system is replaced by a more complex thinking system. The ‘egocentric-exploitative’ low rejection can also be an indication of tolerance towards ‘egocentric-exploitative’ behaviour in others.

In summary, from a contextual self-perspective, the interpretation is that this group can be in possible peak ‘strategic-materialistic’ thematic coping-value system of thinking with support from the ‘integrative-systemic’ and ‘authoritative-conformist’ thematic coping-value systems. This group’s dominant thinking stems from a first-tier level of thinking, with possible support from ‘integrative-systemic’ second-tier level of thinking.

### **5.3.2.2.2 Work-perspective sub-category**

Considering group 5 from the contextual work-perspective, the observation of the relative preferred scores for the ‘authoritative-conformist’ (16.86) followed by the ‘integrative-systemic’ (10.71), ‘strategic-materialistic’ (10.57) and ‘humanistic-sensitive’ (8.07) thematic coping-value systems. From a rejection score perspective, compared to the survey average, the relatively low rejection for the ‘authoritative-conformist’, ‘strategic-materialistic’, ‘integrative-systemic’ and ‘egocentric-

'exploitative' thematic coping-value systems and the relatively high rejection for the 'tribalistic-safety', 'humanistic-sensitive' and 'experientialistic-holistic' thematic value systems of thinking.

From a work-perspective, the observation is that this group may be peaking at the 'authoritative-conformist', based on strong association as can be observed by the relatively high acceptance and low rejection, supported by the 'integrative-systemic' and 'strategic-materialistic' thematic coping-value systems. The relatively high rejection of the 'humanistic-sensitive' thematic system can be an indication that, although this group is aware of the 'humanistic-sensitive' thematic coping-value system, they actively reject this thematic coping-value system. The relatively high rejection and normal acceptance of the 'tribalistic-safety' thematic coping-value system can be an indicator that this group is aware of this thinking system, but actively rejects this thematic coping-value system of thinking. The relative low intensity in the 'egocentric-exploitative' thematic coping-value system, based on normal acceptance, low rejection, can be an indication that thinking associated with this coping-value system is replaced by a more complex thinking system. The 'egocentric-exploitative' low rejection can also be an indication of tolerance towards 'egocentric-exploitative' behaviour in others.

In summary, from a contextual work-perspective the interpretation is that this group can be in a possible peak 'authoritative-conformist' thematic coping-value system of thinking with support from the 'strategic-materialistic' and 'integrative-systemic' thematic coping-value systems, rejecting the 'tribalistic-safety' and 'humanistic-sensitive' and tolerating the 'egocentric-exploitative' thematic coping-value system. This group's dominant thinking seems to stem from a first-tier of thinking, with possible strong support from 'integrative-systemic' second-tier level of thinking.

#### **5.3.2.2.3 World-perspective sub-category**

From the contextual world-perspective, there were relative preference scores for the 'authoritative-conformist' (9.5) and 'strategic-materialistic' (7.5) thematic coping-value systems. From a rejection score perspective, compared to the survey average, it can be observed that the rejection for these thematic coping-value systems is almost the same as for the survey average. Other score values of interest are the relatively low rejection scores for the 'egocentric-exploitative' and relatively high rejection of the 'tribalistic-safety' and 'humanistic-sensitive' thematic coping-value systems compared to the survey average. From an acceptance perspective, note the relatively low acceptance for the 'egocentric-exploitative' and 'humanistic-sensitive' thematic coping-value systems.

From a world-perspective, this group may be in a transition stage between the sacrificial 'authoritative-conformist' and expressive 'strategic-materialistic' thematic value systems. The relatively low intensity in the 'egocentric-exploitative' thematic value system, based on low acceptance, low rejection, can be an indication that thinking associated with this coping-value

system is replaced by a more complex thinking system. The ‘egocentric-exploitative’ low rejection can also be an indication of tolerance towards ‘egocentric-exploitative’ behaviour in others.

The relatively high rejection and low acceptance of the ‘humanistic-sensitive’ thematic coping-value system can be an indicator that this group is aware of this thinking system, but actively rejects this thematic value system of thinking. The relatively high rejection and normal acceptance of the ‘tribalistic-safety’ thematic coping-value system can be an indicator that this group is aware of this thinking system, but actively rejects this thematic coping-value system of thinking.

In summary, from a contextual world perspective, the interpretation is that this group’s thinking can be in a first-tier level of thinking, with a transition in the ‘authoritative-conformist’, ‘strategic-materialistic’ thematic coping-value systems of thinking, tolerating (based on low rejection) the ‘egocentric-exploitative’ thematic coping-value system and actively rejecting the ‘humanistic-sensitive’ and ‘tribalistic-safety’ thematic coping-value systems of thinking.

### **5.3.2.3 Summary of cluster group 5’s identified average thematic coping-value profile**

From Figures 5.7, 5.8 and 5.9 above as summarised in Table 5.3 below, the interpretation that this group’s association with the ‘strategic-materialistic’ and ‘integrative-systemic’ thematic coping-values predominantly arises from their own perspective, and that the ‘authoritative-conformist’ thematic coping-value arises predominantly from their work-perspective and world-perspective, i.e. how they cope with their day-to-day operational activities and interaction with society.

**Table 5.3: Cluster group 5 – Thematic coping-value profile summary**

<b>Association with high-growth – Cluster group 5 – Thematic coping-value profile summary</b>			
<b>Overall profile:</b>	<b>Self-perspective:</b>	<b>Work-perspective:</b>	<b>World-perspective:</b>
Transition between sacrificial ‘authoritative-conformist’ and expressive ‘strategic-materialistic’ & ‘integrative-systemic’	Peak ‘strategic-materialistic’ based on strong association, with ‘integrative-systemic’ & ‘authoritative-conformist’ support system	Peak ‘authoritative-conformist’ based on strong association, with ‘strategic-materialistic’ & ‘integrative-systemic’ support system	Transition between sacrificial ‘authoritative-conformist’ and expressive ‘strategic-materialistic’
Rejects ‘humanistic-sensitive’ & ‘tribalistic-safety’	Rejects ‘humanistic-sensitive’ & ‘tribalistic-safety’	Rejects ‘humanistic-sensitive’ & ‘tribalistic-safety’	Rejects ‘humanistic-sensitive’ & ‘tribalistic-safety’
Tolerates ‘egocentric-exploitative’	Tolerates ‘egocentric-exploitative’	Tolerates ‘egocentric-exploitative’	Tolerates ‘egocentric-exploitative’

The perceived tolerance of the ‘egocentric-exploitative’ thematic coping-value seems to arise from all three sub-categories, i.e. their self-perspective, work-perspective and world-perspective. As for their perceived dissonance with the ‘humanistic-sensitive’ thematic coping-value, this also seems to arise from all three sub-categories, i.e. their self-perspective, work-perspective and world-perspective.

Their rejection, or perceived dissonance with the ‘tribalistic-safety’ thematic coping-value, although present in all the perspectives, seems to be predominantly strong from their work-perspective, i.e. their day-to-day operational activities.

Considering the thematic value systems from the three sub-categories (their self-perspective, work-perspective and world-perspective), from a self-perspective the observation is that the entrepreneurs are in a possible peak ‘strategic-materialistic’ thematic coping-value system, supported by the second-tier ‘integrative-systemic’ thematic coping-value system, and that they stretch down in their work- and world-perspectives preferring the ‘authoritative-conformist’ thematic coping-value system.

The interpretation is that this cluster group can be in a ‘authoritative-conformist’, ‘strategic-materialistic’ and ‘integrative-systemic’ transition phase. The ‘humanistic-sensitive’ rejection and ‘integrative-systemic’ acceptance indicate a possible first-tier higher complexity transient with possibly early second-tier thinking. The tolerance for ‘egocentric-exploitative’ combined with the possible down-stretch behaviour from the ‘strategic-materialistic’ self-perspective to a ‘authoritative-conformist’ thematic coping-value system to cope with the work and social-perspectives supports contextual application of multiple thematic values, which is an attribute associated with second-tier thinking.

From a change openness perspective, using a classification scale of open, arrest, closed, considering that this group is in a possible transition spread over more than two thematic coping-value systems towards the second-tier of thinking, it seems that this group can be classified as open/arrest.

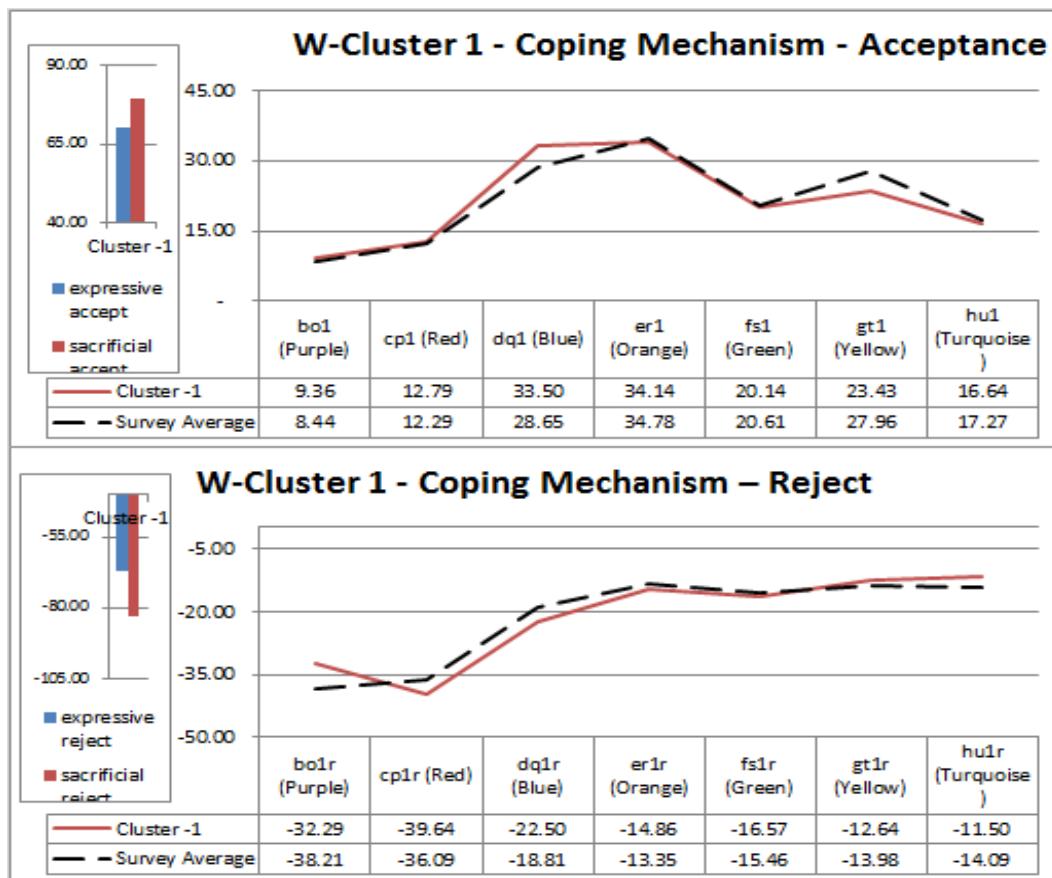
### **5.3.3 Average thematic coping-value profile of the business development cluster group 1**

#### ***5.3.3.1 Cluster average profile of acceptance and rejection scores***

The participants of the business development cluster group 1, associated themselves with the thematic coping-value pattern represented in Figure I.2 in Appendix I.

From Figure 5.10, the observation that this group associated themselves predominantly with two of the thematic coping-values, being ‘strategic-materialistic’ (score 34.14) and ‘authoritative-conformist’ (score 33.50). Secondary to this relatively high association, are the score values of the ‘integrative-systemic’ (score 23.43) and ‘humanistic-sensitive’ (score 20.14), followed by the relatively low score values for the other thematic coping-value systems with ‘experientialistic-holistic’ (score 16.64), ‘egocentric-exploitative’ (score 12.79) and ‘tribalistic-safety’ (score 9.36).

Beck and Cowan (2006) observed a transition stage to be a combination of two core thematic coping-value systems from an expressive and sacrificial nature. When using their guidance, the interpretation is that this group can be in a transition stage between ‘authoritative-conformist’ and ‘strategic-materialistic’.



**Figure 5.10: Business development cluster 1 participants' coping-value average profile scores**

The relatively high rejection of the 'authoritative-conformist' (score -22.5) thematic coping-value that is 33.50 percent higher than the survey average, seems to support this transition classification. As the coping-view interpretation guideline (5DVS, 2014a) indicates, when there is a relatively high acceptance and high rejection, people find both assets and liabilities in this way of thinking; this is an indicator of a strong intensity to this thematic coping-value system and a possible transition phase.

Considering the rejection values of the other thematic coping-values of interest are the 'egocentric-exploitative' and 'tribalistic-safety' rejection scores if compared to the average total rejection for the total survey population. This group's rejection scores of the 'egocentric-exploitative' thematic coping-value, is nine percent (9%) more than the average total rejection for the total survey population. Compared to their relatively low acceptance score for the 'egocentric-exploitative' (12.79) thematic coping-value, this relatively high comparative rejection can be a possible indicator of disassociation with the 'egocentric-exploitative' thematic coping-value.

The values test overview (Beck, 1992) indicates that usually the 'egocentric-exploitative' receives high rejection scores, as people often interpret this way of thinking as 'bad' and as a negative aspect of personality behaviour. In general, people feel that this raw egocentrism is very unlike them and opposes their own moral codes and value systems (Beck, 1992).

This group rejected the ‘tribalistic-safety’ thematic coping-value 18.33 percent less than the average total rejection for the total survey population. Combined with their relatively low acceptance score for the ‘tribalistic-safety’ (9.36) thematic coping-value, this seems to be an indicator of low intensity at this less complex ‘tribalistic-safety’ thematic coping-value system. It can also indicate that this group has replaced thinking associated with this thematic coping-value system with a more complex thematic coping-value system. The values test overview (Beck, 1992) indicates that a low intensity towards less complex thematic coping-value systems can be an indication of more complex thematic coping-value systems that replaced these less complex thematic coping-value systems.

Compared to the survey average, the relatively low intensity in the ‘integrative-systemic’, based on low acceptance (19.33% lower than survey average) and relatively normal rejection, can be an indication of latency towards this more complex thematic coping-value system. Similarly, the relatively low intensity of the ‘experientialistic-holistic’ thematic coping-value system, based on low rejection (22.52% lower than the survey average) and relatively normal acceptance, can be an indication of latency towards this more complex thematic coping-value system.

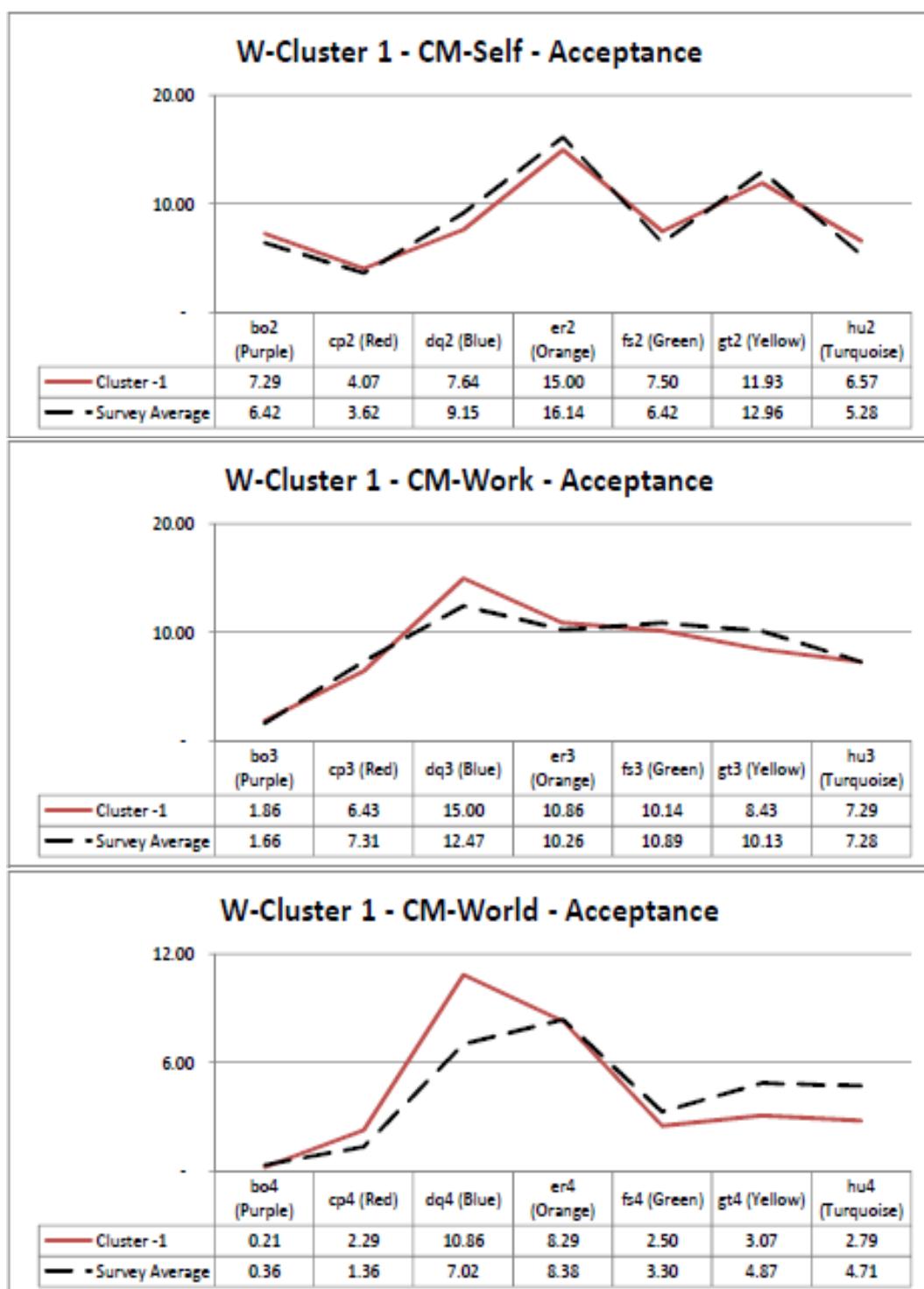
Based on the guidance from the values test overview (Beck, 1992) a low intensity towards more complex thematic value systems can be an indication of latency and the possibility that people do not recognise or associate with the problems and life conditions associated with these more complex thematic coping-value systems. Hence, the possibility that this group does not associate with the problems and life conditions of these second-tier ('integrative-systemic', 'experientialistic-holistic') thematic coping-value systems.

In summary, the interpretation is that this group functions in the first-tier of thematic coping-value systems, with a transition between the ‘authoritative-conformist’ and ‘strategic-materialistic’ thematic coping-value systems, rejecting the low complex ‘egocentric-exploitative’ thematic coping-value system, and with latency towards the more complex thematic coping-value systems, including second-tier ‘integrative-systemic’ and ‘experientialistic-holistic’ coping-value systems thinking.

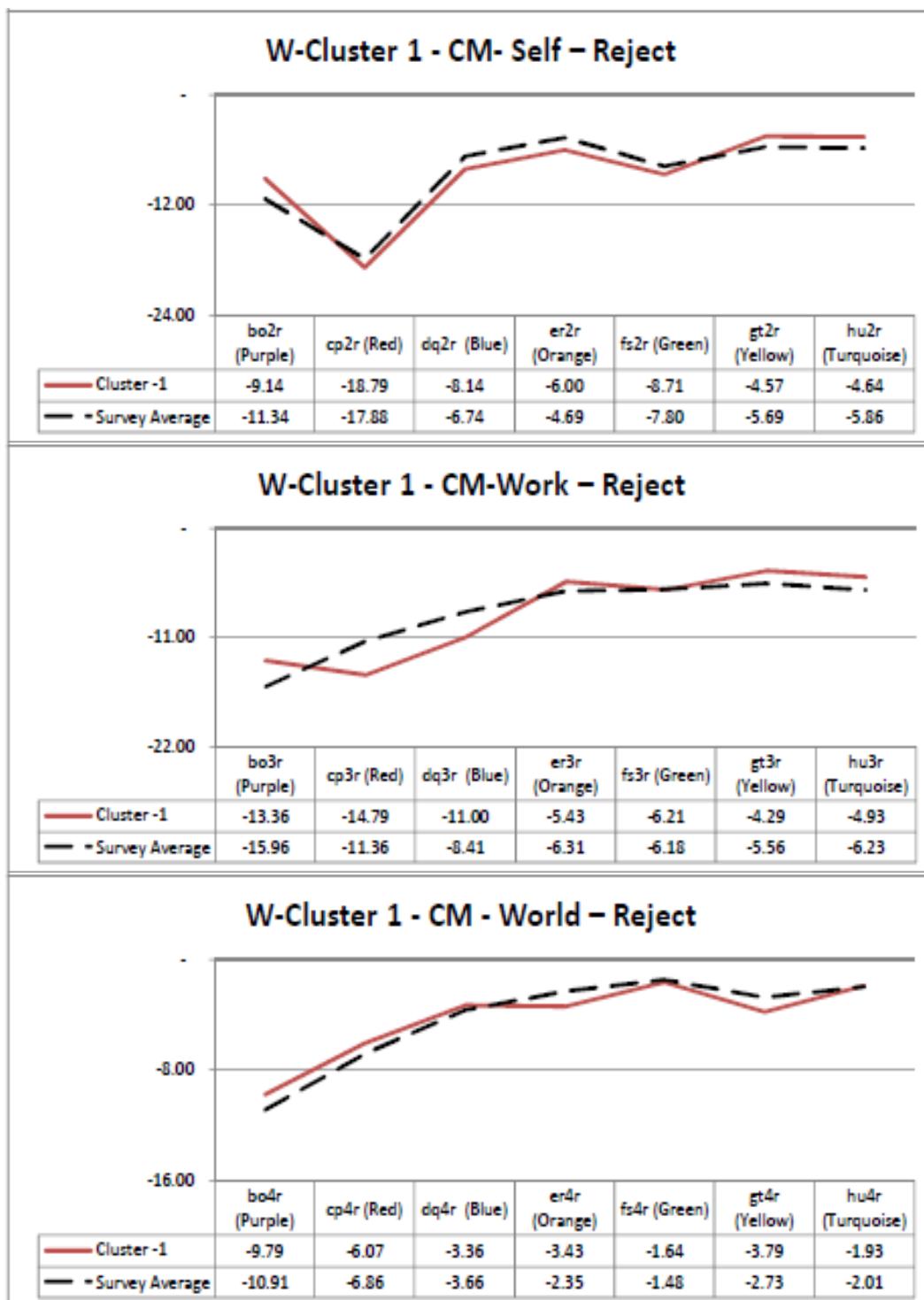
From a change openness perspective, using a classification scale of open, arrest, closed, considering this group’s willingness to consider other thematic coping-value systems, it seems from the intensity nature of the transition stage, with relative dissonance in the ‘authoritative-conformist’, and the latency toward second tier thinking, that this group may be in an arrest/closed state.

### 5.3.3.2 Group 1 Thematic coping-value profile: sub-category influences

The participants of the business development cluster group 1, associated themselves with the thematic coping-value pattern, divided into the following sub-categories in terms of their self-perspective, work-perspective and world-perspective as represented in Figure 5.11 and Figure 5.12 below.



**Figure 5.11: Business development cluster 1 participants' coping-value average profile acceptance scores per sub-category**



**Figure 5.12: Business development cluster 1 participants' coping-value average profile rejection scores per sub-category**

### **5.3.3.2.1 Self-perspective sub-category**

Considering this group from a contextual self-perspective, the relatively high ‘strategic-materialistic’ (15) thematic coping-value system is observed. From a rejection score perspective compared to the survey average, note the relatively high rejection (21.8% more) for the ‘strategic-materialistic’ thematic coping-value system.

Other score values of interest, compared to the survey average, are the comparative relatively high acceptance scores for the ‘humanistic-sensitive’ and ‘tribalistic-safety’ thematic coping-value systems and the comparative low acceptance for ‘authoritative-conformist’ and ‘integrative-systemic’ thematic coping-value systems. From a rejection perspective, compared to the survey average, there are relatively high rejection scores for the ‘egocentric-exploitative’, ‘authoritative-conformist’ and ‘humanistic-sensitive’ and relatively low rejection of the ‘tribalistic-safety’, ‘integrative-systemic’ and ‘experientialistic-holistic’ thematic coping-value systems.

From a self-perspective, the observation is that this group is in an ‘strategic-materialistic’ intensity transition stage based on intensity observed by the relatively high ‘strategic-materialistic’ acceptance combined with relatively high rejection scores if compared to the survey average. Note a relatively high rejection for the less complex ‘authoritative-conformist’ and more complex ‘humanistic-sensitive’ thematic coping-value systems that precede and follow the ‘strategic-materialistic’ thematic coping-value system. This relatively high rejection of the ‘authoritative-conformist’ and ‘humanistic-sensitive’ thematic coping-value systems can be an indication that this group may be aware of these thematic coping-value systems, but actively reject these thematic coping-value systems.

Compared to the survey average, the relatively low ‘integrative-systemic’ intensity based on the below-average acceptance with the relatively low rejection seems to be an indicator of latency towards this more complex thematic coping-value systems.

In summary, from the contextual self-perspective, the interpretation is that this group can be in an ‘strategic-materialistic’ transition stage, rejecting the preceding ‘authoritative-conformist’ and following ‘humanistic-sensitive’ thematic coping-value systems. There seems to be latency towards more complex thematic coping-value systems, including second-tier ‘integrative-systemic’ and ‘experientialistic-holistic’ coping-value systems thinking.

### **5.3.3.2.2 Work-perspective sub-category**

Considering this group from a contextual work-perspective, the relatively high ‘authoritative-conformist’ (15) thematic coping-value system with a comparatively high rejection score (23.54% more) compared to the survey average is observed. Other score values of interest, compared to the survey average, are relatively high rejection of the ‘egocentric-exploitative’, and relatively low rejection and acceptance of the ‘integrative-systemic’ and ‘experientialistic-holistic’ thematic coping-value systems.

From a work-perspective, the observation that this group can be in a ‘authoritative-conformist’ intensity transition stage based on the relatively high ‘authoritative-conformist’ acceptance combined with relatively high rejection scores, if compared to the survey average. The relatively high rejection of the ‘egocentric-exploitative’ thematic coping-value system can be an indication that this group is aware of the ‘egocentric-exploitative’ thematic coping-value system, but actively rejects this thematic coping-value system.

Compared to the survey average, the relatively low intensity in the ‘integrative-systemic’, based on low acceptance and relatively low rejection and the relatively low intensity of the ‘experientialistic-holistic’ thematic coping-value system, based on low rejection and normal acceptance, can be an indication of latency towards these more complex second-tier thematic value systems.

In summary, from the contextual work-perspective, the interpretation is that this group can be in a ‘authoritative-conformist’ intensity transition stage. It seems that transition manifests in first-tier levels of thinking, with latency toward the second-tier thinking.

#### **5.3.2.3.3 World-perspective sub-category**

Considering this group from a contextual world-perspective, the relatively high ‘authoritative-conformist’ (10.86) and ‘strategic-materialistic’ (8.29) thematic coping-value systems are observed. From a rejection score perspective compared to the survey average, note that the ‘authoritative-conformist’ thematic coping-value system rejection is basically the same as for the survey average and there is a relatively high rejection score for the ‘strategic-materialistic’ thematic coping-value system. Other score values of interest, compared to the survey average, are the relatively high rejection of the ‘integrative-systemic’, and relatively low rejection of the ‘tribalistic-safety’ thematic coping-value systems. From an acceptance perspective, note the comparative low acceptance of the ‘humanistic-sensitive’, ‘integrative-systemic’ and ‘experientialistic-holistic’ thematic coping-value systems.

From a world-perspective, this group seems to be in a transition stage between the sacrificial ‘authoritative-conformist’ and expressive ‘strategic-materialistic’ thematic coping-value systems. The comparative high ‘strategic-materialistic’ intensity based on the rejection scores seems to support an ‘strategic-materialistic’ transition stage. The relatively low intensity in the ‘tribalistic-safety’ thematic coping-value system, based on normal acceptance, low rejection, can be an indication that thinking associated with this coping-value system is replaced by a more complex thinking system. The relatively low intensity in the ‘humanistic-sensitive’ (based on low acceptance and normal rejection), ‘integrative-systemic’ (based on low acceptance, high rejection) and ‘experientialistic-holistic’ (based on low acceptance and normal rejection) thematic coping-value systems, can indicate latency. Hence, it is possible that this group does not associate with the problems and life conditions of this second tier (‘integrative-systemic’, ‘experientialistic-holistic’) thematic coping-value systems.

In summary, from the contextual world-perspective, the interpretation is that this group can be in a 'authoritative-conformist', 'strategic-materialistic' transition stage. It seems that transition is between first-tier levels of thinking, with latency towards the second-tier thinking.

### **5.3.3.3 Summary of cluster group 1's identified average thematic coping-value profile**

From Figures 5.10, 5.11 and 5.12 above and as summarised in Table 5.4 below, the interpretation is that this group's 'authoritative-conformist' thematic coping-value transition predominantly arises from their work-perspective and world-perspective, i.e. how they cope with their day-to-day operational activities and interaction with society. From a self- and world-perspective, the transition seems to be towards the 'strategic-materialistic' thematic coping-value system. Considering the relatively low 'authoritative-conformist' in the self-perspective, it seems that there may be a transition from 'authoritative-conformist', currently strongly applied in the work- and social-perspective to an early awareness and transition into the 'strategic-materialistic' thematic coping-value system in the self-perspective.

**Table 5.4: Cluster group 1 – Thematic coping-value profile summary**

<b>Associate with moderate growth – Cluster group 1 – Thematic coping-value profile summary</b>			
<i>Overall profile:</i> Transition between sacrificial 'authoritative-conformist' and expressive 'strategic-materialistic'  Latency towards 'humanistic-sensitive' & 'integrative-systemic' & 'experientialistic-holistic'	<i>Self-perspective:</i> Transition 'strategic-materialistic' based on intensity  Rejects 'egocentric-exploitative' & 'authoritative-conformist' & 'humanistic-sensitive'  Latency towards 'integrative-systemic' & 'experientialistic-holistic'	<i>Work-perspective:</i> Transition 'authoritative-conformist' based on intensity  Rejects 'egocentric-exploitative'  Latency towards 'integrative-systemic' & 'experientialistic-holistic'	<i>World-perspective:</i> Transition between sacrificial 'authoritative-conformist' and expressive 'strategic-materialistic'  Latency towards 'humanistic-sensitive' & 'integrative-systemic' & 'experientialistic-holistic'

The perceived disassociation with the 'egocentric-exploitative' thematic coping-value seems to arise from their work-perspective, i.e. how they cope with their day-to-day operational activities and to some extent in the self-perspective.

The possible replacement of the less complex 'tribalistic-safety' thematic coping-value system by a more complex thinking system seems to be present in all three of the contextual profiles. Possible latency towards the more complex thematic coping-value systems, including second-tier 'integrative-systemic' and 'experientialistic-holistic' coping-value systems thinking seems to be present in all three of the contextual profiles.

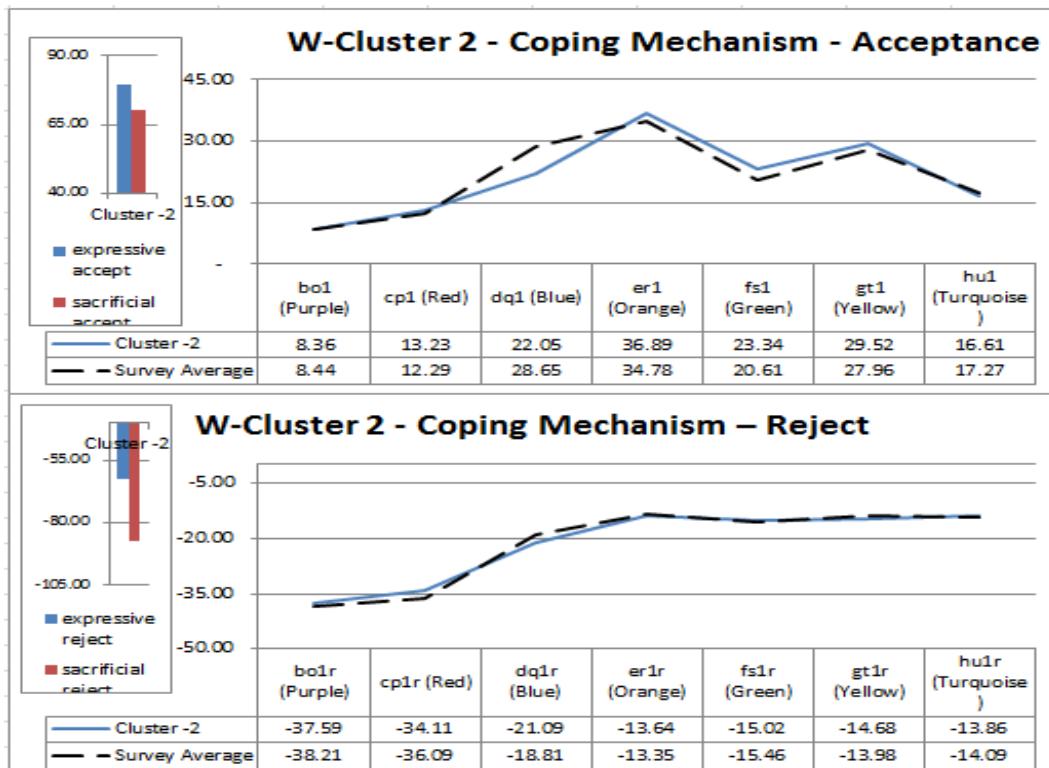
The interpretation is that this cluster group can be in a 'authoritative-conformist'/'strategic-materialistic' transient stage. Transition seems to be between first-tier levels of thinking, with latency towards second-tier thinking. From a change openness perspective, using a classification scale of open, arrest, closed, considering this group's willingness to consider other thematic

coping-value systems, it seems from the intensity nature of the transition stage, with relative dissonance in the ‘authoritative-conformist’, and the latency towards second-tier thinking, that this group may be in an arrest/closed state.

### 5.3.4 Average thematic coping-value profile of the business development cluster group 2

#### 5.3.4.1 Cluster average profile of acceptance and rejection scores

The participants of the business development cluster group 2, associated themselves with the thematic coping-value pattern represented in Figure I.3 in Appendix I.



**Figure 5.13: Business development cluster 2 participants' coping-value average profile scores**

From Figure 5.13, the observation, that this group associated themselves with the ‘strategic-materialistic’ thematic coping-value (score 36.89). Secondary to this association, there seems to be an association to the ‘integrative-systemic’ thematic coping-value (score 29.52). This is followed by a preference in this group towards the thematic coping-value profile of ‘humanistic-sensitive’ (score 23.34) and ‘authoritative-conformist’ (score 22.05). In terms of the ‘authoritative-conformist’ thematic coping-value, this group’s relative association towards the ‘authoritative-conformist’ thematic coping-value seems to be 29.9 percent lower than the average total association shown by the total survey population.

As for the other thematic coping-values, all scores are relatively lower with 'experientialistic-holistic' (score 16.61), 'egocentric-exploitative' (score 13.23) and 'tribalistic-safety' (score 8.36).

Based on the guidance of Beck and Cowan (2006), a peak stage is usually identified by a relatively strong core thematic coping-value system supported by two or three softer thematic coping-values. From the above profile, the interpretation is that this group seems to prefers the predominant 'strategic-materialistic' thematic coping-value system of thinking, supported by the expressive 'integrative-systemic' and the sacrificial 'humanistic-sensitive', 'authoritative-conformist' thematic coping-value systems of thinking.

Considering the rejection profile of the thematic coping-values, the observation is that this group's rejection profile is relatively similar to the average rejection profile of the total survey population. From a second-tier thinking perspective, it seems that there is an awareness of this level of thinking, based on the relatively high acceptance of the 'integrative-systemic' thematic coping-value system of thinking that supports the peak 'strategic-materialistic' first-tier level of thinking.

In summary, the interpretation is that this cluster group can be in a peak 'strategic-materialistic' thematic coping-value system stage, and it seems to include support from the early awareness of second-tier 'integrative-systemic' thematic coping-value system.

From a change openness perspective, using a classification scale of open, arrest, closed, considering this group's willingness to consider in a supportive function other thematic coping-value systems, it seems from the supportive nature of the peak 'strategic-materialistic' stage, that this group may be in an arrest/closed status.

#### **5.3.4.2 Group 2 Thematic coping-value profile: sub-category influences**

The participants of the business development cluster group 2, associated themselves with the thematic coping-value pattern, divided into the following sub-categories in terms of their self-perspective, work-perspective and world-perspective as represented in Figure 5.14 and Figure 5.15 below.

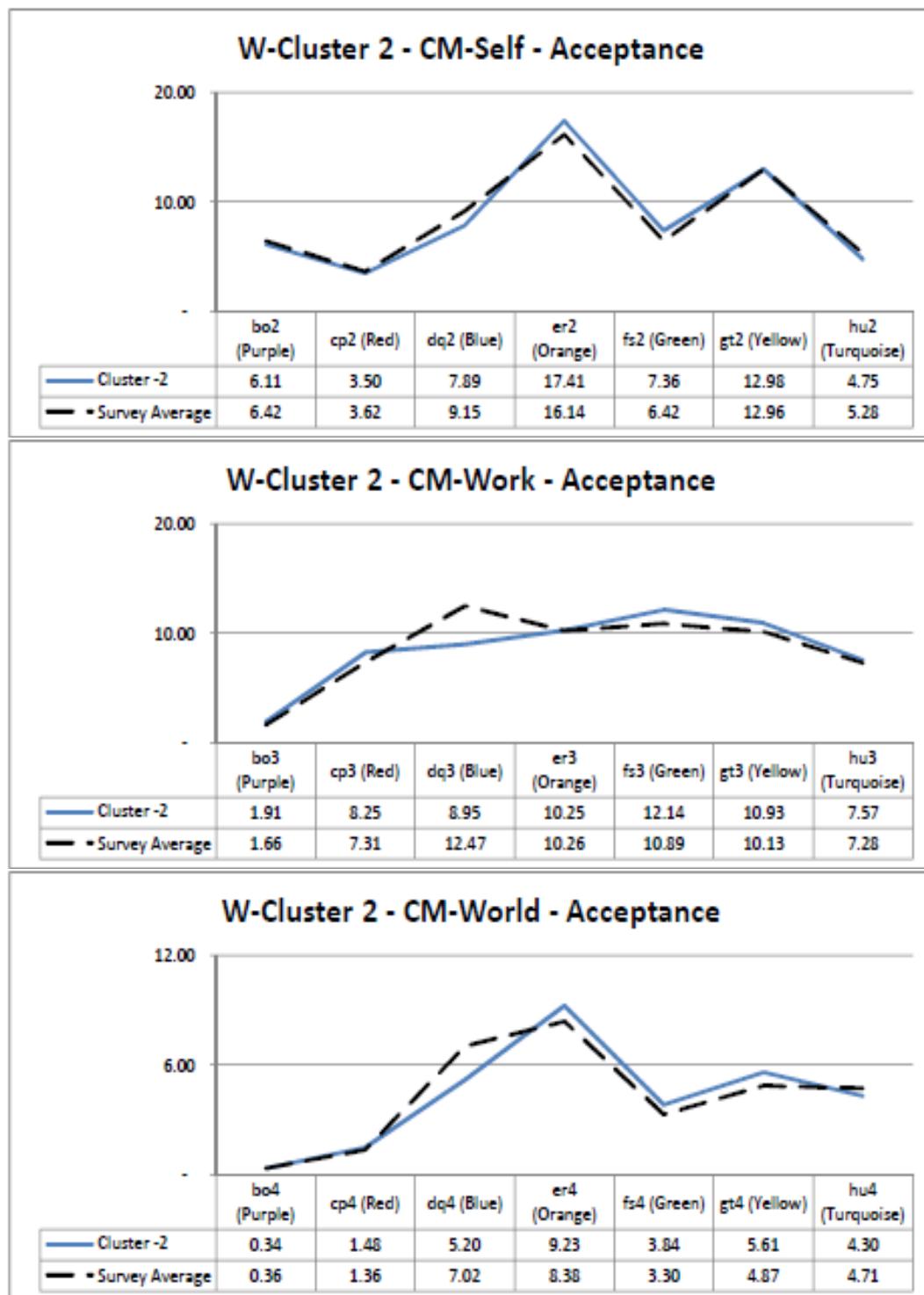
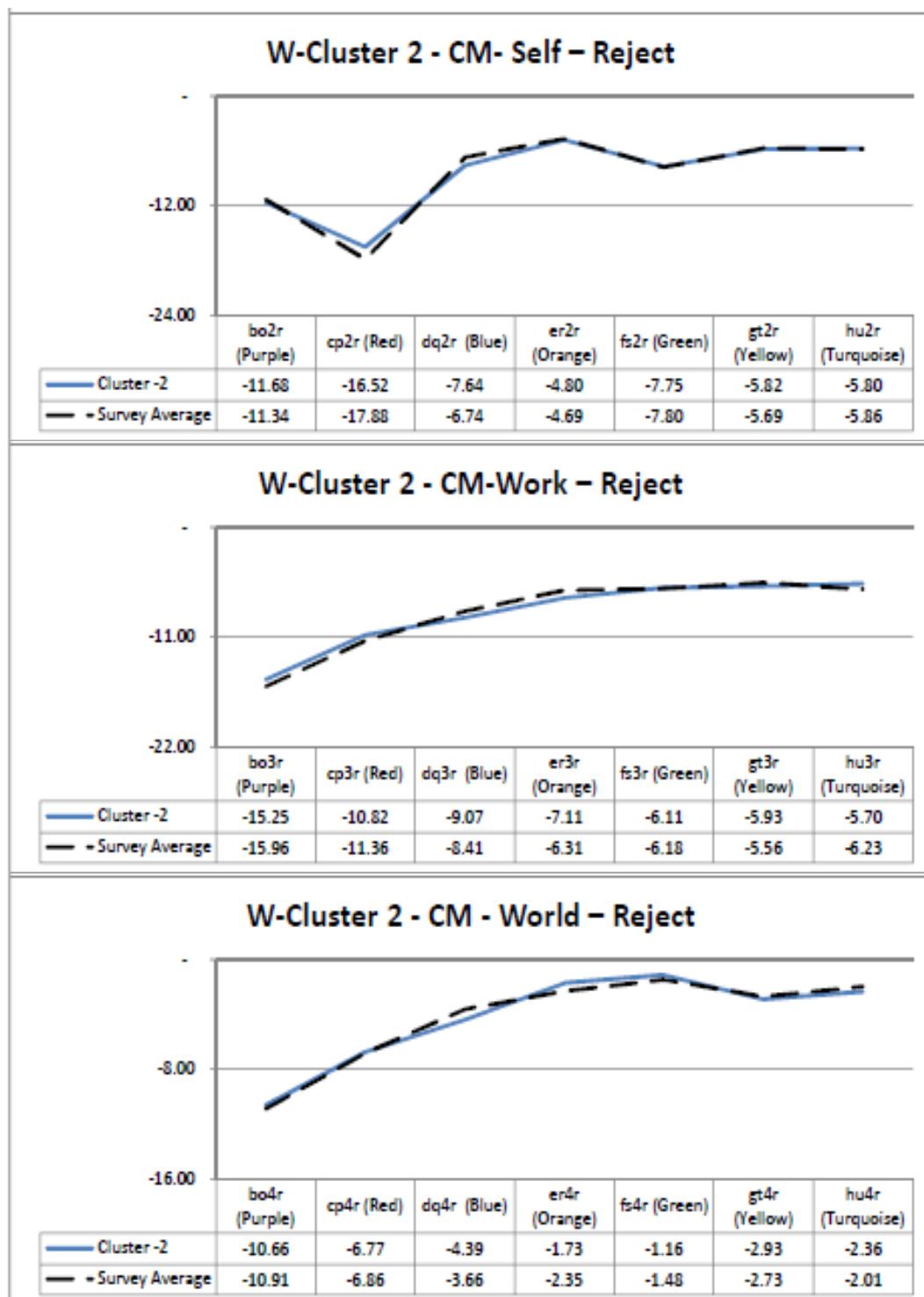


Figure 5.14: Business development cluster 2 participants' coping-value average profile acceptance scores per sub-category



**Figure 5.15: Business development cluster 2 participants' coping-value average profile rejection scores per sub-category**

#### **5.3.4.2.1 *Self-perspective sub-category***

When considered from the contextual self-perspective, observe the comparative high score values for the ‘strategic-materialistic’ (17.41), supported by the undertones of the ‘integrative-systemic’ (12.98) thematic coping-value system. Considering the rejection scores, the intensity for these thematic coping-values systems seems to be relatively similar to the total survey average.

From the contextual self-perspective, the interpretation that this group may be in a first-tier ‘strategic-materialistic’ peak thematic coping-value system stage, supported by the second-tier ‘integrative-systemic’ thematic coping-value system.

#### **5.3.4.2.2 *Work-perspective sub-category***

From a contextual work-perspective, observe the comparative high score values of the ‘humanistic-sensitive’ (12.14), ‘integrative-systemic’ (10.93) and ‘strategic-materialistic’ (10.25) thematic coping-values systems. Considering the rejection scores, the intensity for these thematic coping-values systems seems to be relatively similar to the total survey average. Other score values of interest are the relatively low acceptance scores for the ‘authoritative-conformist’ thematic coping-value system if compared to the survey average.

From a work-perspective, the interpretation that this group may be in a peak ‘humanistic-sensitive’ sacrificial first-tier coping-value system stage supported by the expressive coping-values of the lower complex first-tier ‘strategic-materialistic’ and the more complex second-tier ‘integrative-systemic’ thematic coping-value systems.

#### **5.3.4.2.3 *World-perspective sub-category***

From a contextual world-perspective, observe the comparative high ‘strategic-materialistic’ (9.23) thematic coping-value system, with a comparative low (35.83% lower) rejection score if compared to the survey average. Other score values of interest, compared to the survey average, are the relatively low acceptance scores for the ‘authoritative-conformist’ (35% lower) and relatively high acceptance score (13.19% more) for the ‘integrative-systemic’ thematic coping-value system. From a rejection perspective, note the relatively high rejection score (16.62% more) for the ‘authoritative-conformist’ thematic coping-value system.

From a world-perspective, this group seems to be in an ‘strategic-materialistic’ peak expressive first-tier coping-value stage, based on relatively high association as can be observed from the relatively high acceptance score and relatively low rejection scores for the ‘strategic-materialistic’ thematic coping-value system. The relatively high rejection of the ‘authoritative-conformist’ thematic coping-value system is an indication that this group is aware of the ‘authoritative-conformist’ thematic coping-value system, but actively rejects this thematic coping-value system.

### **5.3.4.3 Summary of cluster group 2's identified average thematic coping-value profile**

From Figures 5.13, 5.14 and 5.15 above and as summarised in Table 5.5 below, the interpretation that this group's association with the 'strategic-materialistic' thematic coping-value and supportive 'integrative-systemic' thematic coping-value predominantly arises from their own self-perspective and possible world-perspective, i.e. their interaction with society.

**Table 5.5: Cluster group 2 – Thematic coping-value profile summary**

<b>Association low-growth (Disengaged) – Cluster group 2 – Thematic coping-value profile summary</b>			
<i>Overall profile:</i> Peak 'strategic-materialistic' with possible 'authoritative-conformist' & 'humanistic-sensitive' & 'integrative-systemic' support system.	<i>Self-perspective:</i> Peak 'strategic-materialistic' with possible 'integrative-systemic' support system.	<i>Work-perspective:</i> Peak 'humanistic-sensitive' with possible 'strategic-materialistic' & 'integrative-systemic' support system.	<i>World-perspective:</i> Peak 'strategic-materialistic' based on strong association Rejects 'authoritative-conformist'

The 'humanistic-sensitive' thematic coping-value system seems to arise predominantly from their work-perspective, i.e. how they cope with their day-to-day operational activities.

The relatively lower-than-average association of the 'authoritative-conformist' coping-value compared to the average of the whole survey sample seems to arise from the work-perspective and world-perspective, i.e. how they cope with their day-to-day operational activities and interaction with society.

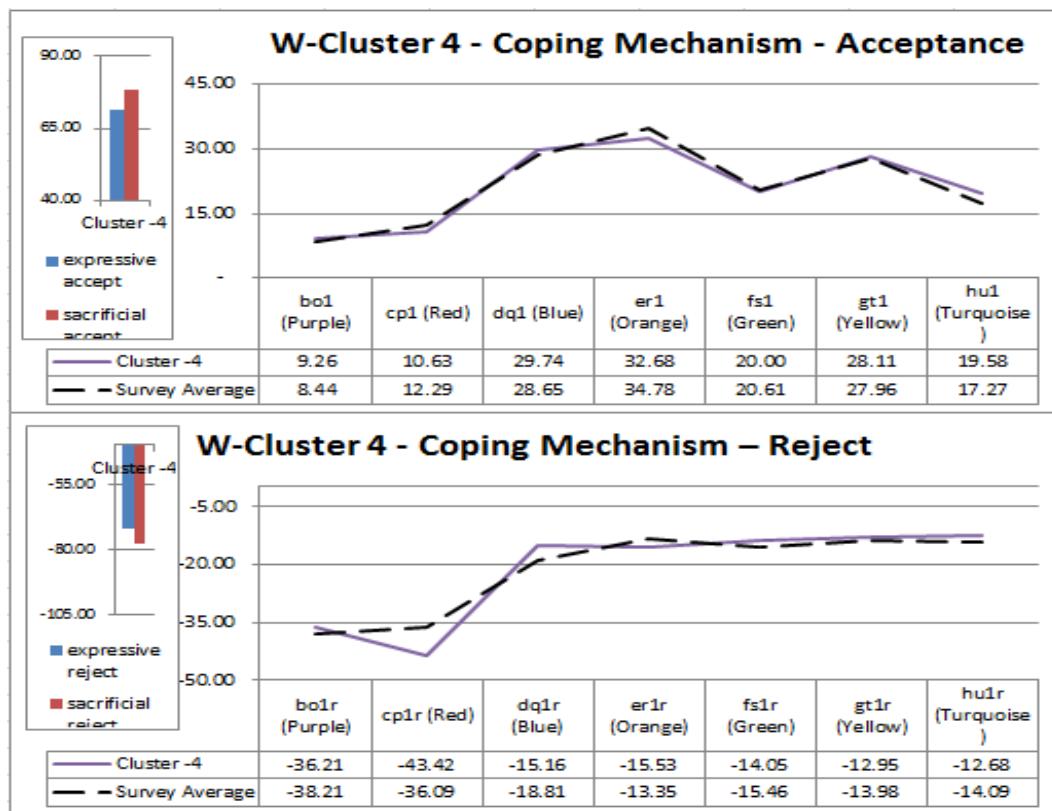
It is interpreted that this cluster group can be in a possible peak 'strategic-materialistic' thinking stage supported by 'authoritative-conformist'/ 'humanistic-sensitive' / 'integrative-systemic'. This group seems to peak in the first-tier with possible support from the second-tier 'integrative-systemic' thematic coping-value system of thinking. In their work-perspective there seems to be an up-stretch to the sacrificial 'humanistic-sensitive' thematic coping-value system of thinking, stretching up from the expressive 'strategic-materialistic' thematic coping-value system that is preferred in the self-perspective and world-perspective.

From a change openness perspective, using a classification scale of open, arrest, closed, considering this group's willingness to consider other thematic coping-value systems in a supportive nature, it seems from the supportive nature of the peak 'strategic-materialistic' stage, that this group may be in an arrest/closed status.

### **5.3.5 Average thematic coping-value profile of the business development cluster group 4**

#### **5.3.5.1 Cluster average profile of acceptance and rejection scores**

The participants of the business development cluster group 4, associated themselves with the thematic coping-value pattern represented in Figure I.4 in Appendix I.



**Figure 5.16: Business development cluster 4 participants' coping-value average profile scores**

From Figure 5.16, the observation that this group associated themselves with three of the thematic coping-values, being 'strategic-materialistic' (score 32.68), 'authoritative-conformist' (score 29.74) and 'integrative-systemic' (score 28.11). Secondary to this association there seems to be an association in this group towards the thematic coping-value profile of 'humanistic-sensitive' (score 20.00) and 'experientialistic-holistic' (score 19.58).

As for the association with the other thematic coping-values, all scores are relatively lower with 'egocentric-exploitative' (score 10.63) and 'tribalistic-safety' (score 9.26).

Considering the rejection scores in relation to the association scores, the relatively low rejection (14.03% lower) of the 'authoritative-conformist' thematic coping-value, compared to the average total rejection score for the total survey population, this can be an indicator of a possible strong association with the 'authoritative-conformist' thematic coping-value, hence a possible peak stage.

In accordance to the values test overview (Beck, 1992), a case of a high acceptance and low rejection is associated with a strong affirmation to a possible way of thinking. Using the guidance from Beck and Cowan (2006), a transition stage can be identified by a combination of two core thematic coping-value systems from an expressive and sacrificial nature.

Seeing that the potential ‘authoritative-conformist’ peak forms part of a potential transition stage between the sacrificial ‘authoritative-conformist’ and expressive ‘strategic-materialistic’ and ‘integrative-systemic’ thematic coping-value systems, from a classification perspective the interpretation that this group can be in a transition stage between the sacrificial ‘authoritative-conformist’ and expressive ‘strategic-materialistic’ and ‘integrative-systemic’ thematic coping-value systems.

Considering the rejection values of the other thematic coping-values, of interest is the ‘egocentric-exploitative’ score compared to the average total rejection for the whole survey sample group. This group’s rejection scores of the ‘egocentric-exploitative’ thematic coping-value, is 16.8 percent more than the average total rejection for the total survey population. Compared to their relatively low acceptance score for the ‘egocentric-exploitative’ (10.63) thematic coping-value, this relatively high comparative rejection can be a possible indicator of disassociation with the ‘egocentric-exploitative’ thematic coping-value.

The values test overview (Beck, 1992) indicated that usually the ‘egocentric-exploitative’ receives high rejection scores, as people often interpret this way of thinking as ‘bad’ and as a negative aspect of personality behaviour. In general, people feel that this raw egocentrism is very unlike them and opposes their own moral codes and value systems (Beck, 1992).

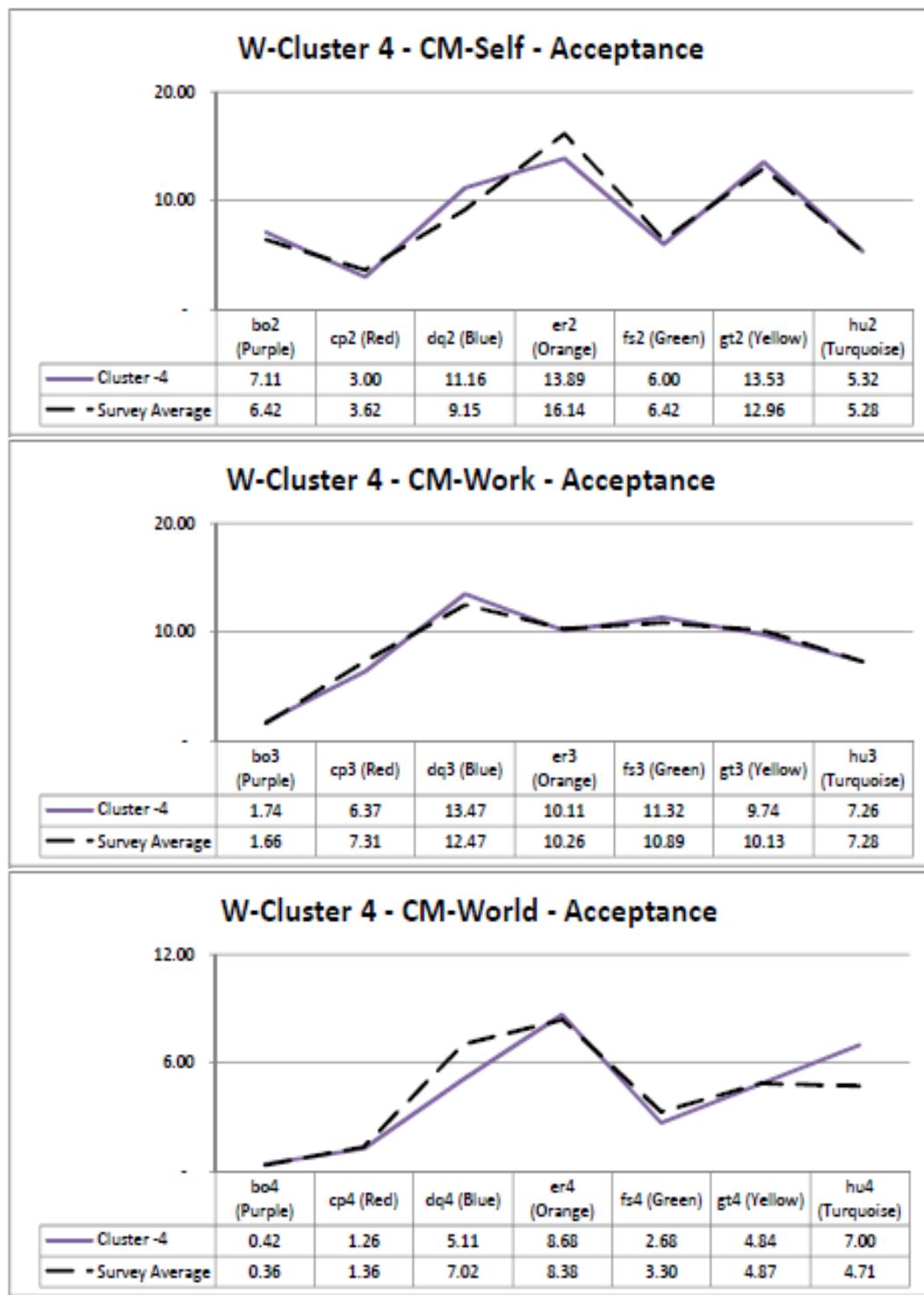
From a second-tier thinking perspective, the interpretation that there is an awareness of this level of thinking, based on the relatively high acceptance of the ‘integrative-systemic’ and ‘experientialistic-holistic’ thematic coping-value systems of thinking.

In summary, the interpretation is that this group can be in a sacrificial ‘authoritative-conformist’ and expressive ‘strategic-materialistic’/‘integrative-systemic’ transition stage at the more complex spectrum of the first-tier thematic coping-value systems, influenced by the ‘integrative-systemic’ second-tier thematic coping-value system of thinking.

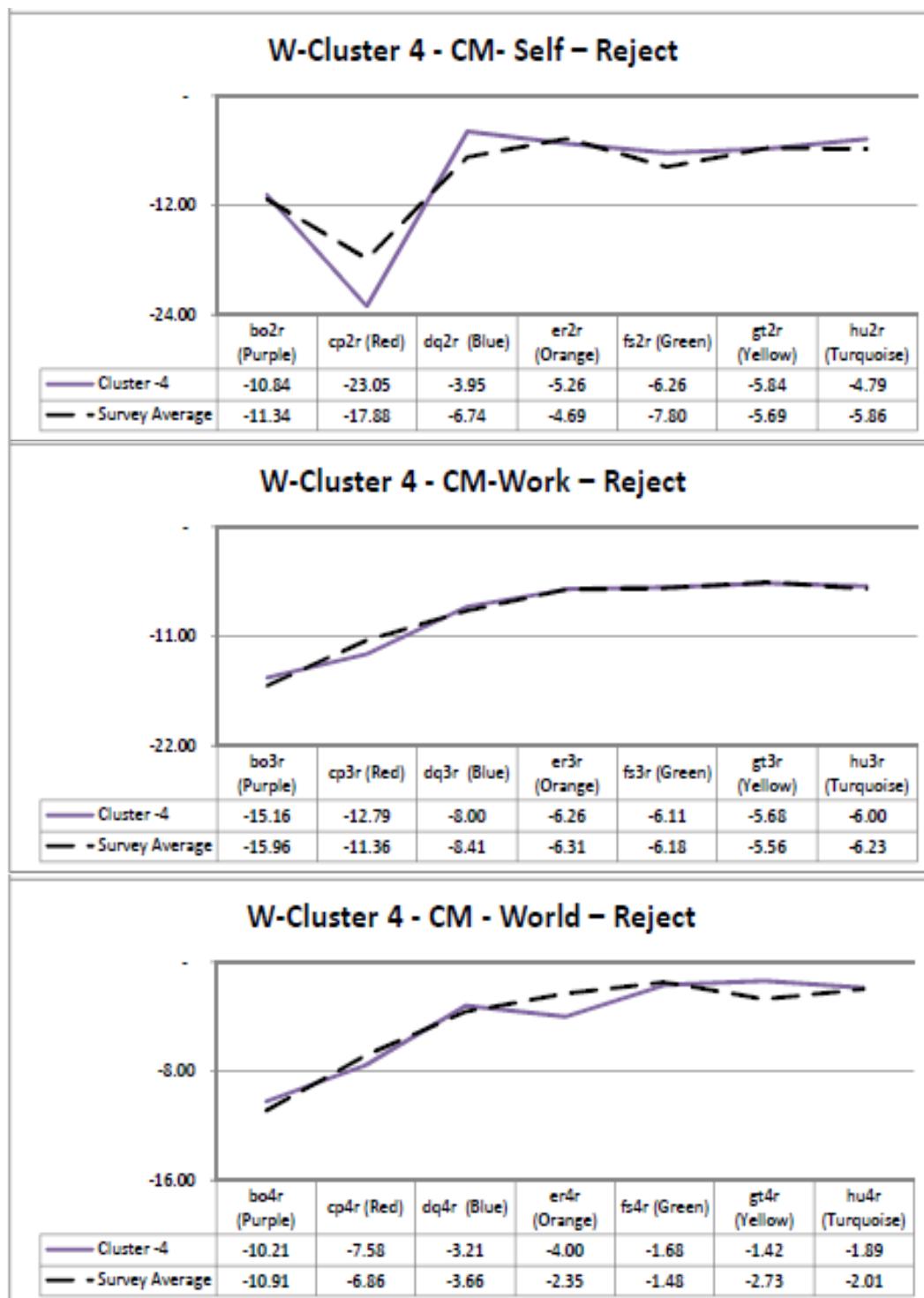
From a change openness perspective, using a classification scale of open, arrest, closed, considering this group’s transition stage between thematic coping-value systems, as indicated by the possible transition stage between an expressive and sacrificial system, with possible second-tier thinking support, it seems that this group may be in an open/arrest status.

#### **5.3.5.2 Group 4 Thematic coping-value profile: sub-category influences**

The participants of the business development cluster group 4, associated themselves with the thematic coping-value pattern, divided into the following sub-categories in terms of their self-perspective, work-perspective and world-perspective as represented in Figure 5.17 and Figure 5.18 below.



**Figure 5.17: Business development cluster 4 participants' coping-value average profile acceptance scores per sub-category**



**Figure 5.18: Business development cluster 4 participants' coping-value average profile rejection scores per sub-category**

#### **5.3.4.2.1 Self-perspective sub-category**

When considered from the contextual self-perspective, observe the relatively high scores in the ‘strategic-materialistic’ (13.89), ‘integrative-systemic’ (13.53) and a possible supportive ‘authoritative-conformist’ (11.16) thematic coping-value systems. From a rejection score perspective, compared to the survey average, observe the relatively low rejection (70.63% less) for the ‘authoritative-conformist’ thematic coping-value system. The ‘strategic-materialistic’ and ‘integrative-systemic’ rejection scores compare relatively well to the survey average scores.

Other score values of interest are the relatively high rejection scores (22.42% more) for the ‘egocentric-exploitative’ and the relatively low rejection (24.60% less) for the ‘humanistic-sensitive’ thematic coping-value systems compared to the survey average.

From a contextual self-perspective, based on the strong association and normal rejection scores, the interpretation is that this group may be in a transition stage between the sacrificial ‘authoritative-conformist’ and expressive ‘strategic-materialistic’ and ‘integrative-systemic’ thematic coping-value systems, rejecting the ‘egocentric-exploitative’ thematic coping-value system. The relative high acceptance of the ‘integrative-systemic’ thematic value system, indicates that this group may be aware of second-tier level of thinking.

#### **5.3.5.2.2 Work-perspective sub-category**

When considered from the contextual work-perspective, observe the relatively high scores in the ‘authoritative-conformist’ (13.47), and possible supportive ‘humanistic-sensitive’ (11.32), ‘strategic-materialistic’ (10.11) and ‘integrative-systemic’ (9.74) thematic coping-value systems. From a rejection score perspective, compared to the survey average, observe the ‘authoritative-conformist’, ‘humanistic-sensitive’, ‘strategic-materialistic’ and ‘integrative-systemic’ thematic coping-value systems are relatively the same as the total survey average.

Other score values of interest are the relatively high rejection scores (11.18% more) for the ‘egocentric-exploitative’ thematic coping-value system compared to the survey average.

From a contextual work-perspective the interpretation is that this group is peaking in the ‘authoritative-conformist’ thematic value system, based on the strong association with ‘authoritative-conformist’ and the three supportive more complex ‘humanistic-sensitive’, ‘strategic-materialistic’ and ‘integrative-systemic’ thematic coping-value systems, rejecting the ‘egocentric-exploitative’ thematic coping-value system. The relative high acceptance of the ‘integrative-systemic’ thematic coping-value system indicates that this group may be aware of second-tier level of thinking.

### **5.3.5.2.3 World-perspective sub-category**

When considered from the contextual world-perspective, the relatively high scores in the ‘strategic-materialistic’ (8.68), and possible supportive ‘experientialistic-holistic’ (7) and ‘authoritative-conformist’ (5.11) thematic coping-value systems is noted. From a rejection score perspective, compared to the survey average, the relatively high (41.25% more) rejection of the ‘strategic-materialistic’ thematic coping-value system is noted.

Other score values of interest are the relatively low rejection scores for the ‘integrative-systemic’ thematic coping-value system compared to the survey average.

From a world-perspective, the interpretation that this group may be in an intensity ‘strategic-materialistic’ transition stage, based on the strong association and high rejection scores of the ‘strategic-materialistic’ thematic coping-value system.

### **5.3.5.3 Summary of cluster group 4’s identified average thematic coping-value profile**

From Figures 5.16, 5.17 and 5.18 above and as summarised in Table 5.6 below, the interpretation is that this group’s association with the ‘authoritative-conformist’ thematic coping-value is from the transition in their own self-perspective and the strong association to the ‘authoritative-conformist’ thematic coping-value system of thinking in their work-perspective, i.e. how they cope with their day-to-day operational activities.

**Table 5.6: Cluster group 4 – Thematic coping-value profile summary**

<b>Association low-growth (Disengaged) – Cluster group 4 – Thematic coping-value profile summary</b>			
<i>Overall profile:</i> Transition between sacrificial ‘authoritative-conformist’ and expressive ‘strategic-materialistic’ & ‘integrative-systemic’ Rejects ‘egocentric-exploitative’	<i>Self-perspective:</i> Transition between sacrificial ‘authoritative-conformist’ and expressive ‘strategic-materialistic’ & ‘integrative-systemic’ Rejects ‘egocentric-exploitative’	<i>Work-perspective:</i> Peak ‘authoritative-conformist’ with, possible ‘strategic-materialistic’ & ‘humanistic-sensitive’ & ‘integrative-systemic’ support system. Rejects ‘egocentric-exploitative’	<i>World-perspective:</i> Transition ‘strategic-materialistic’ based on intensity

The association with the ‘strategic-materialistic’ thematic coping-value seems predominantly to arise from their own self-perspective and world-perspective, i.e. their interaction with society.

It seems that the ‘integrative-systemic’ thematic coping-value arises from the self-perspective and if compared to the average coping-value scores of the whole survey sample, it seems that the ‘experientialistic-holistic’ thematic coping-value arises predominantly from their world-perspective, i.e. their interaction with society. As for their perceived disassociation with the ‘egocentric-exploitative’ thematic coping-value, this seems to arise from their own self-perspective and work-perspective.

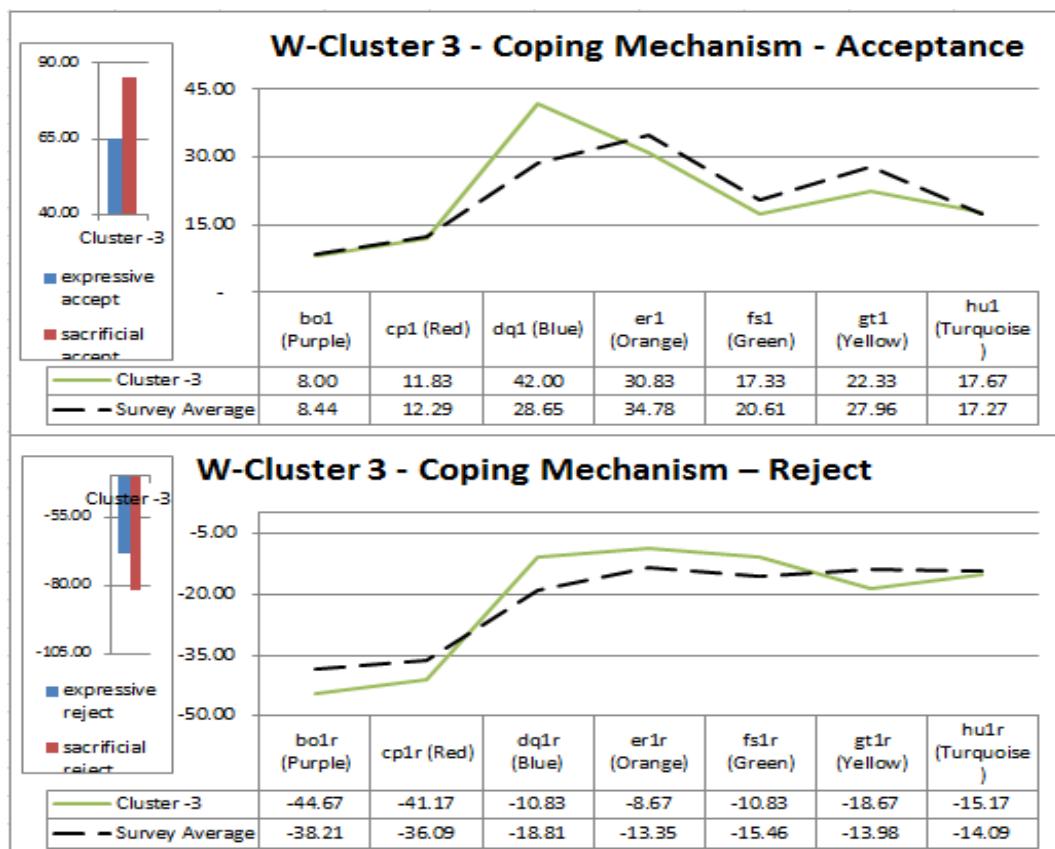
The interpretation is that this cluster group can be in a ‘authoritative-conformist’/‘strategic-materialistic’/‘integrative-systemic’ transient stage. The ‘integrative-systemic’ and in some cases the relative high acceptance for ‘experientialistic-holistic’, can be an indicator of possible first-tier higher complexity transient supported by possible second-tier thinking. It seems that from a self-perspective, this group rejects the ‘egocentric-exploitative’ thematic coping-value system, as a possible indication that they feel that any egocentrism is very unlike them and opposing to their own moral codes and value system.

From a change openness perspective, using a classification scale of open, arrest, closed, considering this group’s willingness to consider other thematic coping-value systems, as indicated by the possible transition stage between an expressive and sacrificial system, with possible second-tier thinking support, this group may be in an open/arrest status.

### 5.3.6 Average thematic coping-value profile of the business development cluster group 3

#### 5.3.6.1 Cluster average profile of acceptance and rejection scores

The participants of the business development cluster group 3, associated themselves with the thematic coping-value pattern represented in Figure I.5 in Appendix I.



**Figure 5.19: Business development cluster 3 participants' coping-value average profile scores**

From Figure 5.19, the observation is that this group associated themselves with the thematic coping-value ‘authoritative-conformist’ (42.00). Secondary to this association there seems to be a preference in this group towards the thematic coping-value profile of ‘strategic-materialistic’ (score 30.83).

Considering the rejection scores in relation to the association scores, the relatively low rejection (73.68% lower) of ‘authoritative-conformist’, compared to the average total rejection scores for the total survey population, can be a possible indicator of a peak stage based on the strong association with the ‘authoritative-conformist’ thematic coping-value.

The ‘strategic-materialistic’ rejection scores in relation to the association scores, also indicate a relatively low rejection score (53.97% lower) if compared to the average total rejection scores for the total survey population; this is also a possible indicator of a strong association with the ‘strategic-materialistic’ thematic coping-value.

The ‘authoritative-conformist’ association score seems to be significantly more (26.59% more) if compared to the ‘strategic-materialistic’ association score. Based on this, from a classification perspective, the interpretation is that this group can be in a peak ‘authoritative-conformist’ stage supported by the ‘strategic-materialistic’ thematic coping-value system of thinking.

This is based on the guidance of the values test overview (Beck, 1992) and the coping-view interpretation guideline (5DVS, 2014a), indicating that a relatively high acceptance and low rejection can be a possible indicator of a strong affirmation to a specific thematic coping-value system of thinking, with the possibility of being in a comfort or stable zone. Secondary and supportive to the above guidance, Beck and Cowan (2006), identified a peak stage by a relatively strong core thematic coping-value system supported by two or three softer thematic coping-values.

As for the association with the other thematic coping-values, all scores are relatively lower with ‘integrative-systemic’ (22.33 score), ‘experientialistic-holistic’ (17.67 score), ‘humanistic-sensitive’ (22.33 score) ‘egocentric-exploitative’ (score 11.83) and ‘tribalistic-safety’ (score 8.00).

Considering the rejection values of the other thematic coping-values, of interest are the ‘egocentric-exploitative’, ‘tribalistic-safety’ and ‘integrative-systemic’ scores compared to the average total rejection for the total survey population.

This group’s rejection scores of the ‘egocentric-exploitative’, ‘tribalistic-safety’ and ‘integrative-systemic’ thematic coping-values are 12.33 percent, 14.5 percent and 25.1 percent respectively more than the average total rejection for the whole survey sample group.

The values test overview (Beck, 1992) indicated that usually the ‘egocentric-exploitative’ coping-value system receives high rejection scores, as people often interpret this way of thinking as ‘bad’ and as a negative aspect of personality behaviour. In general, people feel that raw egocentrism is very unlike them and opposes their own moral codes and value systems.

As for a relatively high rejection of the 'tribalistic-safety' thematic value system, the values test overview (Beck, 1992) indicated that many people in the world of business and management find the 'tribalistic-safety' thematic value system to be quite far from their perceived self-image. Furthermore, people with a high rejection score may have real difficulty managing those who operate strongly in a 'tribalistic-safety' thematic value system. A rejection may also indicate that people moved out of the way of thinking associated with the 'tribalistic-safety' thematic value system, and focus on proving how dysfunctional this thematic value system is.

The relatively high rejection of the 'integrative-systemic' thematic value system may be an indicator of latency. This group may be aware of the 'integrative-systemic' thematic coping-value system; however, the possibility that they may actively reject this more complex second-tier level of thinking. The coping-view interpretation guideline (5DVS, 2014a) and the values test overview (Beck, 1992) indicated that a relatively low association score and relatively high rejection score can be an indication of high rejection and that people in general have a clear idea of the coping-values they associate with and/or reject.

The relatively low intensity (low acceptance and low rejecting) for the 'humanistic-sensitive' thematic system as an indicator of latency towards more complex thematic value systems. This seems to support the latency observed above relating to the more complex second-tier 'integrative-systemic' thematic coping-value system. Hence, it is possible that this group does not associate with the problems and life conditions of the more complex 'humanistic-sensitive' and second-tier 'integrative-systemic'/'experientialistic-holistic' thematic coping-value systems.

In summary, the interpretation is that this group can be peaking, based on the strong association with the first-tier 'authoritative-conformist' thematic coping-value system, with the possible support of the 'strategic-materialistic' thematic coping-value system of thinking, with latency towards the second-tier thematic coping-value systems.

From a change openness perspective, using a classification scale of open, arrest, closed, considering this group's willingness to consider other thematic coping-value systems, based on the strong association nature of the 'authoritative-conformist' peak, with possible latency towards second-tier thinking, it seems that this group may be in a closed status.

#### **5.3.6.2 Group 3 Thematic coping-value profile: sub-category influences**

The participants of the business development cluster group 3, associated themselves with the thematic coping-value pattern, divided into the following sub-categories in terms of their self-perspective, work-perspective and world-perspective as represented in Figure 5.20 below.

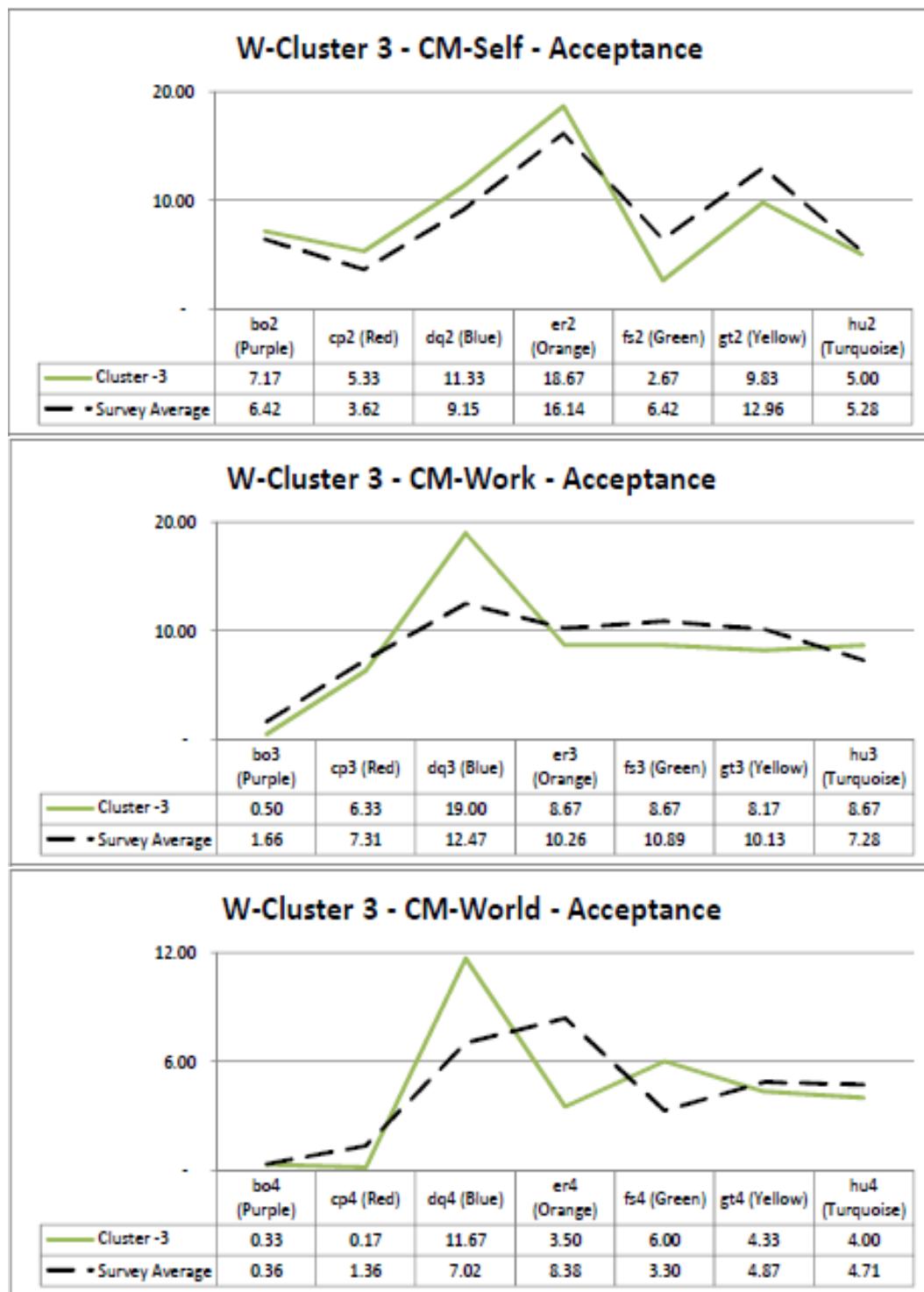


Figure 5.20: Business development cluster 3 participants' coping-value average profile acceptance scores per sub-category

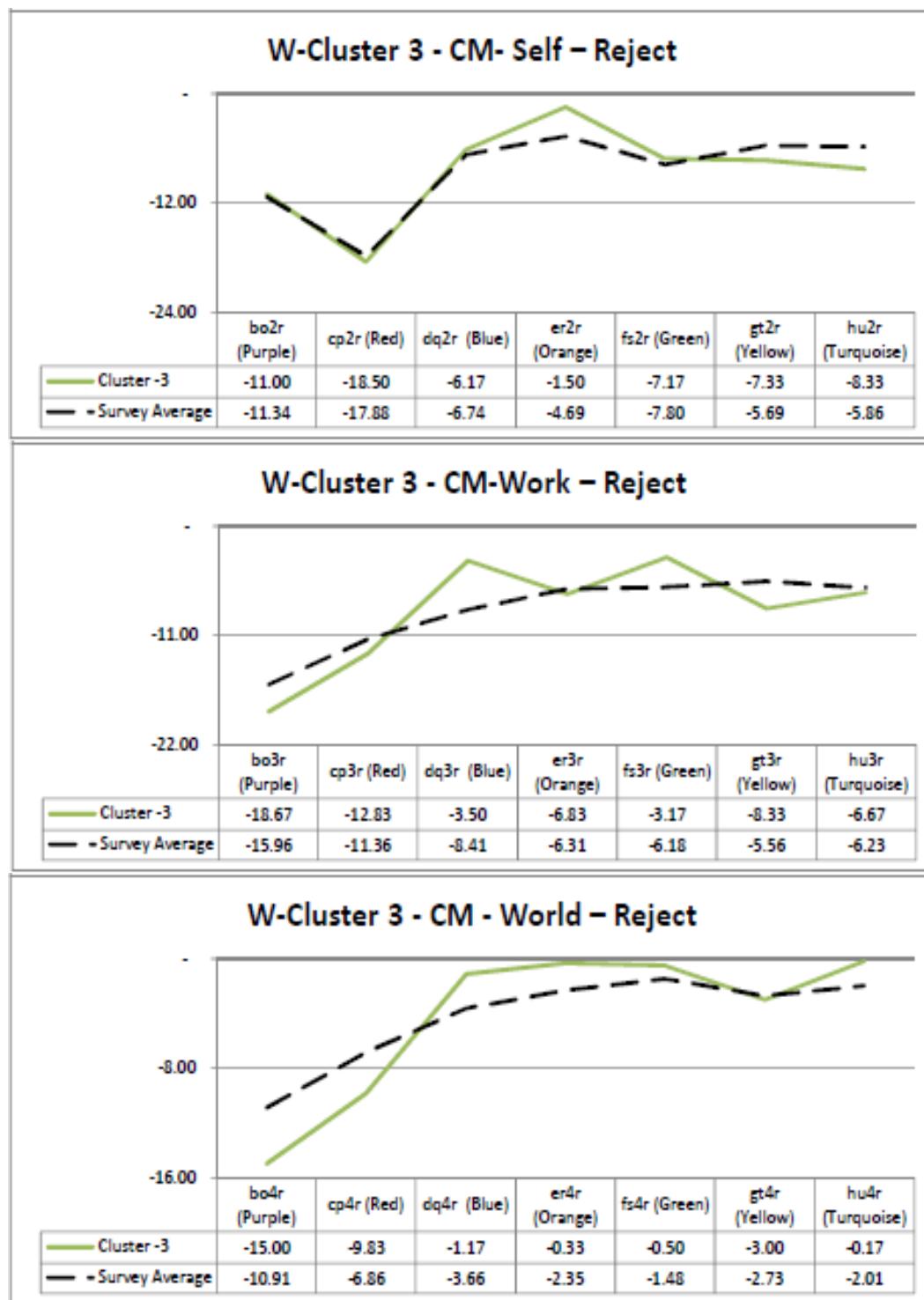


Figure 5.21: Business development cluster 3 participants' coping-value average profile rejection scores per sub-category

### **5.3.6.2.1 Self-perspective sub-category**

Considered from this group's contextual self-perspective, observe the relatively high 'strategic-materialistic' (18.67) thematic coping-value system, with a relatively low rejection score (212.66% less) if compared to the survey average. Other score values of interest, compared to the survey average, are the relatively high acceptance scores for the 'egocentric-exploitative' and 'authoritative-conformist' thematic value systems and the comparatively low acceptance scores for the 'humanistic-sensitive' and 'integrative-systemic' thematic value systems. From a rejection perspective, the relatively high rejection for the 'integrative-systemic' and 'experientialistic-holistic' thematic coping-values systems is noted.

From the self-perspective, this group seems to be in a peak 'strategic-materialistic' first-tier thematic coping-value system stage of thinking, based on the strong association as can be observed in the relatively high preference for the 'strategic-materialistic' thematic coping-value systems and comparatively low rejection scores.

With the higher-than-average acceptance of the lower complex 'authoritative-conformist' and 'egocentric-exploitative' thematic coping-value systems and low 'humanistic-sensitive' and 'integrative-systemic' acceptance, the interpretation is that this group functions in the first-tier of thematic coping-value systems, peaking in the 'strategic-materialistic' thematic coping-value system of thinking. There seems to be latency and possible rejection towards the second-tier thematic coping-value systems, as indicated by the rejection of the 'integrative-systemic' and 'experientialistic-holistic' second-tier thematic coping-value systems of thinking.

### **5.3.6.2.2 Work-perspective sub-category**

When considered from this group's contextual work-perspective, observe the relatively high 'authoritative-conformist' (19) thematic coping-value system, with a relatively low rejection score (140.28% lower) compared to the survey average. Other score values of interest, compared to the survey average, are the relatively low acceptance scores for the 'strategic-materialistic', 'humanistic-sensitive' and 'integrative-systemic' thematic coping-value systems and the comparatively low acceptance scores for the 'tribalistic-safety' and 'egocentric-exploitative' thematic coping-value systems. From a rejection perspective, the relatively high rejection for the 'tribalistic-safety', 'egocentric-exploitative' and 'integrative-systemic' thematic coping-values systems and the relatively low rejection for the 'humanistic-sensitive' thematic coping-value system was noted.

From a work-perspective, this group seems to be in a peak stage of the first-tier 'authoritative-conformist' thematic value system, based on the strong association, as can be observed in the relatively high preference for the 'authoritative-conformist' thematic coping-value systems and comparatively low rejection scores. There seems to be latency towards the more complex 'strategic-materialistic', 'humanistic-sensitive' and 'integrative-systemic' spectrum of thematic

coping-value systems based on the comparatively low acceptance and in the case of ‘humanistic-sensitive’ relatively low rejection. The interpretation is that this group functions in the first-tier of thematic coping-value systems, peaking in the ‘authoritative-conformist’ thematic coping-value system of thinking, with latency and possible rejection towards the second-tier thematic coping-value systems, as indicated by the relatively low acceptance and high rejection of the ‘integrative-systemic’ second-tier thematic coping-value system of thinking.

#### **5.3.6.2.3 World-perspective sub-category**

When considered from this group’s contextual world-perspective, observe the relatively high ‘authoritative-conformist’ (11.67) thematic coping-value system, with a relatively low rejection score (212.82% lower) compared to the survey average. Other score values of interest, compared to the survey average, are the relatively low rejection scores for the ‘strategic-materialistic’, ‘humanistic-sensitive’ and ‘experientialistic-holistic’ thematic coping-value systems and the comparatively low acceptance scores for the ‘strategic-materialistic’ and comparatively high acceptance for the ‘humanistic-sensitive’ thematic coping-value systems. The low acceptance and relatively high rejection for the ‘tribalistic-safety’ and ‘egocentric-exploitative’ thematic coping-value systems are also noted.

From a contextual world-perspective, this group seems to be in a ‘authoritative-conformist’ peak stage first-tier thematic value system, based on the strong association, as can be observed in the relatively high preference for the ‘authoritative-conformist’ thematic coping-value system and comparatively low rejection scores. The interpretation is that this group functions in the first-tier of thematic coping-value systems, peaking in the ‘authoritative-conformist’ thematic coping-value system of thinking, with latency towards the second-tier thematic coping-value systems, as indicated by the relatively low acceptance of the ‘integrative-systemic’ and ‘experientialistic-holistic’ and low rejection of the ‘experientialistic-holistic’ second-tier thematic coping-value systems of thinking.

#### **5.3.6.3 Summary of cluster group 3’s identified average thematic coping-value profile**

From Figures 5.19, 5.20 and 5.21 above and as summarised in Table 5.7 below, the interpretation that the ‘strategic-materialistic’ thematic coping-value system peaks in this group’s self-perspective, and the ‘authoritative-conformist’ thematic coping-value peaks in their work-perspective and world-perspective, i.e. how they cope with their day-to-day operational activities and interaction with society.

**Table 5.7: Cluster group 3 – Thematic coping-value profile summary**

<b>Associate low-growth (Life Style) – Cluster group 3 – Thematic coping-value profile summary</b>			
<p><i>Overall profile:</i> Peak ‘authoritative-conformist’ based on strong association, possible ‘strategic-materialistic’ support system. Rejects ‘tribalistic-safety’ &amp; ‘egocentric-exploitative’ Latency towards ‘humanistic-sensitive’ &amp; ‘integrative-systemic’ &amp; ‘experientialistic-holistic’</p>	<p><i>Self-perspective:</i> Peak ‘strategic-materialistic’ based on strong association. Latency towards ‘humanistic-sensitive’ &amp; ‘integrative-systemic’ &amp; ‘experientialistic-holistic’</p>	<p><i>Work-perspective:</i> Peak ‘authoritative-conformist’ based on strong association Rejects ‘tribalistic-safety’/‘egocentric-exploitative’ Latency towards ‘strategic-materialistic’/‘humanistic-sensitive’ &amp; ‘integrative-systemic’ &amp; ‘experientialistic-holistic’</p>	<p><i>World-perspective:</i> Peak ‘authoritative-conformist’ based on strong association Rejects ‘tribalistic-safety’/‘egocentric-exploitative’ Latency towards ‘strategic-materialistic’ &amp; ‘humanistic-sensitive’ &amp; ‘integrative-systemic’ &amp; ‘experientialistic-holistic’</p>

From a contextual perspective, it seems that this group prefers to operate in only one predominant thematic coping-value system in each contextual circumstance. As Graves (1970) indicated, this is an indication of people operating in first-tier levels of thinking, hence supporting the observation of latency towards second-tier level of thinking observed in this cluster group.

The interpretation is that this cluster group operates can be in the first-tier level of thinking, with latency towards second-tier thinking. They seem to peak in the ‘authoritative-conformist’ thematic coping-value system; however, from a contextual self-perspective, it seems that they are driven by a peak ‘strategic-materialistic’ thematic coping-value system.

From a change openness perspective, using a classification scale of open, arrest, closed, considering this group’s willingness to consider other thematic coping-value systems, it seems that this group can be classified in the closed status. This is based on their perceived first-tier level of thinking that seems to apply a strongly associated peak thematic coping-value system in contextual circumstances.

### **5.3.7 Summary on thematic coping-value profiles of the business development cluster groups**

The eight thematic coping-value systems, identified by the Graves model, can be configured into a relative infinite number of thematic coping-value system profiles, suggesting the current dynamic state of preferred dominant logic of a person or group (5DVS, 2014a).

From the survey data, using descriptive statistics and applying a systematic approach, it was possible to identify a unique thematic coping-value system profile, based on Graves’ thematic coping-value system framework, for each of the five business developmental stages identified.

**Table 5.8: Summary of the clusters' thematic coping-value profile patterns**

Clusters Groups	5				2			7	8	9	10	5.5	6	3.3	7	7.5	16			
	1							7	8	9	10									
	3	0.3			1			7			5									
	2							3.5	4	4.5	10	5.5	6	6.5	7	7.5	8			
	4				1			7	8	9	10	5.5	6	6.5	7	7.5	16			
	CG	BO	BO cp	bo CP	CP	CP dq	cp DQ	DQ	DQ er	dq ER	ER	ER fs	er FS	FS	FS gt	fs GT	GT	GT hu	gt HU	HU
	Range of Graves' thematic coping value systems																			

Table 5.8 above is a visual summary, indicating the unique configurations of thematic coping-value system profiles of each business cluster.

On face value, the configuration profiles of cluster group 5 and group 4 seem to be relatively the same, as a transition phase through the sacrificial ‘authoritative-conformist’ and expressive ‘strategic-materialistic’/‘integrative-systemic’ thematic coping-value systems. However, note the difference is in the ‘egocentric-exploitative’ and ‘humanistic-sensitive’ thematic coping-value systems. Cluster group 5 indicated tolerance for the ‘egocentric-exploitative’ and rejection for the ‘humanistic-sensitive’ thematic coping-value system. Cluster group 4 indicated a rejection for the ‘egocentric-exploitative’ thematic coping-value system and found support in the ‘humanistic-sensitive’ thematic coping-value system.

Cluster group 1 seems to be in a transition stage between the sacrificial ‘authoritative-conformist’ and expressive ‘strategic-materialistic’ thematic coping-value systems. Cluster group 3 seems to be in strong association peak of the ‘authoritative-conformist’ thematic coping-value system, rejecting the ‘egocentric-exploitative’ and ‘tribalistic-safety’ thematic coping-value systems and finding support from the contextual self-perspective in a peak stage of the ‘strategic-materialistic’ thematic coping-value system. Both cluster group 1 and group 3 seem to have latency towards the more complex second-tier coping-value systems.

Cluster group 2 seems to peak in the ‘strategic-materialistic’ thematic coping-value system with support from the ‘authoritative-conformist’, ‘humanistic-sensitive’ and second tier ‘integrative-systemic’ thematic coping-value systems.

## 5.4 SUMMARY OF DATA ANALYSIS

In summary, the survey data collected, was analysed in a systematic methodical approach.

The aim of the first methodical step was to classify businesses on an empirical basis into various business developmental stages, each with its own business structure and context characteristic configurations.

The aim of the second methodical step was to identify a thematic coping-value system profile for each business development cluster identified. This suggests the average entrepreneur's preferred coping-value system profile within a cluster, based on Graves' open system of values theory framework.

Following this systematic methodical approach, it was possible to identify five business development clusters, on an empirical basis by applying multi-variate statistical analysis to the research data. The five business development clusters identified were validated based on statistical methods and qualitatively on literature in the subject field of business developmental stages. Through the application of descriptive statistics and based on the literature in the subject field of business developmental stages, it was possible to identify configurations of business context and structure variables for each of the five identified business development clusters.

This aided the classification of the five business clusters into one of three possible signposts that can be associated with theoretical business developmental pathway. This provided an additional platform to consider the validity of the identified objective business variables of context and structure configurations that were assigned to each business developmental stage.

The aim of the next methodical step was to identify possible, subjective in nature, thematic coping-value system profiles, that can be used to represent the subjective intent of the entrepreneurs represented by each business developmental cluster group. To an extent, this step expanded on the descriptive characteristics of the five business clusters that are based on the objective in nature, business context and structure variables.

Through the application of descriptive statistics and following a systematic approach, it was possible to identify a unique average thematic coping-value system profile for the entrepreneurs who are present in each business development cluster. This thematic coping-value system profile was used to represent the subjective in nature preferred subjective intent of the entrepreneur, based on the conceptual heuristic framework of Graves' open system of values theory framework.

In summary, based on the data analyses it was possible to identify five business developmental cluster groupings, each with its own configuration of characteristics. From an objective perspective, each business cluster has characteristic configurations that pertain to the business context and structure and from a subjective perspective, each business cluster has characteristic configurations that pertain to the entrepreneurs' dominant logic, as described by the unique configuration observed in the average thematic coping-value system profile for representative entrepreneurs of the identified business development cluster.

This data analyses provided the platform for the objective of this study to explore possible deepened insight from contextual interrelationships between the objective characteristic configurations and subjective characteristic configurations identified in each of the five business cluster groups. Chapter 6 explores this possible deepened insight and/or implied interrelationship.

# CHAPTER 6

## EXPLORING POTENTIAL CONTEXTUAL INTERRELATIONSHIPS BETWEEN OBJECTIVE AND SUBJECTIVE BUSINESS CLUSTER CHARACTERISTICS

### 6.1 INTRODUCTION

This methodical step in this research study explored within each developmental business cluster group, the potential contextual interrelationship between the objective business characteristic configuration and the subjective intent characteristic configuration. The objective business characteristic configuration is represented by the business context and structure characteristics within the business cluster groups, that were identified in the data analysis in Chapter 5. The subjective characteristic configuration is represented by the characteristics identified in the literature that is associated with the average thematic coping-value system profile that was identified for the entrepreneurs who are present within each of the business developmental cluster groups.

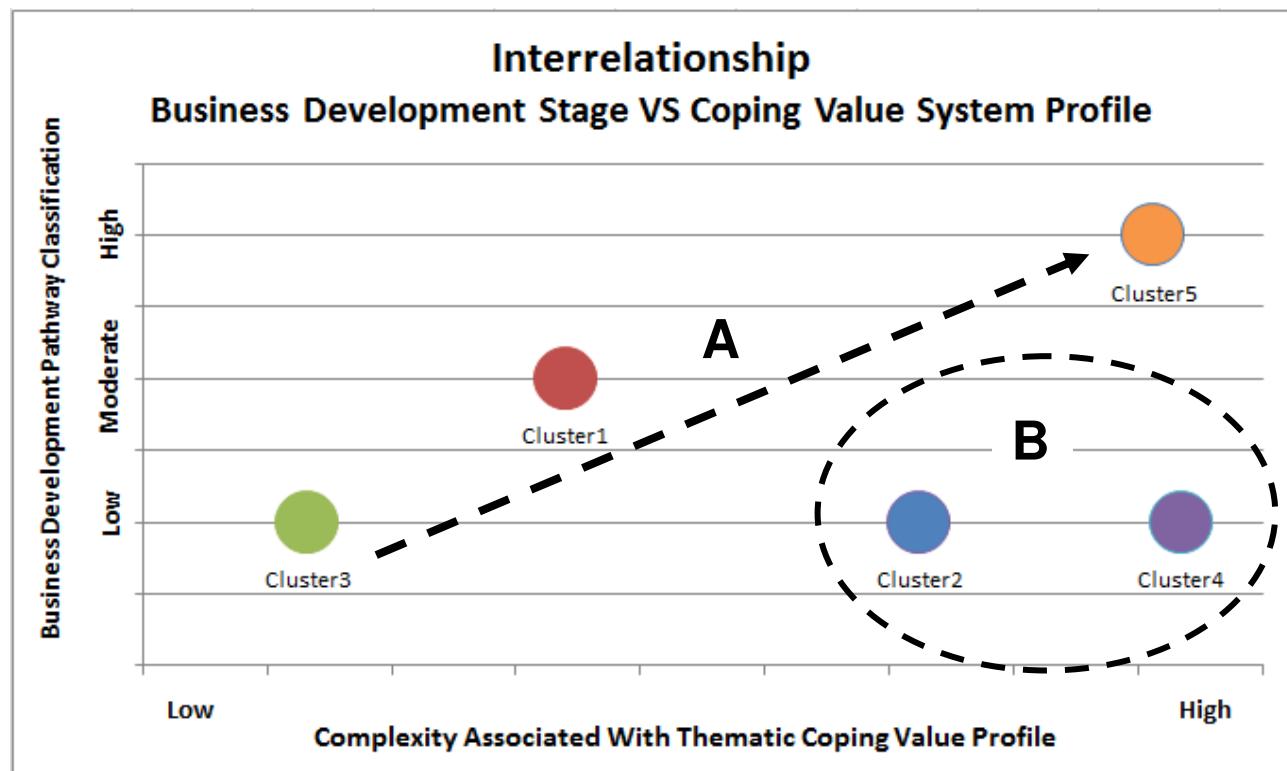
Guided by the integral model developed in Chapter 3, there is a general expectation of a contextual interrelationship between the objective business characteristic configuration and the subjective entrepreneur's intent characteristic configuration. This expectation is based on the principle that it is possible to indicate the level of complexity in the character of the identifiable developmental stages in developmental models. The general notion is that more developed levels are associated with higher levels of complexity.

In terms of the identification of developmental levels (single points of location), the first step of the data analysis in Chapter 5 focused on the empirical identification of developmental levels in the survey data. From this step, five business developmental clusters were identified. As for the complexity of the character of these identified single points of location in the data, two types of characteristics were considered, i.e. characteristics of the subjective intent of the entrepreneur and the objective characteristics of the entrepreneurial business venture.

The level of the complexity of the objective entrepreneurial business venture can be observed in the configuration of the business context and structure variables, which enable the classification of the identified business clusters to be associated with one of three developmental pathways identified in the literature. These are the low-growth developmental classification (that is associated with less complex business context and structure configurations), followed by the medium-growth classification and the high-growth classification (that is associated with more complex business context and structure configurations).

The levels of the complexity of the entrepreneur's subjective intent was observed from the average thematic coping-value system profile of the entrepreneurs who are present within each business developmental cluster group. The thematic coping-value system of Graves' open theory of values framework is a hierarchical structure of coping-values that increase in complexity to cope with the increase in the complexity of existential life challenges. The hierarchical structure starts with the first-tier group of thematic coping-value systems, that ranges from the less complex AN thematic coping-value system that develops through the BO, CP, DQ, ER and FS thematic coping-value systems. It then proceeds to the second-tier group of more complex thematic coping-value systems that develops through the GT and HU thematic coping-value system. Therefore, the level of complexity assigned to the preferred thematic coping-value system profile of the entrepreneurs in each business cluster is the sum total of the representative hierarchical levels of the thematic coping-values system as presented in Graves' open theory of values.

The identification of single points of location (developmental levels) in the survey data and the assessment of the level of complexity that is associated with the characteristics of the subjective intent and the objective business, enable the process to explore contextual interrelationships between the objective and subjective characteristics.



**Figure 6.1: Business clusters' interrelationship between the business development pathway and the assumed complexity of the thematic coping-value system profile configurations**

Guided by the integral model developed in Chapter 3, Figure 6.1 is a visual representation of the contextual interrelationship observed within the five identified business clusters. There is an expectation of an interrelationship to exist between the business ventures' developmental classification and the thematic coping-value profile configuration of the entrepreneurs who are representative of the various business cluster groups.

The relative positions of cluster 3, cluster 1 and cluster 5, depicted by the arrow A in Figure 6.1 above, seem to support the generally expected contextual interrelationship advocated by the proposed integral model. In essence the observation of relatively more complex configuration of business characteristics, associated with relatively more complex coping-value system profiles of the entrepreneurs. This observation supports the advocated notion of an expected interrelationship between developmental processes based on an increase in complexity.

The interrelationship of cluster 2 and cluster 4, depicted by the circle B in Figure 6.1 above, seems to be counter-intuitive. The observation can be made of a relatively less complex configuration of business characteristics that is associated with a relatively more complex coping-value system profile of the entrepreneurs.

Exploring this rather theoretically counter-intuitive observation, with reference to the literature on business developmental stages, cluster 2 and cluster 4 seem to compare favourably to businesses that were observed to have disengaged from the developmental process. As noted by Hanks et al. (1993), these disengaged businesses do not fit the traditional business developmental models, which makes them more difficult to interpret.

Contemplating on the above observation, Wilber (1997: 75) stated: "objective exteriors can be seen, but all depth requires interpretation". This supports the notion to research both the objective exterior and subjective interior to understand our world. To an extent, this demonstrates the advocacy of the perceived benefits to be gained from an integral research approach to deepen insight into a social phenomenon.

Considering an approach to explore the interrelationship between the objective exterior world and the subjective interior world, from a validity perspective, Wilber (1997) noted that validity in the objective exterior world is obtained through empirical evidence. However, to obtain validity in the subjective interior world, interpretation and hermeneutics are used.

From this perspective follows the understanding that a process of interpreting the contextual interrelationship that may exist between the observed objective business characteristics and the characteristics of the average subjective thematic coping-value system profile of the entrepreneurs that are present within the five business clusters groups, can contribute to deepened insight into the phenomenon of entrepreneurial business development.

The remainder of this chapter is organised based on the three business developmental classifications of high-growth, medium-growth, and low-growth. The study explored through an interpretive process the interrelatedness of the objective (Appendix H) and subjective (Appendix L) characteristics identified in each of the business clusters, utilising literature on Graves' thematic coping-values system and business developmental models as data sources.

The interpretive process is structured to first consider the nature of the configuration of the objective business context and structure variables identified in each business cluster. The nature of these configurations is considered in terms of business venture control (governance style) and prospects for development. This objective nature of the business venture is compared to the underlying characteristics of the cluster's identified thematic coping-value system.

Appendix M is a summary list of relevant characteristics of the thematic coping-value systems used in the interpretation of the interrelationship between the configurations of the objective business context and structure characteristics and the subjective coping-value system profile identified within each of the five business cluster groups.

## **6.2 BUSINESS CLUSTERS IN THE HIGH-GROWTH CLASSIFICATION**

From the data analysis of this study, cluster group 5 is associated with the high-growth classification as documented by McMahon (2000) and compares favourably to business clusters C and D identified by Hanks et al. (1993) in their study on business developmental stages.

### **6.2.1 Configuration and nature of business objective characteristics**

Considered from an objective perspective of business context and structure characteristics (Table H.1), businesses in the high-growth Classification seem to demonstrate the following characteristic configuration.

As indicated by the data of this study and mentioned by McMahon (2000), businesses in this group employ about 100 or more employees after 15 years, with a positive employment growth of more than five percent.

The data analysis showed that, similar to the observation by Hanks et al. (1993), businesses in this group are structured functionally. There is an increase in business formalities in terms of policies and procedures, supported by formal operational plans and budgets to guide decisions. Furthermore, lines of authority are emerging from formal job descriptions, with formal communication structures most probably contributing to the tendency of a decrease in the centralisation of business operational decisions observed.

Considering the nature of work specialisation, McMahon (2000) observed the presence of qualities that contribute to growth aspirations and a possible international outlook. Hanks et al. (1993) similarly observed specialisation that indicates expansion with an increase in professionalisation and cost control.

From the data analysis, a similar observation can be made: from a cost performance perspective, there was a relatively high presence of specialised functions that relate to production planning and scheduling, quality control and the combination of inventory control and procurement. As for the ambition to expand, in addition to a high sales focus, the survey data showed the combination of product research and development with market research. Furthermore, in addition to the traditional accounting function, there seems to be a focus on finance, as a possible enabler for expansion.

From an objective characteristics perspective, considered from a business structure and control configuration above, this group indicated a comparatively high utilisation of skilled resources within a functional structure. Business formalities are perceived as relatively mature, with operational decision-making relatively decentralised. The interpretation is that this group can be structured and focused on the active processes to expand and grow their business.

### **6.2.2 Subjective characteristics that seems to interrelate with the nature of the objective characteristics**

From a subjective characteristics perspective, exploring the possible interrelationship of the entrepreneurs' thematic coping-value system profile configuration as identified in Chapter 5 above and summaries in Appendix L, the following induced interrelationship seems to be present.

From a classification perspective, businesses in this cluster group are classified objectively as high growth with a possible interrelationship with the entrepreneurs' subjective transition stage between the 'authoritative-conformist'/'strategic-materialistic'/'integrative-systemic' thematic coping-value systems, with a rejection for the 'humanistic-sensitive' thematic coping-value system. From a first- or second-tier perspective, the 'egocentric-exploitative' tolerance (low rejection) supports the contextual application of multiple thematic values, which is an attribute associated with second-tier thinking. It was interpreted above that this transition stage is most probably in the more complex levels of first-tier towards early second-tier thematic coping-value thinking, finding them in a possible open/arrest change state.

Induced from the literature, the following characteristics of this subjective thematic coping-value system prolific configuration seem to interrelate to the above objective business structure. From a control perspective, the 'authoritative-conformist' thematic coping-value system seems to focus on responsibility and stability, with a systematic approach and commitment to systems and procedures to be a well-organised organisation (Beck & Cowan, 1979). There may be a tendency from the 'integrative-systemic' thematic coping-value system to become impatient with routines and to let others do their own thing as long as it does not appear harmful (Beck, 1992).

As the tolerance for the ‘egocentric-exploitative’ thematic coping-value system seems to indicate, these entrepreneurs may find it easy to deal with egocentric behaviours and may find it easy to assist them to be more productive (Beck, 1992). The ‘strategic-materialistic’ thematic coping-value system of thinking may perceive the ‘humanistic-sensitive’ thematic coping-value system of thinking as ambitious but undirected, and as a possible barrier for progress or tangible results (Beck, 1992).

From the ‘integrative-systemic’ thematic coping-value system there may be a willingness to accept diverse experiences with a focus on functionality and being pragmatic (Beck & Cowan, 1979). This might be supported by the ‘strategic-materialistic’ thematic coping-value system’s manipulative skills and effective game-playing abilities reinforced by multiplicity thinking and acceptance of risk (Beck & Cowan, 1979).

The ‘integrative-systemic’ thematic coping-value system indicates the possibility that their actions are based on personal and internalised principles and that these entrepreneurs are most probably less driven by negative motivators associated with fear, loss of status and threats of rejection (Beck, 1992).

From this internalised perspective, the business developmental orientation seems to stem from a peak ‘strategic-materialistic’ thematic coping-value system observed in the contextual self-perspective. The ‘strategic-materialistic’ thematic coping-value system indicates the possibility of a constructive, ambitious and highly energetic pursuit for business goals (Beck & Cowan, 1979). This can possibly be supported by the ‘authoritative-conformist’/‘strategic-materialistic’ transition drive with an aspiration for a better life now for one-self (Beck & Cowan, 1979), as the ‘strategic-materialistic’ thematic coping-value system most probably focuses to win in life, as an entrepreneur with an option-orientated mind-set, who looks for growth (Beck, 1992).

### **6.2.3 Summary of induced objective and subjective interrelationship**

In summary, based on the induced interrelationship above, from an objective perspective, this group can be structured and focused on business growth. This appears to be supported by a subjective configured thematic coping-value system profile of thinking that seems to prefer a governance control structure of decentralised authority in favour of an autocratic and/or bureaucratic rule-based system of governance. There seems to be a thinking (subjective intent) that support and guide the productivity of people with ambition, as long as this ambition is perceived as realistic and is supported by a form of planning and execution that can be monitored. From a second-tier perspective, there is the possibility of an openness to consider a diverse range of possible contributors for organisational optimisation and development, from a functional and practical perspective.

## 6.3 BUSINESS CLUSTERS IN THE MODERATE-GROWTH CLASSIFICATION

From the data analysis of this study, the cluster group 1 is associated with the moderate-growth classification as documented by McMahon (2000) and compares favourably to business cluster B identified by Hanks et al. (1993) in their study on business developmental stages.

### 6.3.1 Configuration and nature of business objective characteristics

Considered from an objective perspective of business context and structure characteristics (Table H.2), businesses in the moderate-growth classification seem to demonstrate the following characteristics.

According to McMahon (2000), businesses in this group, employ less than 100 people after 15 years, with a positive employment growth of more than three percent. The younger moderate-growth organisations (average 7.36 years) in McMahon's (2000) study employed on average 19.9 people with an employment growth of 72.25 percent. The data for cluster group 1 compares favourably to this, and is also similar to the findings of Hanks et al. (1993). Businesses in cluster group 1 have an average age of 7.36 years (7.36 for Hanks et al., 1993), employing on average 17.2 people (23.64 for Hanks et al., 1993) with an employment growth of 50.9 percent (33% for Hanks et al., 1993).

Hanks et al. (1993) observed that firms in this group have generally accepted a functional organisation structure. The data from this study indicated that businesses are in the process of adopting functional organisation structures.

Similar to the observation by Hanks et al. (1993), the data from cluster group 1 seems to indicate that business formalities are still relatively low and organisational decision-making is more centralised if compared to clusters classified under the high-growth development classification. The relatively more centralised decision-making is most probably to compensate for the perceived potential loss of operational control through the transformation to a more functional structure. This transition into a functional structure seems to take place in an environment that is comparatively seen to have lower levels of formalisation in the form of policies and procedures.

Considering the nature of work specialisation, Hanks et al. (1993) observed specialisation that indicated commercialisation of their product, identifying the sales function to be present in more than 50 percent of these organisations. In this study, the data showed a similar focus on product commercialisation in cluster group 1, with the specialisation function of sales and customer service to be present in more than 50 percent of these organisations.

McMahon (2000) indicated that organisations in this category seem to have rather modest growth aspirations. He ascribed this to probable external elements in the form of strong market competitiveness, or internal elements, due to the intrinsic nature of their product or service. He also indicated the possibility of a deliberate choice, where growth is capped by owner-managers, to a

rate that limits the dependence upon external financing, thus minimising surrender of control and avoiding accountability obligations associated with external funding.

From an objective characteristics perspective, considering the business structure and control configuration above, this group operates between a simple and functional structure to accommodate skills that predominantly focus on the commercialisation of their product or service. With relatively low business formalities, decision-making tends to be more of a centralised nature, probably supported by formalities that are of a rule-orientated nature. Business growth aspirations seem to be limited to the entrepreneurs' willingness to share business control and the avoidance of accountability obligations, most probably offering a product or service with inherent scalability limitations in the current market.

### **6.2.2 Subjective characteristics that seems to interrelate with the nature of the objective characteristics**

From a subjective characteristics perspective, exploring the possible interrelationship of the entrepreneurs' thematic coping-value system profile configuration as identified in Chapter 5 above and summaries in Appendix L, the following induced interrelationship seems to be present.

Considering the survey profile classification, businesses in this cluster group are classified objectively as moderate growth with a possible interrelationship with the entrepreneurs' subjective transition stage between the 'authoritative-conformist'/'strategic-materialistic' thematic coping-value systems with latency towards second-tier thematic coping-value systems, finding themselves in a possible arrest / closed change state.

From a contextual work-perspective, the observation of a relatively high association with the 'authoritative-conformist' thematic coping-value system and at the same time a relatively high rejection of the 'authoritative-conformist' thematic coping-value system, indicates a strong intensity to this thematic coping-value system. From this perspective, they seem to enter a possible transition phase from a peak 'authoritative-conformist' thematic coping-value system. In the contextual self-perspective, it seems that the entrepreneurs have exited the 'authoritative-conformist' thematic coping-value system and entered an intensity-driven preference for the 'strategic-materialistic' coping-value system. From a transition perspective, it appears if the entrepreneurs are in turmoil in the work environment with the 'authoritative-conformist' thematic coping-value system of thinking, exploring from the self-perspective the possibilities of a 'strategic-materialistic' thematic coping-value system of thinking.

From an objective characteristics perspective, considered from a business structure and control perspective, it was observed that businesses in this category tend to move to an early adoption of a functional structure, with business formalities still perceived as relatively low, possibly rule-orientated and decision-making that is more centralised than in high-growth businesses.

The entrepreneurs' subjective thematic coping-value characteristics that seem to interrelate to the above objective business structure and control seem to stem from the 'authoritative-conformist' thematic coping-value system with a focus on responsibility and stability, with a sense of order and tradition, possibly rule-orientated with the possibility to be rigid and to an extent authoritarian and possibly intolerant in nature (Beck & Cowan, 1979). The rejection of the 'egocentric-exploitative' thematic coping-value system seems to support the presence of a possible authoritarian, rule-orientated, rigid and intolerant governance system. Rejection of the 'egocentric-exploitative' thematic coping-value system may be an indication that the entrepreneurs feel that any perceived egocentric behaviour is very unlike them, opposing to their own moral codes and value system (Beck, 1992). From an 'strategic-materialistic' thematic coping-value system there is a possibility of frustration with heavily-structured systems, viewing them as unnecessary restraints on progress (Beck, 1992). This can most probably be reflected in the relatively high rejection of the 'authoritative-conformist' thematic system observed in the thematic coping-value profile.

Considering business development, the entrepreneurs' subjective thematic coping-value characteristics that appear to interrelate most probably originate from the 'strategic-materialistic' thematic coping-value system with an individualistic high achievement motivation and need for success that result from competitiveness and the skilful use of power, popularity and prestige (Beck & Cowan, 1979). The 'strategic-materialistic' thematic coping-value drivers are probably more of a selfish nature, maintaining an entrepreneurial option-oriented manipulative mind-set with a willingness to do anything for a price (Beck & Cowan, 1979).

The transition between the 'authoritative-conformist'/'strategic-materialistic' thematic coping-value system appear to support the probable selfish application of the 'strategic-materialistic' thematic coping-value system, with aspirations for a better life now for themselves, and the possibility that they will challenge authority to produce tangible results (Beck & Cowan, 1979).

Operating in first-tier thinking with second-tier latency, within a 'authoritative-conformist'/'strategic-materialistic' transition stage, these entrepreneurs may be seeking one best approach to success among many potential options (Beck & Cowan, 1979). As the coping-view interpretation guideline document (5DVS, 2014a) indicated, during the 'authoritative-conformist'/'strategic-materialistic' transition phase, there is a possible shift in thinking from a 'sacrifice now for benefit later' thinking to an expectation of 'a better life for oneself now' thinking, with the person that may be aware of multiple options to pursue, but actively seems to be seeking only one best option.

### **6.3.3 Summary of induced objective and subjective interrelationship**

In summary, based on the induced interrelationship above, from an objective perspective, this group can be structured and focused on business development that is limited to the entrepreneurs' willingness to share their business control and the avoidance of accountability obligations. The focus is most probably on a single product or service. This product or service may or may not have

inherent scalability limitations in the current market or experience high competition. This seems to be supported by a subjective configured thematic coping-value system profile of thinking that supports an authoritative rule-based control governance structure, although they actively dislike this view of themselves. There appears to be a thinking (subjective intent) of a selfish nature that support the entrepreneurs' individualistic high achievement motivation and need for success with an option-oriented manipulative mind-set and the skilful use of power, popularity and prestige. Although entrepreneurs may be aware of multiple options for the achievement of success, it seems that they prefer to filter the multiple options to the utilisation of one or only a few options.

#### **6.4 BUSINESS CLUSTERS IN THE LOW-GROWTH CLASSIFICATION**

Based on the survey data analysis above, cluster group 2, group 3 and group 4 are associated with McMahon's (2000) low-growth development classification that compares favourably to business clusters E and F identified by Hanks et al. (1993) in their study on business developmental stages.

##### **6.4.1 Configuration and nature of business objective characteristics**

When considered from an objective characteristics perspective (Table H.3), that focuses on business context and structure, businesses in the low-growth classification seem to demonstrate the following characteristics.

Observed from the data analysis, similar to the findings in the survey data, McMahon (2000) indicated that after approximately 15 years, businesses in the low-growth Classification would have fewer than 20 employees. McMahon (2000) described businesses in the low-growth development Classification as businesses with few, if any, development aspirations. These businesses seem to exist in principle to provide their owner-managers with a source of employment and income and are frequently operated in a manner consistent with the life-style aspirations of their owners. As Hanks et al. (1993) indicated, referring to their identified clusters E and F, it is possible that these business clusters do not fit the traditional business development models and that they are more difficult to interpret.

With reference to the findings of Hanks et al. (1993) and McMahon (2000), cluster group 2, group 3 and group 4 are classified for discussion purposes into possible life-style businesses (cluster 3) and success-disengagement businesses (cluster 2 and cluster 4).

#### **6.4.2 Life-style businesses configuration and nature of business objective characteristics**

What Hanks et al. (1993) referred to as a possible life-style business, his cluster E from a size perspective compares relatively well to his classification of a start-up business. However, from an age perspective, the life-style business is much older than the start-up business (Hanks et al., 1993).

From the survey data and analysis, cluster 3 above compares favourably from a size and age perspective to cluster E of Hanks et al. (1993). However, from a structure perspective, the findings from this study's data analysis differ in some aspects to those of Hanks et al. (1993), with cluster 3 seeming to be relatively formal with relatively centralised decision-making.

Hanks et al. (1993) observed that life-style businesses seem to compare favourably to start-up businesses from a size and structure perspective; however, they differ in nature. While the start-up businesses seem to focus on their product/service development, the life-style businesses' product/service seems to be well developed or defined (Hanks et al., 1993). The data from cluster group 3 seems to support this with specialisation focusing on production and sales.

As an overall observation, the business context and structure data of cluster group 3 resonate relatively well with the classification of life-style businesses by Hanks et al. (1993). According to them, life-style businesses are older small businesses that appear to have disengaged from the development process with their products and services fairly well developed.

Hanks et al. (1993) ascribed this disengagement to possible limited development potential due to small market niches or the business owners who have most probably consciously chosen to keep their businesses small. Davidson (1989 cited by Hanks et al., 1993) noted in his study of Swedish firms, how many business managers of small businesses, that had reached the size of five to nine employees, perceived the challenges associated with the developing of their business to outweigh the potential benefits to be gained. Five to nine employees is the relative size of the businesses represented by the life-style classification in this study and the study of Hanks et al. (1993).

From an objective characteristics perspective, considered from the business structure and control configuration above, this group operates between a simple and functional structure to accommodate skills that predominantly focus on product or service delivery and the management of people and accounting administration. Decision-making seems to be relatively centralised, supported by a comparatively mature level of business formalities, and most probably orientated towards rules and compliance. These businesses seem to exist in principle to provide their owner-managers with a source of employment and income. They are most probably operated in a manner consistent with the life-style aspirations of their owners with few, if any, business development aspirations.

#### ***6.4.2.1 Life-style businesses' subjective characteristics that seem to interrelate with the nature of the objective characteristics***

From a subjective characteristics perspective, exploring the possible interrelationship of the entrepreneurs' thematic coping-value system profile configuration as identified in Chapter 5 and summaries in Appendix L, the following induced interrelationship seems to be present.

Based on the data analysis in the chapter above, businesses in this cluster group were classified objectively as 'life-style', low-growth businesses with a possible interrelationship with the entrepreneurs' subjective peak 'authoritative-conformist' thematic coping-value system. It was observed that this group peaks in the first-tier level of thinking with latency towards second-tier thematic coping-value systems of thinking, finding themselves in a possible closed change state.

Considering the objective characteristics from a business structure and control perspective, this cluster group seems to be between a simple and functional structure, with the possibility of adopting an early functional business structure. However, decision-making seems to stay relatively centralised and business formalities are perceived as relatively mature, and possibly of a rule or compliance-based nature.

The owners' subjective thematic coping-value characteristics, that were theoretically observed to interrelate to the above objective business structure and control, stem from a 'authoritative-conformist' thematic coping-value system. The 'authoritative-conformist' thematic coping-value system focuses on responsibility and stability, with a sense of order and tradition, possibly rule orientated, with an aim to steadfastly pursue what is perceived as right and to reject what is perceived as wrong and those who engage in it (Beck & Cowan, 1979). Levels of dogmatism may be relatively high in a peak 'authoritative-conformist' thematic coping-value system, with the possibility of authoritarianism and rigidity and maybe intolerant nature (Beck & Cowan, 1979).

The rejection of the 'egocentric-exploitative' thematic coping-value system seems to support the possible presence of an authoritarian, rule-based, rigid and intolerant governance system. Rejection of the 'egocentric-exploitative' thematic coping-value system may be an indication that the entrepreneurs feel that any perceived egocentric behaviour is very unlike them, and a contradiction to their own moral codes and value system (Beck, 1992). In an 'authoritative-conformist' thematic value system there is the inherent need for conformity to information obtained from a righteous higher authority, usually from structured environments that respect chain of command and prefer documentation (Beck, 1992). Considering the observed high skill utilisation associated with personnel, payroll management and accounting, it is assumed that the relatively mature formalities are most probably rule and compliance-orientated to comply with the regulatory business environment.

The objectively observed limited aspirations for business development, that are most probably limited to be a source of income for the entrepreneurs according to their life-style needs, also interrelate from the ‘authoritative-conformist’ thematic coping-value system. Again, there is the sense of responsibility to maintain stability for the present to guarantee future reward, possibly rule orientated with a sense of order and tradition, and to steadfastly pursue what is perceived as right and to reject what is perceived as wrong and those who engage in it (Beck & Cowan, 1979). Levels of dogmatism may be high in a peak ‘authoritative-conformist’ thematic coping-value system, with the possibility of rigidity and a preference for stability and a dislike for change and uncertainty (Beck & Cowan, 1979). From a contextual self-perspective, the observed peak ‘strategic-materialistic’ thematic coping-value system based on strong association may be an indication of a preference to engage based on selfishness, with high energy to pursue organisational and societal goals with actions that may reflect a concern for the welfare of others, as long as it is subject to one’s own (Beck & Cowan, 1979). In a ‘authoritative-conformist’ thematic coping-value system community involvement can be common in volunteer programmes where duty and obedience to authority are driving forces (Beck, 1992).

#### ***6.4.2.2 Summary of life style businesses’ induced objective and subjective interrelationship***

In summary, based on the inductive interrelationship above, from an objective perspective, this group has few if any business development aspirations, with entrepreneurs who most probably perceive the cost of development to be higher than the benefits. They operate most probably in markets with well-developed products and the primarily existence of the business appears to be a source of employment and income for the entrepreneurs. Business formalities may be observed as relative mature; however, decision-making is still centralised. It was observed that this objective state appears to be supported by a subjectively configured thematic coping-value system profile of thinking that supports an authoritative rule-based control governance structure, although they actively dislike this view of themselves. An inherent need is expected for conformity to information obtained from a righteous higher authority, usually from structured environments that respect a chain of command and prefer documentation. This gives a possible indication that the relative mature business formalities observed can be of a compliance nature. High energy to engage in activities is most probably based on selfish motives and the willingness to pursue organisational and societal goals subject to their own perceived benefit.

#### **6.4.3 Success-disengagement businesses configuration and nature of business objective characteristics**

Hanks et al. (1993) noted that, from a size perspective their business cluster F compares relatively well to cluster B (moderate-growth businesses); however, from an age perspective, cluster F is much older. Hank et al. (1993) compared business cluster F to what Churchill and Lewis (1983) labelled a ‘success-disengagement’ business group.

In essence, businesses classified as ‘success-disengagement’ are similar from a size perspective to businesses classified in the moderate-growth classification; however, they seem to be older and disengaged from business growth.

The findings of this survey’s data and analysis are relatively similar to those of Hanks et al. (1993), with cluster group 2 and group 4 comparing favourably from a size perspective to the moderate-growth cluster group 1. However, from an age perspective, cluster group 2 and group 4 are much older than cluster group 1.

In general, from the size and age perspectives, cluster group 2 and group 4 seem to be comparable to the ‘success-disengagement’ business classification of Hanks et al. (1993); however, from a structure perspective, cluster group 2 and group 4 seem to differ in some aspects.

The survey data analysis indicated that cluster group 2 and group 4 seem to have relatively low formalities, with relatively centralised decision-making governance structures. From a specialisation perspective, the pattern of using specialised skills seems to compare with business in the moderate-growth phase in terms of sales and product or customer service. This is an indication that these businesses probably focus on product commercialisation.

Although these businesses may seem to compare in some aspects relatively well with moderate-growth businesses, as Hanks et al. (1993) indicated, their age and relatively slow growth rate make it inappropriate to classify them in the traditional business development model and they are more difficult to interpret.

Attempting to find a plausible explanation for the relatively slow growth and/or possible stagnation observed in these businesses, Hanks et al. (1993) referred to the longitudinal study of Miller and Friesen (1984), which indicated that businesses might go through cycles of stagnation or decline, among stages of growth. Hanks et al. (1993) also entertained the possible scenario that these businesses may represent what Churchill and Lewis (1983) labelled as the ‘success-disengagement’ business group.

Success-disengagement businesses have attained economic health with sufficient size and product-market penetration to ensure economic success. These businesses can stay in this stage provided that ineffective management does not reduce their competitive abilities and/or environmental change does not negatively affect the market niche of these businesses (Churchill & Lewis, 1983).

Instead of using the business as a platform for development, business owners seem to disengage and rather maintain the business at *status quo*, using the benefits derived from the business to pursue other activities (Churchill & Lewis, 1983).

In summary, from an objective perspective, considering data pertaining to business context and structure and compared to the findings of McMahon (2002) and Hanks et al. (1993), these older success-disengaged businesses classified into the low-growth Classification, differ from moderate-growth businesses in terms of development growth expectations. From an organisation's governance structure perspective, formalities seem to be relatively low and decision-making seems to be more centralised.

#### **6.4.3.1 Subjective characteristics that seems to interrelate with the nature of the objective characteristics for cluster group 2**

Considered from cluster group 2's subjective characteristics perspective, exploring the possible interrelationship of the entrepreneurs' thematic coping-value system profile configuration as identified in Chapter 5 and summaries in Appendix L, the interrelationship below can be induced.

Businesses in the cluster group 2 are classified objectively as 'success-disengagement' businesses in the low-growth development Classification with a possible interrelationship with the entrepreneurs' subjective peak 'strategic-materialistic' thematic coping-value system supported by 'authoritative-conformist'/'humanistic-sensitive'/'integrative-systemic' thematic coping-value systems. It was interpreted above that this group peaks in first-tier thinking with possible support from second-tier thematic coping-value systems thinking, finding themselves in a possible arrest/closed change state. From the contextual work-perspective (their business), a possible peak in the 'humanistic-sensitive' thematic coping-value system stage, with support from the 'strategic-materialistic' thematic coping-value system, is observed.

Considered from a business objective characteristics perspective in terms of structure and control, the observation that cluster group 2 is the lowest user of skilled resources. However, from a business structure perspective, this cluster moves between a simple and functional structure, with the possibility of adopting an early functional business structure. From a business governance perspective, the businesses' formalities seem to be relatively low, with decision-making that is relatively centralised.

The subjective thematic coping-value characteristics that seem to interrelate to the above objective business structure and control appear to stem from the 'humanistic-sensitive' thematic coping-value system with a focus on the ability to work together, and priorities that tend to be based on the feeling of the situation on hand, rather than uniform standards. This is possibly supported by an 'strategic-materialistic' thematic coping-value system that can become frustrated with heavily-structured systems, viewing them as an unnecessary restraint on progress (Beck, 1992). With an 'humanistic-sensitive' thematic coping-value system, there is the expectation of high ambiguity and

low specifics (Beck, 1992). The 'humanistic-sensitive' thematic coping-value system can possibly be unrealistically idealistic and overly permissive, with an unbalanced emphasis on affect or feeling that tends to ignore the need to produce tangible results (Beck & Cowan, 1979). The 'humanistic-sensitive' thematic coping-value system can also be associated with a high level of rigidity, with people's needs being seen as more important than production and schedules and a willingness to adjust rules if in favour of perceived human benefits (Beck, 1992).

When considering the objective characteristics, from a business development orientation perspective, business development aspirations may seem to be rather low. It can be possible that the business has attained economic health with sufficient size and product-market penetration to ensure economic success. With no dissonance, these businesses can most probably stay at this stage, provided there is no ineffective management to reduce the businesses' competitive abilities or they do not experience environmental change that negatively affects their market niche (Churchill & Lewis, 1983). It may also be possible that these owners have disengaged from actively seeking a business development strategy and rather prefer to maintain the business at *status quo*, using the benefits derived from the business to pursue other activities (Churchill & Lewis, 1983).

The subjective thematic coping-value characteristics that seem to interrelate to the above objective business growth orientation appear to stem from the 'strategic-materialistic' thematic coping-value system with an individualistically motivation need for success that results from competitiveness and the skilful use of power, popularity and prestige (Beck & Cowan, 1979). From an 'strategic-materialistic' thematic coping-value perspective, there are the expectation of ambition and high levels of energy to pursue organisation and societal goals, with actions that reflect a concern for the welfare of others subject to that of one self (Beck & Cowan, 1979). However, from an 'humanistic-sensitive' thematic coping-value system perspective, progress is most probably focusing on the need for high interpersonal involvement and group forming to promote consensus-building for the perceived well-being of all (Beck, 1992). From the 'humanistic-sensitive' thematic coping-value system perspective, specifics may be low with a possible tendency to tolerate an unbalanced emphasis on affect or feelings and a tendency to ignore the need to produce tangible results (Beck & Cowan, 1979). With a supportive 'humanistic-sensitive' thematic coping-value system that seems to peak, from a work-perspective, there is the possibility of an early dissonance with the 'strategic-materialistic' thematic coping-value system, discovering the need for a richer inner life and that material wealth is not a guarantee for happiness (Beck & Cowan, 1979).

#### ***6.4.3.2 Summary of cluster 2 businesses' induced objective and subjective interrelationship***

In summary, based on the inductive interrelationship above, the interpretation is that from an objective perspective, cluster group 2 can have few, if any, business development aspirations, with entrepreneurs who most probably pursue goals outside of their businesses. These seem to be businesses with well-established markets and well-developed products. Business formalities seem to be less formal with decision-making that is still centralised. This seems to interrelate with a subjective configured thematic coping-value system profile of thinking with a rigid focus on interpersonal involvement, prioritising the feeling of the situation on hand, promoting group consensus, rather than following uniform standards. With an individualistic motive for success, high energy to engage in activities is most probably of a selfish nature with a willingness to pursue organisational and societal goals subject to their own perceived benefit. Ambitions may be high, but specifics may be low with a possible tendency to tolerate an unbalanced emphasis on affect or feelings and a tendency to ignore the need to produce tangible results.

#### ***6.4.3.3 Subjective characteristics that seem to interrelate with the nature of the objective characteristics for cluster group 4***

Considered from cluster group 4's subjective characteristics perspective, exploring the possible interrelationship of the entrepreneurs' thematic coping-value system profile configuration as identified in Chapter 5 (summarised in Appendix L), the following interrelationship can be induced.

Businesses in the cluster group 4 were classified objectively as 'success-disengagement' businesses in the low-growth development Classification, with a possible interrelationship with the entrepreneurs' subjective transition stage between the 'authoritative-conformist'/'strategic-materialistic'/'integrative-systemic' thematic coping-value systems.

From a first-tier or second-tier perspective, the high 'egocentric-exploitative' rejection may reflect on the relevance of the second-tier 'integrative-systemic' thematic coping-value system in the transition stage. Rejection of the 'egocentric-exploitative' thematic coping-value system may be an indication that the entrepreneurs feel that any perceived egocentric behaviour is very unlike them, and a contradiction to their own moral codes and value system (Beck, 1992). From this perspective, entrepreneurs in this cluster group may not necessarily consider the contextual application of multiple thematic coping-values, which is an attribute associated with first-tier thinking. From this perspective, the interpretation is that the transition can be most probably still in the first-tier thematic coping-value systems of thinking, finding themselves in a possible open/arrest change state.

Considering cluster group 4's business structure from an objective characteristic perspective, in terms of its structure and control, this cluster group indicated the second highest utilisation of skilled resources. However, from a business structure perspective, the observation is that this

cluster rather adopts a simple structure. Furthermore, the possible interpretation is that these entrepreneurs tend to use these various skills to assist them in various tasks instead of having defined departments with roles and responsibilities. From a business governance perspective, the business formalities seem to be the lowest of all clusters, with decision-making that is relatively centralised.

The subjective thematic coping-value characteristics, identified to interrelate to the above objective business structure and control, stem from a ‘authoritative-conformist’ thematic coping-value system. The ‘authoritative-conformist’ thematic coping-value system focuses on responsibility and stability, with a sense of order and tradition, possibly rule orientated, and to steadfastly pursue what is perceived as right and to reject what is perceived as wrong and those who engage in it (Beck & Cowan, 1979). The relatively high use of specialist skills without creating defined departments with authoritative accountability may be from a low function ‘integrative-systemic’ thematic coping-value system in a form of self-protective avoidance of other points of view and/or problems with other realities (Beck & Cowan, 1979). Levels of dogmatism may be relatively high in a ‘authoritative-conformist’ thematic coping-value system, with the possibility of authoritarianism and rigidity, a possible intolerant nature (Beck & Cowan, 1979). Rejection of the ‘egocentric-exploitative’ thematic coping-value system seems to support this ‘authoritative-conformist’ and ‘integrative-systemic’ characteristics as a possible indication that the entrepreneurs feel that any perceived form of egocentric behaviour is very unlike them and in contradiction to their own moral codes and value system (Beck, 1992). This observed rejection of the ‘egocentric-exploitative’ thematic coping-value system seems to support the prevalence of a protective, authoritarian, rule-based probably rigid and intolerant governance system, associated with the ‘authoritative-conformist’ thematic coping-value system.

Considering the objective characteristics, from a business developmental orientation perspective, the aspiration to develop their business may seem to be rather low. It can be possible that the business has attained economic health with sufficient size and product-market penetration to ensure economic success. With no dissonance, these businesses can most probably stay at this stage, provided there is no ineffective management to reduce the businesses’ competitive abilities and/or experience environmental change that negatively affects their market niche. It may also be possible that these owners have disengaged from actively seeking a business development strategy and rather prefer to maintain the business at *status quo*, using the benefits derived from the business to pursue other activities.

The subjective thematic coping-value characteristics that seem to interrelate to the above objective business development orientation appear to stem from predominantly first-tier thinking transitioning between the ‘authoritative-conformist’ and ‘strategic-materialistic’ thematic coping-value systems with the high possibility that these entrepreneurs may be seeking one best approach to success among many potential options (Beck & Cowan, 1979). From the ‘authoritative-conformist’ thematic

coping-value system, they have a sense of responsibility to maintain stability for the present to guarantee future reward, with the possibility of rigidity and a preference for stability and a dislike for change and uncertainty (Beck & Cowan, 1979). From a 'strategic-materialistic' thematic coping-value system perspective, the entrepreneurs may have a possible individualistic motivational need for success that results from competitiveness and the skilful use of power, popularity and prestige, a drive to engage based on selfishness, maintaining an entrepreneurial option-oriented manipulative mind-set with a willingness to do anything for self-gain (Beck & Cowan, 1979). The 'strategic-materialistic' thematic coping-value can also be an indication of ambition and high levels of energy to pursue organisational and societal goals, with actions that reflect a concern for the welfare of others as well as one's self, a typical 'me-first' approach, whereby good deeds usually result in self-rewards (Beck & Cowan, 1979). Considered from a contextual self-perspective, the rejection of the 'egocentric-exploitative' thematic coping-value system may be an indication that the entrepreneurs feel that any perceived egocentric behaviour is very unlike them and in contradiction to their own moral codes and value system (Beck, 1992). This observed rejection of the 'egocentric-exploitative' thematic coping-value system seems to support the possible self-centred motivation and possible selfishness drive observed from an engagement perspective.

#### ***6.4.3.4 Summary of cluster 4 businesses' induced objective and subjective interrelationship***

In summary, based on the inductive interrelationship above, from an objective perspective, cluster group 4 may have few, if any, business growth aspirations, with entrepreneurs who most probably pursue goals outside of their businesses. These seem to be businesses with well-established markets and well-developed products. Skilled resources are utilised in a simply structured business, with a governance structure based on less formal business formalities, with decision-making that seems to be relatively centralised. This seems to interrelate with a subjective configured thematic coping-value system profile of thinking that supports a sense of order and tradition, doing what is perceived as right and to reject what is perceived as wrong. They apply an authoritative rule-based control governance structure, although they actively dislike this view of themselves, and most probably structure the business to protect themselves and avoid the challenge of other points of view and/or problems with other realities. From a business development perspective, the focus seems to be on maintaining stability for the present to guarantee future reward, with the possibility of rigidity and a preference for stability and a dislike for change and uncertainty. They have an individualistic motive for success, high energy to engage in activities that are most probably of a selfish nature with a willingness to pursue organisational and societal goals subject to their own perceived benefit, although it seems that they may actively dislike this possible perception of selfishness.

## 6.5 SUMMARY OF THE INTERRELATED CHARACTERISTICS' INTERPRETATION

Influenced by Wilber's four-quadrant integral framework, in Chapter 3 an integral model was induced to guide the aim of this research study. The aim of the study was to explore the potential contextual interrelationship that may exist between the objective developmental stage of the entrepreneurial business and the subjective coping-values system profile (the intent) of the entrepreneur. The data analysis of this study's survey data in Chapter 5 enabled the research step to explore through interpretive processes the potential contextual interrelationship that may exist between the objective developmental stage of the entrepreneurial business and the subjective coping-values system profile (the intent) of the entrepreneur.

As indicated in the integral model developed for this research study in Chapter 3, there is the general expectation of a contextual interrelationship between the objective business characteristic configuration and the subjective entrepreneur's intent characteristic configuration. This expectation is based on the principle that it is possible to indicate the level of complexity in the character of the identifiable developmental stages in developmental models. The general notion is that more developed levels are associated with higher levels of complexity.

Considering the analytical findings in the survey data from this perspective (Figure 6.1 above), the observation is that cluster group 3, group 1 and group 5 seem to support this theoretical expectation of a contextual interrelationship based on a developmental process that is associated with the principle of an increase in complexity.

From the data, the observation is that businesses associated with the high-growth development classification that operate with a business context and structure characteristic configuration that are seen to be more complex in nature, are associated with entrepreneurs who seem to prefer a more complex thematic coping-value system profile configuration as their dominant subjective logic.

However, cluster group 2 and group 4 do not seem to support this theoretical expectation. These business clusters are associated with the low-growth development classification that operates with business context and structure configurations that are seen to be less complex in nature. Yet, from the data analysis, it was observed that cluster group 2 and group 4 are associated with entrepreneurs who seem to prefer a more complex thematic coping-value system profile configuration as their dominant subjective logic.

When comparing these business cluster to the literature on business developmental models, these findings seem to be supported by similar findings that support the notion that not all entrepreneurs have the ambitions to develop their businesses. It has been indicated that these disengaged businesses do not seem to fit the traditional business developmental models, which makes them more difficult to interpret.

From this perspective, in an attempt to gain deepened insight into the phenomenon of entrepreneurial business development, an interpretive process was followed to identify the possible existence of a contextual interrelationship between the observed objective business characteristics and the characteristics of the identified subjective thematic coping-value system profile.

Considering the nature of the configuration of the objective business context and structure characteristics in terms of the business control (governance nature) and orientation towards development, it was possible to induce supportive contextual thematic coping-value system profile characteristics for each of the five business developmental clusters identified in the data analysis.

Reflecting on these induced contextual interrelationships, two themes have emerged from the analysis that may have a significant influence on the developmental (transition) process of an entrepreneurial business. Observing the findings of this interpretive process the observation that the entrepreneurs' preference towards the 'egocentric-exploitative' coping-value system may have an effect on the interpretation of how the identified coping-values profile relate to the nature of the configurations observed in the business context and structure variables. Similarly, the entrepreneurs' preference towards second-tier thematic coping-value systems also seems to influence the nature of the configuration of the business context and structure variables.

If the 'egocentric-exploitative' coping-value system is considered from an egocentric perspective, it is considered as a healthy part of an adult's behaviour, that influences how a person operationalises the thematic coping-values that they associate themselves with. From an operationalisation perspective, Beck and Cowan contributed to Graves' theory by indicating that a thematic coping-values system can be expressed as healthy (productive) or unhealthy (unproductive) (Kotzé, 2009; Beck & Cowan, 2006).

From this perspective, reflecting on the induced contextual interrelationships, the interpreted observation that a rejection of the 'egocentric-exploitative' thematic coping-value system contributes to a less productive operationalisation of the other thematic coping-value systems. In contrast, in the case of an observed tolerance towards the 'egocentric-exploitative' thematic coping-value system, it seems to manifest into the more productive operationalisation of the other thematic coping-value systems.

Similarly, it seems that a preference to second-tier thematic coping-value systems, seems to be associated with a more productive operationalisation of the other thematic coping-value systems. In essence as indicated in the literature, first-tier thematic coping value system thinking tends to consider single solutions that tend to be closed to views from other thematic coping-value systems. In contrast second-tier thematic coping value system thinking considers multiple solutions to problem-solving, taking into consideration the role of other thematic coping-value systems.

The observed potential impact that these two observations from the interpretation of the data above may have on entrepreneurial business development can be summarised as follow.

Considered from the high-growth development Classification, cluster group 5 indicated a preferred tolerance for the 'egocentric-exploitative' thematic coping-value system and seems to operate in an early transition stage to second-tier 'integrative-systemic' thematic coping-value system thinking. This seems to interrelate to an objective functional structure with a tendency towards a decentralised control structure, utilising specialisation skills and embracing an outlook for business development.

As for the other clusters that represent the medium-growth and low-growth development Classifications, cluster group 3 and group 4 reject the 'egocentric-exploitative' thematic coping-value system. This seems to interrelate to a protective functional structure with an orientation towards central control. This seems to originate from the influence which the rejection of the 'egocentric-exploitative' thematic coping-value system may have on the interpretation of the 'authoritative-conformist' thematic coping-value system. From this perspective, the 'authoritative-conformist' thematic coping-value system is probably authoritarian, rigid and can be intolerant in nature. With a focus on a sense of order and tradition, it has the probability to be rule orientated with a responsibility towards stability and a dislike for change and uncertainty.

From a first-tier and second-tier perspective, cluster group 1, group 2 and group 3 seem to prefer predominantly first-tier thematic coping-value systems of thinking. As a result, they most probably seeking one best approach to success among many potential options. There is a possible interrelationship with the objective business context and structure configuration, which potentially influences the business developmental aspirations.

In summary, considering the aim of this study, it seemed possible to explore entrepreneurship development applying an integral in nature approach, exploring the implied contextual interrelationship between the objective and subjective realms of entrepreneurial business development.

Exploring these contextual interrelationships has revealed deeper contextual insight into entrepreneurial business development. From the perspective of this study, the entrepreneur's coping-value system profile (his subjective intent) seems to interrelate to the developmental stage of the entrepreneurial business. The next final chapter offers a research summary and some recommendations.

## CHAPTER 7

# RESEARCH SUMMARY AND RECOMMENDATIONS

### 7.1 INTRODUCTION

As discussed in Chapter 1, the commonly accepted view that entrepreneurial activity can play an important role in socio-economic development. For some time already, worldwide resources have been committed to stimulate entrepreneurial business development.

However, from a measuring and monitoring perspective, the observation that entrepreneurial business in most cases deliver below expectation on socio-economic development. As a result, the prominent view has emerged that the type of entrepreneurial business seems to influence the sustainability of the impact on socio-economic development. From this perspective, one needs to consider how the capacity potential, within the various types of entrepreneurial businesses, can contribute to sustainable socio-economic development.

The literature confirms the classification of entrepreneurial businesses into various categories; each with a different impact on innovation, employment and wealth distribution. In general, it has been acknowledged that a substantial difference exists between micro, very small-sized (including self-employment) entrepreneurial businesses and small, medium-sized entrepreneurial businesses with the comparative notion that small, medium-sized entrepreneurial businesses offer advantageous socio-economic development opportunities. In essence, the observation is that the productivity capacity of an entrepreneurial business can be imbedded in the potential to develop from a micro, very small-sized entrepreneurial business to a small, medium-sized entrepreneurial business. It has also been assumed that, in this development process the business exponentially multiplies its employment opportunities, which if combined with equitable remuneration options, offer advantageous socio-economic development opportunities.

Considered from this business developmental perspective, the GEM (2014) report acknowledged that established businesses are important to form the core of a country's economic canvas. The report (GEM, 2014) highlighted the crucial importance of understanding the dynamics of the successful transition from early-stage entrepreneurial activity towards established businesses as one of the key concerns of any government or stakeholders responsible for the well-being of their citizens.

From an academic perspective, there has been a shift in entrepreneurial business development to include a focus aimed at understanding the dynamics of the successful transition from an early-stage entrepreneurial business to an established medium, larger-sized entrepreneurial business.

The successful transition from early-stage entrepreneurial business to established medium, larger-sized entrepreneurial business is complex, with various authors observing that only a few entrepreneurs seem to be successful in developing their business ventures. In many cases, entrepreneurial business managers are not willing to pursue business development. In some cases, usually necessity-driven entrepreneurial businesses, the entrepreneurs tend to return to forms of employment if and when they have the opportunity.

In essence, there is an indication that the entrepreneurs' choices may have a significant influence on the dynamics involved in the successful transition from early-stage entrepreneurial business activity towards established businesses.

Considered from this contextual perspective, Stokes et al. (2010) observed that entrepreneurial business success consists of two components: There is the action of doing to achieve business results and the need to consider how these results align with the entrepreneur's goals and objectives (Stokes et al., 2010). This observation seems to imply that entrepreneurship development is the interrelationship between the objective world perspective of knowledge to be successful in a business venture and the subjective mind aspect of the entrepreneur's objectives, i.e. the intent for engaging into an entrepreneurial business venture.

From this perspective, it seems to be improbable to explain entrepreneurial business development independent from the entrepreneur's subjective mind. Wilber (2000) highlighted this paradigm that no subject is an island unto itself, and the need to consider how the objective exterior manifestation interconnects with the subjective interior consciousness.

Considered from an interrelationship perspective, many authors have advocated the benefits of integral research to explore interrelationships to deepen insight through the contextualisation of research findings. In the case of this research study, the research objective was to explore the contextual interrelationships, to complement the current rich body of knowledge on entrepreneurial business development. In essence, it aims to contribute to the observed need to gain deepened insight into the potential intentional relationship between the objective elements of the entrepreneurial business and the subjective realm of the entrepreneur's active dominant coping-value system (his world-view).

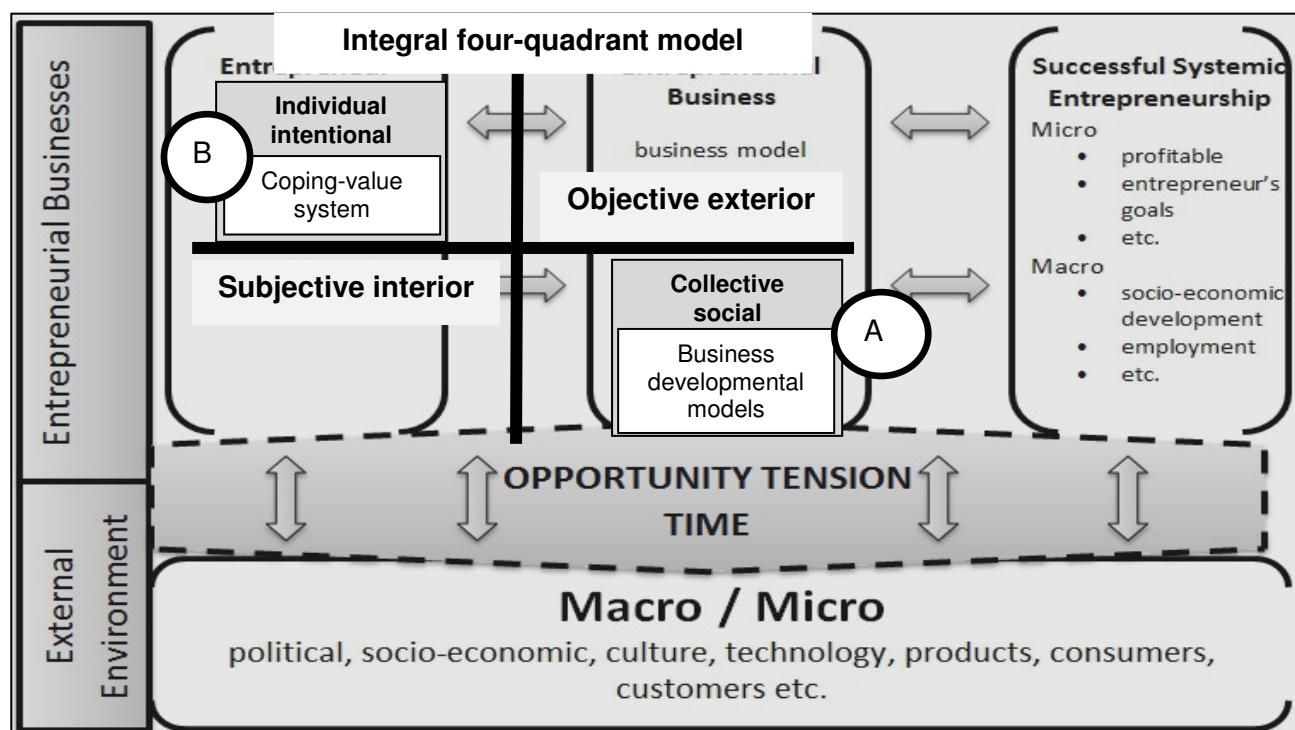
In view of this objective, this explorative in nature study set out to investigate the research question: What is the potential dynamic interrelationship between the subjective realm (operationally defined as the dominant coping-values (world-view) of the entrepreneur), and the objective realm (operationally defined as the developmental stage of the entrepreneurial business venture)?

## 7.2 GENERAL SUMMARY OF THE RESEARCH

The objective of the research was to explore additional insight through the application of a more multi-level approach. Following an integral approach, as a form of a multi-level approach, the intention was to explore contextual interrelationships between characteristics of a subjective nature and objective nature.

With a focus on entrepreneurial business, the intention was to explore contextual interrelationships, applying an integral approach, between the coping-value system of the entrepreneur (his subjective intent) and the developmental stage of the entrepreneurial business (the objective exterior of entrepreneurial business development). In the process, the proposition of this study has been to add systematically to the richness of the current research on entrepreneurial business development.

Considering the contextual research setting as summarised in Figure 3.1 (used as the faded contextual background in Figure 3.3), a research objective was set for this research study as depicted in Figure 3.3, repeated here for ease of reference.



**Figure 3.3: Contextual location of the objective and subjective realms explored by the research study**

With an aim to contribute to the understanding of the entrepreneurial business development phenomenon (the faded background in Figure 3.3), the research objective of this study was to explore the potential implied contextual interrelationship between the developmental stage of the entrepreneurial business (the exterior objective as indicated by A in Figure 3.3) and the dominant

coping-values (world-view or intent) of the entrepreneur (the interior subjective as indicated by B in Figure 3.3).

From a contextual setting perspective, the faded background graphic of Figure 3.3 illustrates the complex ecosystem of the entrepreneurial business development phenomenon consisting of layered multi-dimensional interrelationships. At the bottom of Figure 3.3, is the ever-changing external environment that depicts the macro-economic and micro-economic elements that the entrepreneurial business operates within. At the top are (1) the entrepreneur, (2) the business venture and (3) the success as perceived from a micro perspective, the business viability, and a macro perspective, of how this affects the external environment that the entrepreneurial business operates within.

From a time perspective, this reciprocal interactions result in constant change that creates various forms of opportunity tension. As the literature indicated, there is always a choice within these opportunity tensions, i.e. the proverbial ‘between stimulus and response there is a gap’ with the notion that this choice (conscious or unconscious) affects entrepreneurial business development.

Super-imposed on this ecosystem setting in Figure 3.3 is the aim of the study, i.e. to explore, guided by an integral approach, the potential contextual interrelationships between the entrepreneur’s subjective realm and the business’s objective realm. The theoretical frameworks and models (A&B on Figure 3.3) that were identified to guide the execution of this research study and that influenced the study the most, as discussed in the literature review, related to:

- Wilber’s four-quadrant integral theory framework;
- Business developmental stage models; and
- The heuristic thematic coping-values system concept identified in Graves’ open-system theory of values theoretical model.

One of the key utilities of Wilber’s four-quadrant integral model is that it explores the contextual interrelationship between evolutionary theories, models, frameworks or systems, making it possible to observe the potential contextual interrelationships between levels of development or evolution according to these four major categories of development (Wilber, 1997).

To observe the potential contextual interrelationship at various levels of development, Wilber applied the concept of *holons*, a term from Koestler, describing a whole that is simultaneously part of some other whole, which possesses simple location (Wilber, 1997). Considering these points of simple location (*holons*) from an evolutionary perspective, Brodie (2011) defined evolution as the process of how things become increasingly more complex.

In the processes of identifying the complexity of these points of single location, it is not the presence or absence of elements that indicates complexity, nor the level of efficiency or difficulty, but rather the function of the element or the nature of the interrelationship with other elements that is an indication of complexity.

From this perspective, the application of Wilber's four-quadrant model is based on the processes to identify various developmental or evolution waves or streams, each represented with their definable point of single location (*holon*), that is measurable in terms of its level of complexity.

Based on this theoretical guidance to enable research of an integral nature, this study reviewed the literature and select developmental theoretical frameworks that offered the utility of identifying points of single location that can be assessed according to its level of complexity.

The study used cluster analysis as the principle analytical procedure to objectively identify business clusters in a data set as potential developmental points of single location.

With reference to the work of Hanks et al. (1993), who validated the use of cluster analysis as an empirical method to identify business developmental stages in a dataset of multiple independent business variables, as well as the work of McMahon (2000), this study selected on a theoretical basis three variables to identify business clusters in a business data set: (1) organisation age; (2) size in terms of employees; and (3) growth rate in terms of employees.

Following this primary approach to data analysis, five business clusters were identified and verified as points of single location.

To assess the levels of complexity within these identified points of single location, survey data was used in combination with theoretical data from the literature to identify the nature of the objective and subjective characteristics of these points of single location.

From an objective perspective, data was collected on eight business variables, three relating to business context and five relating to business structure. This was used in combination with literature on business developmental stages to identify the nature of the characteristics within each business cluster, enabling the processes of classifying these clusters into one of three theoretical developmental levels, each associated with a different level of complexity.

From a subjective perspective, survey data was used to identify the entrepreneurs' preferred thematic coping-values system profile. From this perspective, it was possible to identify the preferred theoretical nature and characteristics of the thematic coping-value profiles of the entrepreneurs identified in the business developmental clusters. The level of complexity of these thematic coping-value system profiles is based on the underlying theoretical level of complexity of the thematic coping-value system of Graves' open system of values theory.

In essence, it was possible to identify five business clusters with varying developmental stages from an objective and subjective perspective.

This enabled the explorative process to identify a potential interrelationship that seems to be present between the theoretical nature of the business characteristics and the theoretical nature of the thematic coping-value system profiles of the entrepreneurs in these business clusters.

In this interpretation process the study considered how the identified characteristics of the entrepreneur's thematic coping-value system profile can contribute to explain and/or support the observed patterns of contextual and/or structural characteristics present within each business developmental stage. As indicated in the top of Figure 7.1, influenced by Wilber's integral theory, the expected notion of an interrelationship is based on the increase in complexity associated with development. In essence, there is the expectation of more complex objective characteristic configurations to relate with the more complex subjective characteristic configurations.

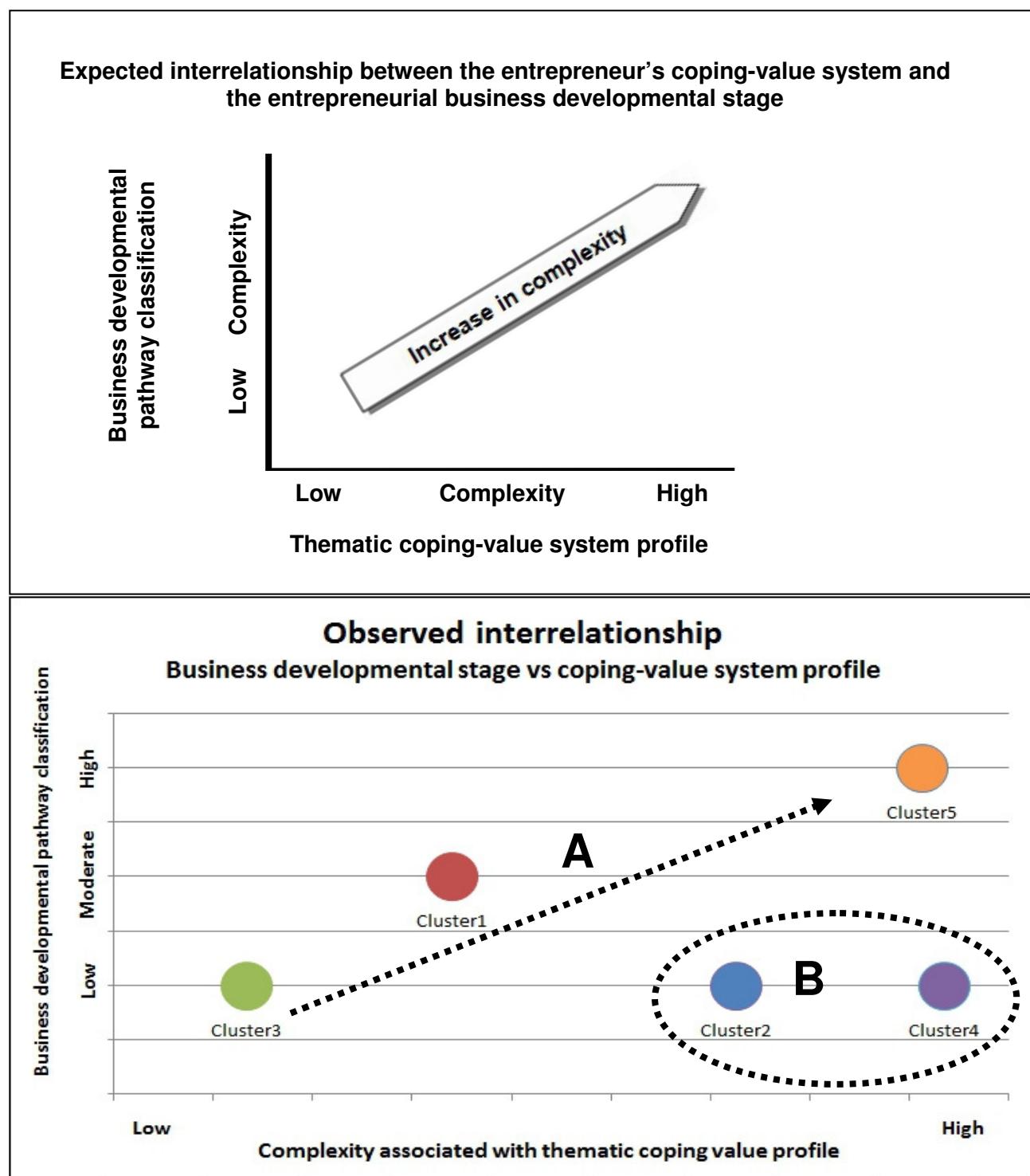


Figure 7.1: Expected interrelationship vs. actual observed interrelationship

The findings indicated that the theoretical notion of interrelated complexity seems to hold for cluster group 3, group 1 and group 5, as depicted by arrow A at the bottom of Figure 7.1.

The interrelationship of cluster group 2 and group 4, depicted in the circle B at the bottom of Figure 7.1, seems to be counter-intuitive, with a relatively low business complexity associated with a relatively more complex entrepreneurial coping-value system profile. Cluster group 2 and group 4 seem to compare favourably to the literature on disengaged clusters observed by Hanks et al. (1993). They noted that these business clusters do not seem to fit the traditional business developmental models, making them more difficult to interpret.

Contemplating on the observed findings above, and influenced by Wilber's (1997:75) view that, "objective exteriors can be seen, but all depth requires interpretation", to an extent seems to confirm the advocated benefits of deepened insight to be gained from research that is of an integral nature.

Chapter 6 gave an overview of the interpretive interrelationships observed between the objective characteristics present in the identified business development clusters (Appendix H) and the characteristics of the identified coping-value profiles present in each business development cluster (Appendix L). The heuristic thematic characteristics associated in the literature with each coping-value profile (summarised in Appendix M) were utilised in the identification of interrelationships.

Using these two sets of objective and subjective characteristic configurations, it was possible to induce an interrelationship, gaining deepened insight into the relationship between (1) the objective realm (the structural and contextual characteristics); and (2) the subjective realm (characteristic configurations of the thematic coping-value system profile), that were identified within each business cluster group.

With a study aim to contribute to the understanding of the development (transitioning) processes of entrepreneurial business, Chapter 6 ends with the reflection on the difference of the nature of the interrelationships identified between the subjective and objective characteristics present within each cluster group. Two themes emerged from the analysis of the research sample data set. The interpreted observation is that these two themes may have a significant influence on the development (transition) process of an entrepreneurial business.

The one theme was the entrepreneurs' level of latency towards more complex thematic coping-value systems. In essence, it relates to the extent that they recognise or associate with the problems and life conditions associated with more complex thematic coping-value systems. To facilitate interpretation of this observation, a summarised simplified version of the thematic world-views (problems and life conditions) that underlie Graves' coping-value profiles seems of utility.

The underlying thematic of the structure, from a less complex to a more complex nature, can be summarised as follows:

- I will be taken care of as part of this society;
- I am partly responsible for taking care of myself;
- I am conscious of how my actions influence the society and world we live in.

From this perspective, it was observed in the analysis of the research sample data set that younger businesses seem to have more latency, associating themselves less with the problems and life conditions associated with more complex thematic coping-value systems.

The other theme was the entrepreneurs' egocentric preference, an observation that to an extent resonates with Wilber (2001) who linked development to the successive decrease in egocentrism.

To facilitate interpretation of this observation, the study explored egocentric development from the perspective of Graves' model with the observed egocentric developmental stages that range from: (1) expressing a self-desire impulsively at any cost; (2) to expressing self-desire for self-gain in a rational and calculated manner; (3) to expressing self-desire but not at the expense of others (Graves, 1971).

The ego is seen as a healthy part of an adult's behaviour, that influences how the person operationalises the thematic world-views (problems and life conditions) that he or she associates themselves with. In this regard, the study considered the contribution of Beck and Cowan to Graves' theory, indicating that thematic coping-values can be expressed as healthy (productive) or unhealthy (unproductive) (Kotzé, 2009; Beck & Cowan, 2006). From this perspective, the study considered the interrelationship between the entrepreneurs' perception of egocentric behaviour and the world-views (problems and life conditions) that they associate themselves with.

Reflecting on the analysis of the research sample data set, it was observed that a rejection of egocentric behaviour, the perception that the ego is bad, seems to contribute to the less productive expression of the thematic world-views (problems and life conditions) that the entrepreneurs associated themselves with.

As observed in the research sample data set, the older small business, that seemed to have disengaged from development, seems to be aware of and/or associate with more complex world-views (problems and life conditions), in combination with a rejection of egocentric behaviour. A rejection of egocentric behaviour is associated with people who often interpret this way of thinking as 'bad' and as a negative aspect of personality behaviour (Beck, 1992). This seems to manifest in a more controlled, protective orientated (risk adverse) behaviour expressed as a possible individualistic motivational need for success with a willingness to do anything for self-gain. In essence, this is a drive to engage that seems to be based on selfishness.

This is in contrast to the older larger business, that seems to be aware of and/or associate with more complex world-views (problems and life conditions) in combination with a tolerance of egocentric behaviour. This seems to manifest in behaviour, which seems to reinforce multiplicity thinking and the acceptance of risk, expressed in the support and guidance of the productivity of people with ambition, as long as this ambition is perceived as realistic and seems to be supported by a form of planning and implementation monitoring. In essence, this seems to be a developmental orientated drive.

In summary, considering the aim of the study, it was possible to explore the phenomenon of entrepreneurial business development on a more multi-level approach. The study to an extent supports the views that an integral (or more multi-level) approach to research offers the potential to gain deepened insight into phenomena of a social orientation.

The study applied an integral method, as a form of a multi-level approach, to explore the interrelationships between the subjective characteristics of the entrepreneur and the objective characteristics of the entrepreneurial business.

Reflecting on the result of the interrelationships identified in the research sample data, this study contributes to the observation of induced deepened insight that seems to have a significant influence on the development (transition) process of entrepreneurial businesses.

The next section discusses the contribution of this study and offers some practical recommendations.

### **7.3 RESEARCH STUDY CONTRIBUTION**

Research of a PhD nature has the ambition of making a contribution to the body of knowledge (Jeppesen, 2005).

The aim of this research study is to contribute to the body of knowledge, exploring deeper insight and understanding of the perceived interrelationship between the subjective realm of the entrepreneur (operationally defined as his coping-values system) and the objective realm of the entrepreneurial business (operationally defined as the business developmental stage).

Part of the research process included the identification of subjective coping-value system characteristics and objective context and structural characteristics associated with various developmental stages identified in the research sample data set.

From this perspective, the study contributes to the body of knowledge; systematically adding to the current explanatory frameworks in the literature on business developmental stages, through the identification of characteristics of a more subjective nature that seem to interrelate to the configuration of the objective in nature characteristics that are present in the various developmental stages. These findings can contribute to research studies that seek to expand

systematically on the development of broad conceptual frameworks regarding the phenomenon of entrepreneurial business development.

Reflecting on the findings of the data analysis and based on the integral nature of the interrelationships identified between the subjective and objective characteristics present within the identified developmental business clusters, it was possible to observe deepened insight, identifying two possible themes that seem to have a key influence on business development.

From this perspective, the study contributes to the body of knowledge gaining deepened insight into the dynamics that seem to influence the successful transition from early-stage entrepreneurial activity towards established entrepreneurial businesses.

The study applied an integral method to explore the interrelationships between the subjective and objective characteristics identified in the sample data. Applying an integral approach, as a form of multi-level research, the findings of the study demonstrate and support the views that research of a multi-level nature seems to offer the potential to gain deepened insight into phenomena of a social science orientation, in this case entrepreneurial business development.

From a body of knowledge perspective, this study is an example of one possible method to operationalise research of an integral nature on entrepreneurial business development.

#### **7.4 RECOMMENDATIONS, PRACTICAL AND FOR FURTHER RESEARCH**

The primary focus of a PhD research project is the academic interest; however, it may contain information that can be of relevance to stakeholders in the ecosystem of the phenomenon under investigation (Jeppesen, 2005). With research on social phenomena there can also be the expectation or ambition to end the research with practical recommendations on how stakeholders can utilise the research to facilitate social change and/or even recommendations on how stakeholders can implement the findings of the research project (Jeppesen, 2005).

In this regard Jeppesen (2005) is of the view that the translation of academic work into legitimate practical orientations should be a separate phase in a dialogue with the relevant stakeholders in the ecosystem. Jeppesen (2005) cautioned on the risk associated with a too close relationship between research and the practical interpretation. He cautioned that the demands of the practical aspects may affect the scientific rigour of the research with the risk of producing possible dubious accounts of a phenomenon (Jeppesen, 2005).

From this standpoint, the translation of the academic findings of this research study is not part of the scope of this project. It is recommended that the findings from this research study be translated on a project-by-project basis according to the needs of the relevant stakeholders in the entrepreneurship development ecosystem. In any such translation process the limitations of this study need to be considered.

Considered from this perspective, with its integral approach, this study borrows from various theoretical frameworks and models. The translation of the findings of this research must consider the inherent limitation of these theoretical frameworks and models.

This study assumed the evolutionary nature of these models to explore deepened insight into entrepreneurship development. However, it is noted that contemporary academic thinking on business developmental stage models challenges this thinking and proposes alternative propositions to be researched. These alternative propositions to an extent promote the notion to consider an integral research approach.

In general, the findings of this study support the notion that it is possible to identify business developmental stages and to identify the less specific thematic nature of the business's objective and subjective characteristics.

From this perspective, the findings of this research study support the approach of Hanks et al. (1993) as a primary method to identify on an imperial basis business developmental clusters in a data set through the application of multi-variate statistical methods.

The research study also found the heuristic utility claimed from the coping-value system framework in Graves' model, to offer the prospects of inducing deepened insight into the subjective dynamisms that can contribute to entrepreneurial business development.

Although the frameworks and models used to guide this study are based on generalisable concepts, this cannot be assumed from the findings based on the application of these frameworks. The detailed interpretation of the findings of this research study is limited to the sample of the entrepreneurial businesses surveyed. Nevertheless, the concept of an integral research approach applied in this research, to gain deepened insight and understanding on the phenomenon of business development, appears to be generalisable.

The explorative nature of this study must be considered in the application of the concepts used in this study. It must be noted that the interpretation of the interrelationships between the objective and subjective characteristics of business developmental stages is inductive by nature. However, these findings do provide valuable insight into the objective and subjective interrelationships of the dynamics of entrepreneurial business development that can be utilised as input into future studies or in the process of translating these academic findings into legitimate practical orientations.

With appropriate regard for the limitations in the research findings, the following are some general observations that can contribute to any processes to translate the research findings into practical application. From a translation perspective, the type of research conducted may have an influence on the recommendations from the research.

Andersen and Gamdrup (1990, cited by Jeppesen, 2005) divided research into five types:

- i) Explorative types of research that aim to present information on a phenomenon and how it is constituted;
- ii) Descriptive types of research that aim to explain the character of the phenomenon in relation to a specific context;
- iii) Explanatory types of research that aim to answer why the phenomenon developed in a certain way and to identify its causes;
- iv) Predictive types of research that aim to provide suggestions, proposals and recommendations concerning how a phenomenon can be changed; and
- v) Action-oriented research that seeks to implement change in collaboration with a target group.

Andersen (1999, cited by Jeppesen, 2005) indicated that a research project should attempt to focus on one type of research, although he acknowledged that most research includes a descriptive element.

From this classification perspective, the nature of this research project is explorative with a descriptive element. This study explored the implied interrelationship between the developmental stage of the entrepreneurial business and the coping-value system of the entrepreneur.

In the research findings, implied causal relationships can be identified. These implied causal relationships can be used as input into future research of an explanatory nature.

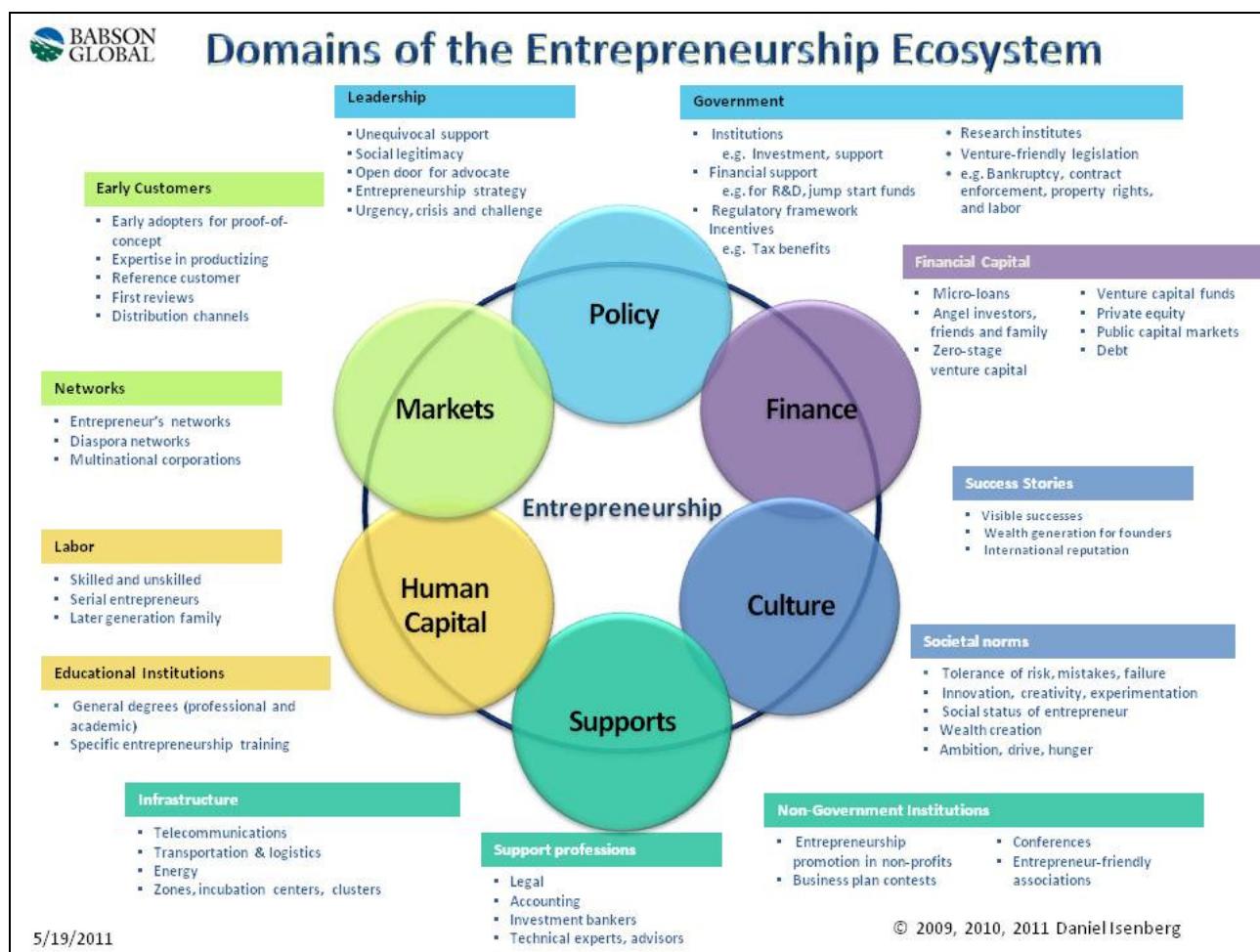
Considered from the predictive and action-oriented research perspective, there is the notion of the interrelationships between social agents that have the ability to change. Social agents are capable of change via thoughtful deliberations about the world they live in, constantly making choices by direct cognition or a reliance on stored heuristics (Miller & Page, 2009).

With a focus on choices that people make in the world that they live, the relevance of this research study stems from its integral nature, that includes the element of subjective characteristics that seem to influence decision-making in accordance to the perception (stored heuristics) of the world the people live in. In the research findings it was possible to identify coping-value profiles for the entrepreneurs in relation to the developmental stage of their entrepreneurial businesses. Reflecting on the induced interrelationship between these profiles and the nature of the objective characteristics of the business ventures, two key potential themes emerged that seem to have an influence on decision-making.

Exploring the potential social contribution from these academically identified two themes, the entrepreneurial ecosystem is seen as a useful framework to guide the translation of this academic insight into practical application.

From this perspective, a systems approach to deepened insight into the understanding of the factors that influence entrepreneurial business development is seen as an important step forward (Mack & Mayer, 2015). The entrepreneurial ecosystem (Figure 7.2) is seen as a unique complex system, consisting of the interaction between a few elements that are always present if entrepreneurial business activity is to be self-sustaining (Isenberg, 2011). Classifying these elements, Isenberg (2011) highlighted six domains within the entrepreneurial ecosystem:

- i) Enabling policy and leadership;
- ii) Venture-friendly markets;
- iii) Quality human capital;
- iv) Availability of finance;
- v) Encouraging culture; and
- vi) Institutional support services.



**Figure 7.2: Domains of the Isenberg Entrepreneurship Ecosystem**

Source: Babson, 2015.

Cohen (2006 cited by Mack & Mayer, 2015) is of the view that research is also needed to understand the interdependencies between the entrepreneurial ecosystem domains, including their evolutionary dynamics. This time dimension enables the evaluation of the relevant importance of the elements within the entrepreneurial ecosystem domains over time (Cohen, 2006 cited by Mack & Mayer, 2015). This evolutionary dimension assists with the contextual setting of how history, culture and the institutional settings influence the entrepreneurial ecosystem (Mack & Mayer, 2015). It may also assist stakeholders in identifying action points to drive the entrepreneurial ecosystem to a next developmental level (Mack & Mayer, 2015).

With the study's focus to contribute to deepened insight into the development of entrepreneurial business, the two key insights of this study may be of interest to the interrelationship between the following domains of the entrepreneurship ecosystem.

Considering policy as the broad course of action adopted by a government in pursuit of sustainable socio-economic objectives to the benefit of all citizens, it is intuitive that the actions of the citizens are required to materialise the goals of the policy. In context to the findings of this study, from a policy strategy and implementation perspective, it can be appropriate to ask the question to what extent the citizen's world-views (coping-value system) contextually relate to the goals of the policy. Furthermore, the point of view emerges that the egocentric development of the citizens need to be considered in the policy strategy and implementation processes.

For example, with an objective to develop businesses from early-stage start-up to medium or large organisations over time, from the data of this study, the observation that it is important that entrepreneurs expand their awareness to more complex world-views. However, as the data indicated an expanded world-view in itself is not sufficient; there is also the need for healthy egocentric development.

As the data of this study indicated, about 65 percent of businesses surveyed were small businesses employing on average 14 to 19 employees, being operational on average for 12 to 27 years. Comparing this observation to the literature on business survival rates, indicating that about 80 percent of businesses fail within the first three years (SME South Africa, 2015), the plausible view to induce that these business owners know how to manage businesses successfully. As the literature on owner-managed businesses indicated, it is also important to consider the objectives of the owners to understand the development ambition of these businesses. From this perspective based on the theoretical models used in this study, from a policy strategy and implementation perspective the interpretation that is can be important for these entrepreneurs to understand what they stand to benefit from the development of their business ventures into medium- and larger-sized organisations.

Considering the human capital domain (entrepreneurs) contextually from a finance domain perspective, the following was observed from the moderate-growth business classification group that represented 14 percent of businesses in the survey, with a growth rate of 50 percent. In the development considerations of these businesses there seems to be a need to discuss the impact from a deliberately capped growth approach as a method to minimise surrender of business control and the possible new obligation of accountability that is associated with external financing. Compared to the literature on business survival rate (80% fail within the first three years) (SME South Africa, 2015), these businesses have been in operation on average for seven years, hence the assumption that they know how to manage business successfully. From the data of this study, for these businesses to develop into medium or large businesses, the view that there may be a need to stimulate more complex world-views and a need to consider the impact of a healthy egocentric development on the perception of business control and external accountability.

Considering these potential interrelationships between the human capital element and the other elements of the entrepreneurship ecosystem, to follow are some practical considerations from a human capital development perspective.

Higher education can contribute and play an important role in the awakening of the awareness levels of the entrepreneur's world-view (coping value system). As for the education system as a whole, there is the opportunity to consider the need to evaluate their role in the processes to foster an environment that is conducive to a healthy egocentric development of a nation's future entrepreneurial talent, their youth.

Considering the human capital interrelationship between the entrepreneurs and the support services domain of the entrepreneurial ecosystem, the study offers some practical considerations for practitioners, coaches, non-governmental organisations (NGOs) and action researchers. With the notion that egocentric development seems to influence the manifestation of the entrepreneur's world-view in his business context, the point of view that these support services should consider how the entrepreneur's egocentric development and the complexity level of their world-view may impact on the expected benefits from the support services offered.

From a cultural perspective, the entrepreneurial ecosystem model indicates the need for the promotion of visible entrepreneurial successes. The communication should consider the personal reputation and social status of the entrepreneurs in their society. From a reputation perspective, this study suggests that the entrepreneurs associated with high-growth business ventures have a world-view that is conscious of how they may influence the society. It is also induced that a high-growth business can be associated with an egocentric developmental level, which expresses self-desire not at the expense of others, compared to smaller, older businesses that seem to be associated with an egocentric developmental level, which expresses self-desire for self-gain in a rational and calculated manner. From this perspective, there seems to be a need for a practical discussion on the nature of the message in the promotion of visible entrepreneurial successes,

considering how this may affect the perceived reputation and social status of the entrepreneurial business. Consideration should be taken of how the message may manifest in the type of entrepreneurial activity in an entrepreneurial ecosystem.

In summary when it comes to making practical recommendations, it is important to consider the explorative purpose of this research with its objective to gain a better understanding of an existing phenomenon and thereby contribute to the development of hypotheses that can be tested in future research (Babbie & Mouton, 2012; Trochim, 2006). From this perceptive, explorative research can indicate future research priorities and/or the feasibility of more extensive research on a phenomenon, contributing by explaining concepts and constructs as well as considering possible research methods that can be deployed in subsequent research (Babbie & Mouton, 2012). This is in contrast to research with an explorative nature and the ambition to report on causalities (Babbie & Mouton, 2012; Andersen & Gamdrup, 1990, cited by Jeppesen, 2005). As a result, the implied causalities identified in this research can be of value to future research of an explorative nature as input into the development of hypotheses to test possible causalities.

However, this does not imply that this research does not offer practical value. The practical value of this research relates to its input on discussions regarding the elements identified that influence entrepreneurial business development. In this regard, Table 7.1 below is an indicative example of how the findings from this research can be incorporated in the discussions on entrepreneurial business development. From a structural perspective, Table 7.1 indicates the discussion topic or recommendation for discussion contextually in relation to the categories of Isenberg's (2011) entrepreneurial eco-system (Figure 7.2 above). From a management perspective, it also indicates the possible strategic considerations with potential operational and organisational impact. Table 7.1 is not a comprehensive list of discussion topics and/or management implications; it is a stimulus to explore the practical implications of the findings of this research study.

**Table 7.1: Practical incorporation of research findings into discussions on entrepreneurial business development**

<b>Recommendation topic</b>	<b>Entrepreneurial eco-system domain</b>	<b>Strategic</b>	<b>Operational / Organisational</b>
There is a need to consider the evolutionary dimension of the entrepreneurial eco-system (Cohen, 2006 cited by Mack & Mayer, 2015). In essence, to assess the contextual setting and interrelationship of the elements within the entrepreneurial ecosystem domain areas. From this perspective, cognisance should be taken of the integral relationship between subjective elements in context to objective elements and their impact on the evolutionary dimension of the entrepreneurial ecosystem.	Policy - <i>Research institutions</i>	Increase the awareness of the potential benefits from an integral research approach that considers objective and subjective elements within the social phenomenon of entrepreneurship development.	The scientific status of consciousness theory is regarded as low, as it is characterised by gaps in its underlying mechanisms and its difficulty to measure (Prinsloo, 2012). This impacts on its usability in explanatory and/or predictive research.  From this perspective, there is need for research of a deductive, explanatory and/or predictive nature, testing hypotheses to strengthen the indicative causalities observed in the explorative research on the interrelationships between the subjective elements and the objective elements of the entrepreneurial eco-system.  In this regard, the potential persistence of disciplinary boundaries that can inhibit the operationalisation of research into integrated complex social phenomena needs to be considered.
There is a need for research of a deductive, explanatory and/or predictive nature, testing hypotheses to strengthen the indicative causalities observed in the explorative research on the interrelationships between the subjective elements and the objective elements of the entrepreneurial eco-system.	Policy - <i>Research institutions</i>	Increase the awareness of the potential benefits from an integral research approach that considers objective and subjective elements within the social phenomenon of SME development.	As Stein and Heikkinen (2009) and Prinsloo (2012) indicated, there is a need for more calibrated measuring instruments that measure the subjective elements of a person (entrepreneur in this case.)  From this perspective, calibrated measuring instruments offer the potential of an increase in hypothesis testing in research of an explanatory nature.

Table continues on next page

**Table 7.1: Practical incorporation of research findings into discussions on entrepreneurial business development (continued)**

<b>Recommendation topic</b>	<b>Entrepreneurial eco-system domain</b>	<b>Strategic</b>	<b>Operational / Organisational</b>
Based on the advocated need for institutions responsible for policy to focus on the transitional processes of entrepreneurial businesses from start-up to medium, larger organisation, there is a need to consider the goals and objectives of the business owners to understand the development ambition of their businesses in context to the prevailing entrepreneurial-eco system.	Policy - <i>Leadership</i>	As part of the black-box discussions on the social phenomenon of entrepreneurship development include integral considerations that consider how subjective elements can impact on social development potential of objective elements.	Develop descriptive research to gain insight on the current status of the subjective elements of SME business owners.  Through collaboration and research, explore the contextual impact that the current status of the subjective elements of SME business owners may have on the developmental potential within the entrepreneurial eco-system and suggest policy development direction.
Higher education can play an important role in the development of the subjective personal elements identified in this study that contribute to the transition processes of entrepreneurial business from a start-up to medium and larger organisation.	Human Capital - <i>Educational institutions</i>	As part of the education for sustainable development theme, include integral thinking that considers how subjective elements contextually may impact on objective social development potential.	From an academic leadership perspective, collaborate on the practical implication of incorporating the development of personal subjective elements in the dissemination of knowledge.
Entrepreneurial support programmes stand to benefit if they consider how knowledge of the entrepreneur's egocentric development and the complexity level of their world-view may impact can impact on the benefits of their support interventions.	Support services - <i>Technical experts and advisors</i>	Incorporate world-view awareness and personal egocentric development components into support programmes.	Practitioners, coaches, non-governmental organisations (NGOs) and action researchers need to collaborate on the impact of and the practical approaches to integrate research that focuses on personal consciousness development into their entrepreneurship support programmes.

Table continues on next page

**Table 7.1: Practical incorporation of research findings into discussions on entrepreneurial business development (continued)**

<b>Recommendation topic</b>	<b>Entrepreneurial Eco-System Domain</b>	<b>Strategic</b>	<b>Operational / Organisational</b>
Consider how the underlying message on the communication of entrepreneurship success affects the personal social status of the entrepreneurs in their society.	Culture - <i>Social status of entrepreneur</i>	Communication on entrepreneurship success should include social consideration on how their actions impact on their societies and socio-economic development	Practical discussion on the nature of the message that promotes entrepreneurial successes and the success examples used to promote entrepreneurial activity, taking into consideration how they support the moral legitimacy of entrepreneurial businesses in their society.
From a capital demand-side perspective, the providers of capital stand to benefit if they consider how the relationships between a SME owner's world-view and egocentric development impact on how they evaluate capital products.	Finance - <i>Financial Capital</i>	Understanding the demand for financial product offerings can be a possible strategic advantage.	From this perspective, consider the impact on the demand for capital from insight from integral market research on how subjective elements in context to objective elements.  Financial institutions can utilise their customer databases to gain insight into the world-view and egocentric development of their business customers in relation to the developmental stage of their business.  Collaborate on how this insight combined with research in this area can impact on the demand for their capital products on offer.

## 7.5 CONCLUDING REMARKS

To conclude, this study contributes on academic and social practical levels.

From an academic perspective, this research was a formal form of knowledge acquisition that followed the sequential three-stage postulation of apprehension (descriptive), judgement (classification) and reasoning; thus, an inductive process that expanded the known (Kjeldal, 2002).

This explorative study characterised and classified objective and subjective elements of entrepreneurial businesses in five identifiable categories, inducing propositions as a contribution to the body of knowledge. These induced propositions include implied causalities that can be used to test hypotheses in subsequent deductive studies. As a result, this study also makes a contribution to the feasibility of future studies.

To consider this study's practical contribution, the Isenberg's entrepreneurial ecosystem (see Figure 7.2) was used as a framework to identify areas that may benefit from the practical translation of the induced propositions discussed above. Considering the six domains of the entrepreneurial ecosystem, the propositions from this study can contribute to discussions and add practical value in the following five domains:

- The policy domain and the strategies for policy implementation;
- The human capital domain, to consider education's impact on consciousness development;
- The finance domain, to consider the impact of perceived obligations associated with financing products for entrepreneurial business development;
- The support services domain, as the study offers practical considerations for practitioners, coaches, non-governmental organisations (NGOs) and action researchers; and
- The cultural domain, to consider how the messages used to promote entrepreneurial business success, could impact on the type of entrepreneurial businesses in an ecosystem.

In summary, this study contributes to the body of knowledge by offering inductive insights into the entrepreneurial business development phenomenon. It demonstrates that it is feasible to gain insight into this phenomenon by applying an integral approach to induce interrelationships between the objective and subjective realms of entrepreneurial business development.

As discussed above, the practical translation of these findings should be in dialogue with the relevant stakeholders in the ecosystem. Guidance is provided on the practical focus areas to be considered when translating the insights gained from this study into practical measures. As such, the practical application value of this study is evident, as long as any translation process takes into consideration the contextual parameters of this particular study.

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## APPENDIX A:

### BUSINESS STAGES QUESTIONNAIRE

Adapted from Hanks, Watson, Jansen & Chandler, 1993.

---

#### **Interview Purpose**

Thank you for participating in this exercise. This is part of a research project in social science. The interview questions that follow relate to various aspects of managing and operating a business. There are no right or wrong answers; your honest and detailed opinion is what matters. In the areas provided for additional information or explanations, please give as detailed as possible information. Please do not only write keywords or short sentences; instead tell us as detailed as possible in writing.

---

#### **Interview Administrative Information**

<b>Interviewer</b>	
--------------------	--

<b>Location</b>		<b>Date</b>	
-----------------	--	-------------	--

<b>Interviewee</b>	
<b>Organisation</b>	
<b>Industry Code</b>	

## Organisation Clustering Variables

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### Part 1 – Demographic Information of the Organisation

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In what year was the organisation / business started (founded) –

Total number of people employed at the end of 2014

Total number of people employed at the end of 2013

---

### Part 2 – Structural Considerations

---

#### Organisation Structure

Instructions - Select only one option

---

- 1 - **Simple Structure** - No defined departments / divisions, basically the Owner / Manager is assisted by individuals with various tasks and responsibilities.
- 2 - **By Functions** - Departments with defined functions, such as marketing, human resources, production, etc.
- 3 - **By Division** - The business is organised by divisions, for example geographic regional divisions, product or service group, market segments, etc.
- 4 - **Other Structures** - Please explain in box below, in as much detail as possible. If needed, please continue to write on the back of this page.

---

## Formalization

Instructions - For question 1 to 10 on a scale of one (Disagree Strongly) to seven (Agree Strongly) please select your level of agreement

For question 11 select only one option.

---

<i>On a scale of one (Disagree Strongly) to seven (Agree Strongly) please select your level of agreement with the statements below.</i>	Disagree Strongly			Agree Strongly			
1 - Formal policies and procedures guide most decisions	1	2	3	4	5	6	7
2 - Important communications between departments are documented in writing.	1	2	3	4	5	6	7
3 - Formal job descriptions are maintained for each position	1	2	3	4	5	6	7
4 - The top management team is comprised of specialists from each functional area (e.g., marketing, engineering, production).	1	2	3	4	5	6	7
5 - Reporting relationships are formally defined	1	2	3	4	5	6	7
6 - Lines of authority are specified in a formal organisation chart.	1	2	3	4	5	6	7
7 - Rewards and incentives are administered by objective and systematic criteria.	1	2	3	4	5	6	7
8 - Capital expenditures are planned well in advance.	1	2	3	4	5	6	7
9 - Plans tend to be formal and written.	1	2	3	4	5	6	7
10 - Formal operating budgets guide day-to-day decisions.	1	2	3	4	5	6	7

### 11 - Consider the following two methods of decision-making:

- a) **Entrepreneurial** - Based on personal judgment, where one individual makes the decisions.
- b) **Professional** - Based on analysis and expertise and involves functional specialists.

### Strategic decision-making in your opinion in this organisation is based on, select only one option:

- 1 - Always entrepreneurial
- 2 - Frequently entrepreneurial
- 3 - 50% entrepreneurial, 50% professional
- 4 - Frequently professional

- 5 - Always professional
- 

### Specialisation

Instructions – Select all the functions that have at least one full-time employee

---

<input type="checkbox"/> 1. Public/Shareholder Relations	<input type="checkbox"/> 2. Shipping and Receiving
<input type="checkbox"/> 3. Building Maintenance	<input type="checkbox"/> 4. Customer/Product Service
<input type="checkbox"/> 5. Production Planning/Scheduling	<input type="checkbox"/> 6. Personnel
<input type="checkbox"/> 7. Advertising	<input type="checkbox"/> 8. Legal Affairs
<input type="checkbox"/> 9. Purchasing	<input type="checkbox"/> 10. Sales
<input type="checkbox"/> 11. Quality Control	<input type="checkbox"/> 12. Employee Training
<input type="checkbox"/> 13. Market Research	<input type="checkbox"/> 14. Accounting
<input type="checkbox"/> 15. Inventory Control	<input type="checkbox"/> 16. Industrial Engineering
<input type="checkbox"/> 17. Research & Development	<input type="checkbox"/> 18. Safety/Security
<input type="checkbox"/> 19. Payroll	<input type="checkbox"/> 20. Finance

---

### Centralisation

Instructions – Indicate who is the last person whose permission must be obtained before legitimate actions may be taken in the following areas.

---

Indicate who is the last person whose permission must be obtained before legitimate actions may be taken to:	Direct Worker	First line supervisor	Department head	Division head	Chief executive officer	Owner or Board
	0	1	2	3	4	5
1- Promotion of a direct worker						
2 - Addition of a new product or service						
3 - Unbudgeted expenditure N\$5000-N\$ 10000						
4 - Selection of type or brand of new equipment						

5 - Dismissal, or firing of a direct worker							
---	--	--	--	--	--	--	--

### **Organisation Levels – Vertical Differentiation**

Instructions – Draw a basic organisation chart indicating the longest line from general employees to the Chief Executive. Please include any foremen or any other form of supervision levels. Please write in as much detail as possible. If needed, please continue to write on the back of this page.

---

---

**End of Questionnaire**

## MEASUREMENT KEY TO CLUSTERING VARIABLES OF BUSINESS STAGE QUESTIONNAIRE

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### ***Contextual Measures***

#### **Business Age**

2014 Less Founding date from part 1 of questionnaire

#### **Organisation Size**

The natural Log of the 2014 employment number from part 1 of the questionnaire

#### **Growth Rate Measure**

(Employee Number 2014 Less Employee Number 2013) divided by Employee Number 2014

### ***Structural Measures***

#### **Structural From**

The value of the level selected under part 2 of the questionnaire.

#### **Formalisation**

Add the rating values of question 1 to 11 under Formalisation part 2 of questionnaire. Expected Value range 11 to 75

#### **Specialisation**

Add the number of functions selected under specialisation part 2 of questionnaire. Expected value range 1 to 20

#### **Centralisation**

Add values of responses under centralisation part 2 of questionnaire. Expected value range 0 to 25

#### **Vertical Differentiation Levels**

Count the number of levels from the lowest employee to the highest position in the organisation; include both the lowest and highest in the count.

---

**End of Questionnaire Measurement Key**

## **APPENDIX B:**

### **COPING-VIEW (VALUES TEST) SELF-ADMINISTRATIVE SURVEY**

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An assessment of coping mechanisms. (V1R4)

#### **WELCOME & INTRODUCTION**

There are a total of 20 statements to complete. Each statement has 7 options for completion. You have a total of 15 points to allocate across the 7 options. For example, you may choose to put all 15 points on a single statement, or divide the points between two or more statements. Be sure to allocate all 15 points.

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points, the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

Allot 30 to 35 minutes to complete the instrument in one sitting. If you are interrupted, you can save your work and return later by pressing the RESUME LATER button.

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#### **G1: Your Hidden Values**

##### **[ ] 1. I LIKE A JOB WHERE... \***

Please write your answer(s) here:

- 1. I make lots of cash, people stay off my back, and I can do what I want
- 2. Loyalty earns greater job security and we are treated fairly
- 3. Our primary focus is on the health of all living entities as integrated systems
- 4. Our circle is strong as we work together and sacrifice for each other
- 5. Successful performance advances my career and I can get ahead
- 6. Human feelings and needs come first as we all share equally in a caring community
- 7. Systemic and long-range thinking count more than people, money, traditions, or quick fixes

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[ ] 2. THESE WORDS AND PHRASES DESCRIBE ME BEST... \***

Please write your answer(s) here:

- 1. An experiential being, who is guided by impressions, values minimalistic living, and carries a poetic perception of reality
- 2. A person who loves power, lives for the moment, and likes to be respected for feats of strength, intelligence, or conquest
- 3. A kindred spirit, who is clannish and superstitious, and senses the spirits in nature, objects, and animals
- 4. A humanist egalitarian, who believes every human being should have an equal opportunity to develop
- 5. A competitor who values material possessions and technology, who thinks pragmatically and pursues success
- 6. A person with strong moral convictions, who is patriotic, caught up in culture pride, and is a true believer
- 7. A non-materialist, who is non-compulsive, internally-driven, variety-seeking and accepts life as it is

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[ ] 3. I PREFER AN ORGANISATION THAT... \***

Please write your answer(s) here:

- 1. Treats everybody by the same rules and is committed to going by the book
- 2. Lets me cream what I can off the top and gives me the respect I deserve
- 3. Adapts to its natural environments so the organisational form is determined by its current functions
- 4. Synthesises knowledge from competent sources to make decisions that are beneficial to all life
- 5. Preserves our traditional customs, observes seasonal celebrations, and protects our close-knit groups
- 6. Tends to the inner and outer health of all of its people so they can become fully human
- 7. Thinks strategically and acts competitively to be successful in its niche

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[] 4. PAY AND REWARDS SHOULD BE DETERMINED BY... \***

Please write your answer(s) here:

- 1. What people like me need to keep the wolf away from the door
- 2. Individual contributions based on knowledge, levels of competency, and degree of importance to the function
- 3. What you're powerful and quick enough to get, since it's everybody for themselves in this dog-eat-dog world
- 4. The collective needs of the entire human community so that everyone can benefit, instead of the select few
- 5. Personal ambition and initiative, successful accomplishments, and the willingness to take risks
- 6. What fosters the development of global collective imperatives and mutual interdependencies
- 7. The need to maintain our standard of living, honour seniority and loyal service, and provide for rainy days ahead

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[]5. MY OWN CAREER PRIORITIES ARE DETERMINED BY... \***

Please write your answer(s) here:

- 1. Whatever will allow my work group to stay together like a family
- 2. What I have to do to get what I want without having to give in to anybody or conform to any system
- 3. What is just and proper, since my job and profession should reflect my rightful place in society
- 4. The goals I have set for myself in my pursuit of the good things in life
- 5. How I can dedicate myself on behalf of human causes that work to reduce hunger, poverty, racism, and violence
- 6. What I really want to be doing, now, even if it may mean charting a whole new course
- 7. A need to unite with other minds to resolve global challenges through serious endeavour

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[ ] 6. THE WORLD IS... \***

Please write your answer(s) here:

- 1. Under the control of destiny and the direction of the Higher Power
- 2. Like a jungle where the strongest and most cunning must exploit to survive
- 3. A sophisticatedly-balanced system of interlinking forces
- 4. A magical place alive with spirit beings where there's safety and security in tribal ways
- 5. A pool of unlimited possibilities and opportunities for those willing to take some risks
- 6. The human habitat in which we share the experiences of living
- 7. A chaotic organism driven by differences and change, but with no guarantees

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[ ] 7. IN AN IDEAL WORLD... \***

Please write your answer(s) here:

- 1. We feel safe knowing the spirits of our ancestors watch over us
- 2. I've been heroic in conquest and my name will live forever
- 3. Righteousness triumphs over evil and the faithful receive their just rewards
- 4. I have achieved material success and enjoy the very finest this world has to offer
- 5. We all join hands and hearts to prosper equally in peace and togetherness
- 6. Our population matches the available natural resources, as each person learns to do more with less
- 7. All living things cohabit Earth, adjusting to the realities of their existence as part of a synergistic order

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[] 8. WHENEVER I'M CRITICISED, IT'S USUALLY FOR BEING... \***

Please write your answer(s) here:

- 1. Too rebellious and self-centred, a power-seeker who likes to rock the boat and seeks instant gratification
- 2. Too ambitious and materialistic, a wheeler-dealer game-player who exploits others in an attempt to "win"
- 3. Too metaphysical, ungrounded, and deeply serious
- 4. Too sensitive and caring with people, a naive social worker type who is blind to the realities of life
- 5. Too rigid and judgmental, a person who is such a true believer life becomes narrow, restrictive, and unforgiving
- 6. Too superstitious and mystical, a person plagued by charms, spirits, fortunes, and spells
- 7. Too aloof and detached, an individual who does his own thing, lacking self-sacrifice and commitment to others' good

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[] 9. WHEN UNDER REAL STRESS, I... \***

Please write your answer(s) here:

- 1. Rely on my faith and convictions to see me through adversity
- 2. Get down and fight even harder to survive in this world where "the toughest get the most".
- 3. Recognise why it's there and decide whether to live with it or remove it, even if it means a complete life-style change
- 4. Observe self and situation, then choose an appropriate state of being and an informed response
- 5. Do things to make fortune smile on me and go to where I feel safe
- 6. Manoeuvre strategically to influence both people and events to get back in control of the situation
- 7. Seek support and assistance from others to explore and deal with my feelings and fears

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[ ] 10. MY DEEPEST BELIEFS AND VALUES... \***

Please write your answer(s) here:

- 1. Come from the customs of my people and our ancestral folk ways
- 2. Are what I want them to be and its nobody's business but my own
- 3. Stand on the firm foundation of my faith and the One True Way
- 4. Grow from confidence that we have the power to shape tomorrow
- 5. Emerge from an acceptance of our need for interdependency and sharing
- 6. Reflect very personal views of what will work in a complex and changing world
- 7. Are an expression of an awe-filled experience of unity

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[ ] 11. IN MY JOB, IT'S LESS IMPORTANT THAT... \***

Please write your answer(s) here:

- 1. Loyalty earns greater job security and we are treated fairly
- 2. I make lots of cash, people stay off my back, and I can do what I want
- 3. Our primary focus is on the health of all living entities as integrated systems
- 4. Our circle is strong as we work together and sacrifice for each other
- 5. Successful performance advances my career and I can get ahead
- 6. Human feelings and needs come first as we all share equally in a caring community
- 7. Systemic and long-range thinking count more than people, money, traditions, or quick fixes

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[] 12. THESE WORDS AND PHRASES DO NOT DESCRIBE ME... \***

Please write your answer(s) here:

- 1. An experiential being, who is guided by impressions, values minimalistic living, and carries a poetic perception of reality
- 2. A person who loves power, lives for the moment, and likes to be respected for feats of strength, intelligence, or conquest
- 3. A kindred spirit, who is clannish and superstitious, and senses the spirits in nature, objects, and animals
- 4. A humanist egalitarian, who believes every human being should have an equal opportunity to develop
- 5. A competitor who values material possessions and technology, who thinks pragmatically and pursues success
- 6. A person with strong moral convictions, who is patriotic, caught up in culture pride, and is a true believer
- 7. A non-materialist, who is non-compulsive, internally-driven, variety-seeking and accepts life as it is

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[] 13. I DON'T THINK IT'S IMPORTANT FOR ME TO WORK FOR AN ORGANISATION THAT... \***

Please write your answer(s) here:

- 1. Treats everybody by the same rules and is committed to going by the book
- 2. Lets me cream what I can off the top and gives me the respect I deserve
- 3. Adapts to its natural environments so the organisational form is determined by its current functions
- 4. Synthesises knowledge from competent sources to make decisions that are beneficial to all life
- 5. Preserves our traditional customs, observes seasonal celebrations, and protects our close-knit groups
- 6. Tends to the inner and outer health of all of its people so they can become fully human
- 7. Thinks strategically and acts competitively to be successful in its niche

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[ ] 14. IT'S LESS IMPORTANT THAT PAY AND REWARDS BE DETERMINED BY... \***

Please write your answer(s) here:

- 1. What people like me need to keep the wolf away from the door
- 2. Individual contributions based on knowledge, levels of competency, and degree of importance to the function
- 3. What you're powerful and quick enough to get, since it's everybody for themselves in this dog-eat-dog world
- 4. The collective needs of the entire human community so that everyone can benefit, instead of the select few
- 5. Personal ambition and initiative, successful accomplishments, and the willingness to take risks
- 6. What fosters the development of global collective imperatives and mutual interdependencies
- 7. The need to maintain our standard of living, honour seniority and loyal service, and provide for rainy days ahead

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[ ] 15. MY OWN CAREER PRIORITIES ARE LEAST DETERMINED BY... \***

Please write your answer(s) here:

- 1. Whatever will allow my work group to stay together like a family
- 2. What I have to do to get what I want without having to give in to anybody or conform to any system
- 3. What is just and proper, since my job and profession should reflect my rightful place in society
- 4. The goals I have set for myself in my pursuit of the good things in life
- 5. How I can dedicate myself on behalf of human causes that work to reduce hunger, poverty, racism, and violence
- 6. What I really want to be doing, now, even if it may mean charting a whole new course
- 7. A need to unite with other minds to resolve global challenges through serious endeavour

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[ ] 16. I DON'T SHARE THE VIEW THAT THE WORLD IS... \***

Please write your answer(s) here:

- 1. Under the control of destiny and the direction of the Higher Power
- 2. Like a jungle where the strongest and most cunning must exploit to survive
- 3. A sophisticatedly-balanced system of interlinking forces
- 4. A magical place alive with spirit beings where there's safety and security in tribal ways
- 5. A pool of unlimited possibilities and opportunities for those willing to take some risks
- 6. The human habitat in which we share the experiences of living
- 7. A chaotic organism driven by differences and change, but with no guarantees

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[ ] 17. IN AN IDEAL WORLD IT'S LESS IMPORTANT THAT... \***

Please write your answer(s) here:

- 1. We feel safe knowing the spirits of our ancestors watch over us
- 2. I've been heroic in conquest and my name will live forever
- 3. Righteousness triumphs over evil and the faithful receive their just rewards
- 4. I have achieved material success and enjoy the very finest this world has to offer
- 5. We all join hands and hearts to prosper equally in peace and togetherness
- 6. Our population matches the available natural resources, as each person learns to do more with less
- 7. All living things cohabit Earth, adjusting to the realities of their existence as part of a synergistic order

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[] 18. WHENEVER I'M CRITICISED, IT'S SELDOM FOR BEING... \***

Please write your answer(s) here:

- 1. Too rebellious and self-centred, a power-seeker who likes to rock the boat and seeks instant gratification
- 2. Too ambitious and materialistic, a wheeler-dealer game-player who exploits others in an attempt to "win"
- 3. Too metaphysical, ungrounded, and deeply serious
- 4. Too sensitive and caring with people, a naive social worker type who is blind to the realities of life
- 5. Too rigid and judgmental, a person who is such a true believer life becomes narrow, restrictive, and unforgiving
- 6. Too superstitious and mystical, a person plagued by charms, spirits, fortunes, and spells
- 7. Too aloof and detached, an individual who does his own thing, lacking self-sacrifice and commitment to others' good

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[] 19. WHEN UNDER REAL STRESS I RARELY... \***

Please write your answer(s) here:

- 1. Rely on my faith and convictions to see me through adversity
- 2. Get down and fight even harder to survive in this world where "the toughest get the most".
- 3. Recognise why it's there and decide whether to live with it or remove it, even if it means a complete life-style change
- 4. Observe self and situation, then choose an appropriate state of being and an informed response
- 5. Do things to make fortune smile on me and go to where I feel safe
- 6. Manoeuvre strategically to influence both people and events to get back in control of the situation
- 7. Seek support and assistance from others to explore and deal with my feelings and fears

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[] 20. FEW OF MY DEEPEST BELIEFS AND VALUES... \***

Please write your answer(s) here:

- 1. Come from the customs of my people and our ancestral folk ways
- 2. Are what I want them to be and its nobody's business but my own
- 3. Stand on the firm foundation of my faith and the One True Way
- 4. Grow from confidence that we have the power to shape tomorrow
- 5. Emerge from an acceptance of our need for interdependency and sharing
- 6. Reflect very personal views of what will work in a complex and changing world
- 7. Are an expression of an awe-filled experience of unity

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

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**End of Questionnaire**

## **APPENDIX C:**

### **SURVEY QUESTIONNAIRE AND INVITATION E-MAIL**

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#### **Invitation E-Mail**

We invite entrepreneurs, like you, to participate in this academic research project designed to focus on entrepreneurial business development, by completing this online survey.

[Business Stage & Values Survey - Click Here](#)

By participating you make a valuable contribution to much needed research and the development of insight that will make a contribution to entrepreneurship development, on a local and international platform.

Research findings and insights gained from this study will be shared with survey participants free of any charges.

The study is being conducted by Mr. A Le Grange a PHD student from the University of Stellenbosch Business School. This research is being conducted as part of a requirement for his doctoral thesis. More information on this doctoral research project can be downloaded from this link.

This survey consists of 28 questions and will take approximately 30 minutes to complete. Detail instruction to answer the questions will be provided in the online survey instrument.

To maintain a high level of anonymity, your survey replies will be anonymized, using key codes to de-identify the data before it is used for data analysis and reporting. Reporting on the findings will be in the aggregate and no personal identifiable data will be disclosed without prior consent.

When you begin the survey, you are consenting to participate in the study. If you do not agree to participate in this research project simply close and delete this e-mail invitation now. If, after beginning the survey, you decide that you do not wish to continue, you may stop at any time. You may choose to not answer any question for any reason.

If you have any questions prior to or during the study, you may contact A Le Grange at [11085819@sun.ac.za](mailto:11085819@sun.ac.za).

This study was approved by the University of Stellenbosch Business School and comply to the university's ethical code and standards.

Participating in this online survey indicates your consent for anonymized use of the answers you supply for research in business development and social science.

To proceed with the survey please follow this link – Online Survey.

Thank you for your consideration and contribution to research and the development of insight.

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## BUSINESS STAGES AND VALUE SYSTEMS QUESTIONNAIRE

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### WELCOME & INTRODUCTION

There are two parts to this questionnaire:

Part 1 has 10 questions and asks you about your business and your views of operating and managing a business.

Part 2 has 20 statements that require completion. For each statement we ask you to assess the relative importance for each of 7 possible completion options.

Allot 30 to 35 minutes to complete the instrument in one sitting. If you are interrupted, you can save your work and return later by pressing the RESUME LATER button.

**Q1. Would you say that you are the controlling owner of the business and responsible for the business strategic development, setting the future of the business?**

- 1 – Yes
- 2 – No

**Q2: Please provide the following demographical information**

Business Name	
Located in which Province in South Africa	

**Q. 2.1 Please select the main business industry**

Agriculture, forestry and fishing	Mining and quarrying	Manufacturing	Electricity, gas, steam and air conditioning supply
Water supply; sewerage, waste management and remediation activities	Construction	Wholesale and retail trade; repair of motor vehicles and motorcycles	Transportation and storage
Accommodation and food service activities	Information and communication	Financial and insurance activities	Real estate activities
Professional, scientific and technical activities	Administrative and support activities	Public administration and defence; compulsory social security	Education
Human health and social work activities	Arts, entertainment and recreation	Other service activities	

**Q3: In what year was the business / organisation started (founded)?**

**Q4: Total number of people employed.**

**Total number of people employed at the end of 2014**

**Total number of people employed at the end of 2013**

**Q5: Organisation Structure.**

**Please select one of the following options that best describes your business / organisation. (If selected other please provide additional information)**

- 1 - Simple Structure** - No defined departments / divisions, basically the Owner / Manager is assisted by individuals with various tasks and responsibilities.
- 2 - By Functions** - Departments with defined functions, such as marketing, human resources, production, etc.
- 3 - By Division** - The business is organised by divisions, for example geographic regional divisions, product or service group, market segments, etc.
- 4 - Other Structures** - Please explain in box below, in as much detail as possible. If needed, please continue to write on the back of this page.

**Q6: Formalization**

**Instructions – For each of the following statements please select your level of agreement on a scale of one (Disagree Strongly) to seven (Agree Strongly)**

<i>On a scale of one (Disagree Strongly) to seven (Agree Strongly) please select your level of agreement with the statements below.</i>	Disagree Strongly			Agree Strongly			
	1	2	3	4	5	6	7
1 - Formal policies and procedures guide most decisions	1	2	3	4	5	6	7
2 - Important communications between departments are documented in writing.	1	2	3	4	5	6	7
3 - Formal job descriptions are maintained for each position	1	2	3	4	5	6	7
4 - The top management team is comprised of specialists from each functional area (e.g., marketing, engineering, production).	1	2	3	4	5	6	7
5 - Reporting relationships are formally defined	1	2	3	4	5	6	7
6 - Lines of authority are specified in a formal organisation chart.	1	2	3	4	5	6	7
7 - Rewards and incentives are administered by objective and systematic criteria.	1	2	3	4	5	6	7
8 - Capital expenditures are planned well in advance.	1	2	3	4	5	6	7
9 - Plans tend to be formal and written.	1	2	3	4	5	6	7
10 - Formal operating budgets guide day-to-day decisions.	1	2	3	4	5	6	7

**Q7: Consider the following two methods of decision making:**

- a) **Entrepreneurial** - Based on personal judgment, where one individual makes the decisions.
- b) **Professional** - Based on analysis and expertise and involves functional specialists.

**Strategic decision-making in your opinion in this organisation is based on, select only one option:**

- 1 - Always entrepreneurial
- 2 - Frequently entrepreneurial
- 3 - 50% entrepreneurial, 50% professional
- 4 - Frequently professional
- 5 - Always professional

**Q8: Specialisation**

Instructions – Select all the functions that have at least one full-time employee.

<input type="checkbox"/> 1. Public/Shareholder Relations	<input type="checkbox"/> 2. Shipping and Receiving
<input type="checkbox"/> 3. Building Maintenance	<input type="checkbox"/> 4. Customer/Product Service
<input type="checkbox"/> 5. Production Planning/Scheduling	<input type="checkbox"/> 6. Personnel
<input type="checkbox"/> 7. Advertising	<input type="checkbox"/> 8. Legal Affairs
<input type="checkbox"/> 9. Purchasing	<input type="checkbox"/> 10. Sales
<input type="checkbox"/> 11. Quality Control	<input type="checkbox"/> 12. Employee Training
<input type="checkbox"/> 13. Market Research	<input type="checkbox"/> 14. Accounting
<input type="checkbox"/> 15. Inventory Control	<input type="checkbox"/> 16. Industrial Engineering
<input type="checkbox"/> 17. Research & Development	<input type="checkbox"/> 18. Safety/Security
<input type="checkbox"/> 19. Payroll	<input type="checkbox"/> 20. Finance

**Q9: Centralisation**

Instructions – Indicate who is the last person whose permission must be obtained before legitimate actions may be taken in the following areas.

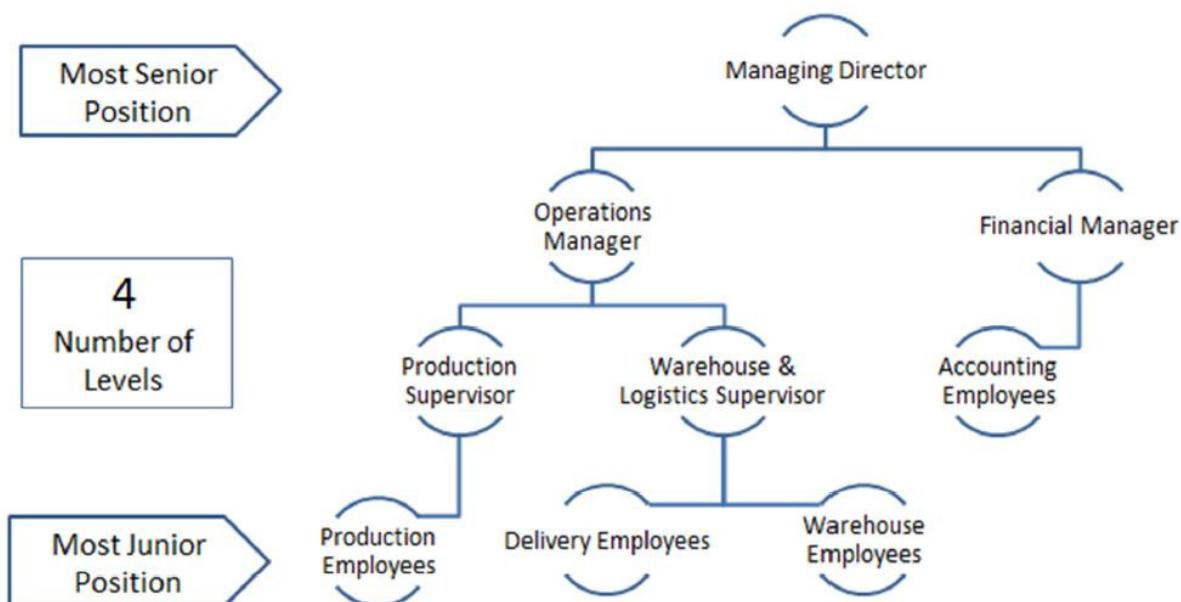
Indicate who is the last person whose permission must be obtained before legitimate actions may be taken to:	Direct Worker	First line supervisor	Department head	Division head	Chief executive officer	Owner or Board
	0	1	2	3	4	5
1- Promotion of a direct worker						
2 - Addition of a new product or service						
3 - Unbudgeted expenditure N\$5000-N\$ .....						
4 - Selection of type or brand of new						
5 - Dismissal, or firing of a direct worker						

### **Q10: Organisation Levels Vertical Differentiation**

Consider the example drawing below, on a piece of paper draw the basic organisation chart of your organisation indicating the longest line from most senior position to the most junior position, in your organisation. In your drawing include any foreman or any other form of supervision levels. Count the number of organisation levels in your drawing, as for the example it is 4.

The number of levels in your organisation

**Example Drawing**



S1: There now follows 20 statements (S1S20). Each statement has 7 options for completion. You have a total of 15 points to allocate across the 7 options. For example, you may choose to put all 15 points on a single statement, or divide the points between two or more statements. Be sure to allocate all 15 points.

[ ] **1. I LIKE A JOB WHERE... \***

Please write your answer(s) here:

1. I make lots of cash, people stay off my back, and I can do what I want
2. Loyalty earns greater job security and we are treated fairly
3. Our primary focus is on the health of all living entities as integrated systems
4. Our circle is strong as we work together and sacrifice for each other
5. Successful performance advances my career and I can get ahead
6. Human feelings and needs come first as we all share equally in a caring community

7. Systemic and long-range thinking count more than people, money, traditions, or quick fixes

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

[ ] **2. THESE WORDS AND PHRASES DESCRIBE ME BEST... \***

Please write your answer(s) here:

1. An experiential being, who is guided by impressions, values minimalistic living, and carries a poetic perception of reality
2. A person who loves power, lives for the moment, and likes to be respected for feats of strength, intelligence, or conquest
3. A kindred spirit, who is clannish and superstitious, and senses the spirits in nature, objects, and animals
4. A humanist egalitarian, who believes every human being should have an equal opportunity to develop
5. A competitor who values material possessions and technology, who thinks pragmatically and pursues success
6. A person with strong moral convictions, who is patriotic, caught up in culture pride, and is a true believer
7. A non-materialist, who is non-compulsive, internally-driven, variety-seeking and accepts life as it is

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[ ] 3. I PREFER AN ORGANISATION THAT... \***

Please write your answer(s) here:

1. Treats everybody by the same rules and is committed to going by the book
2. Lets me cream what I can off the top and gives me the respect I deserve
3. Adapts to its natural environments so the organisational form is determined by its current functions
4. Synthesises knowledge from competent sources to make decisions that are beneficial to all life
5. Preserves our traditional customs, observes seasonal celebrations, and protects our close-knit groups
6. Tends to the inner and outer health of all of its people so they can become fully human
7. Thinks strategically and acts competitively to be successful in its niche

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[ ] 4. PAY AND REWARDS SHOULD BE DETERMINED BY... \***

Please write your answer(s) here:

1. What people like me need to keep the wolf away from the door
2. Individual contributions based on knowledge, levels of competency, and degree of importance to the function
3. What you're powerful and quick enough to get, since it's everybody for themselves in this dog-eat-dog world
4. The collective needs of the entire human community so that everyone can benefit, instead of the select few
5. Personal ambition and initiative, successful accomplishments, and the willingness to take risks
6. What fosters the development of global collective imperatives and mutual interdependencies
7. The need to maintain our standard of living, honour seniority and loyal service, and provide for rainy days ahead

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[]5. MY OWN CAREER PRIORITIES ARE DETERMINED BY... \***

Please write your answer(s) here:

1. Whatever will allow my work group to stay together like a family
2. What I have to do to get what I want without having to give in to anybody or conform to any system
3. What is just and proper, since my job and profession should reflect my rightful place in society
4. The goals I have set for myself in my pursuit of the good things in life
5. How I can dedicate myself on behalf of human causes that work to reduce hunger, poverty, racism, and violence
6. What I really want to be doing, now, even if it may mean charting a whole new course
7. A need to unite with other minds to resolve global challenges through serious endeavour

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[] 6. THE WORLD IS... \***

Please write your answer(s) here:

1. Under the control of destiny and the direction of the Higher Power
2. Like a jungle where the strongest and most cunning must exploit to survive
3. A sophisticatedly-balanced system of interlinking forces
4. A magical place alive with spirit beings where there's safety and security in tribal ways
5. A pool of unlimited possibilities and opportunities for those willing to take some risks
6. The human habitat in which we share the experiences of living
7. A chaotic organism driven by differences and change, but with no guarantees

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[ ] 7. IN AN IDEAL WORLD... \***

Please write your answer(s) here:

1. We feel safe knowing the spirits of our ancestors watch over us
2. I've been heroic in conquest and my name will live forever
3. Righteousness triumphs over evil and the faithful receive their just rewards
4. I have achieved material success and enjoy the very finest this world has to offer
5. We all join hands and hearts to prosper equally in peace and togetherness
6. Our population matches the available natural resources, as each person learns to do more with less
7. All living things cohabit Earth, adjusting to the realities of their existence as part of a synergistic order

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[ ] 8. WHENEVER I'M CRITICISED, IT'S USUALLY FOR BEING... \***

Please write your answer(s) here:

1. Too rebellious and self-centred, a power-seeker who likes to rock the boat and seeks instant gratification
2. Too ambitious and materialistic, a wheeler-dealer game-player who exploits others in an attempt to "win"
3. Too metaphysical, ungrounded, and deeply serious
4. Too sensitive and caring with people, a naive social worker type who is blind to the realities of life
5. Too rigid and judgmental, a person who is such a true believer life becomes narrow, restrictive, and unforgiving
6. Too superstitious and mystical, a person plagued by charms, spirits, fortunes, and spells
7. Too aloof and detached, an individual who does his own thing, lacking self-sacrifice and commitment to others' good

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[ ] 9. WHEN UNDER REAL STRESS, I... \***

Please write your answer(s) here:

1. Rely on my faith and convictions to see me through adversity
2. Get down and fight even harder to survive in this world where "the toughest get the most".
3. Recognise why it's there and decide whether to live with it or remove it, even if it means a complete life-style change
4. Observe self and situation, then choose an appropriate state of being and an informed response
5. Do things to make fortune smile on me and go to where I feel safe
6. Manoeuvre strategically to influence both people and events to get back in control of the situation
7. Seek support and assistance from others to explore and deal with my feelings and fears

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[ ] 10. MY DEEPEST BELIEFS AND VALUES... \***

Please write your answer(s) here:

1. Come from the customs of my people and our ancestral folk ways
2. Are what I want them to be and its nobody's business but my own
3. Stand on the firm foundation of my faith and the One True Way
4. Grow from confidence that we have the power to shape tomorrow
5. Emerge from an acceptance of our need for interdependency and sharing
6. Reflect very personal views of what will work in a complex and changing world
7. Are an expression of an awe-filled experience of unity

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[] 11. IN MY JOB, IT'S LESS IMPORTANT THAT... \***

Please write your answer(s) here:

1. Loyalty earns greater job security and we are treated fairly
2. I make lots of cash, people stay off my back, and I can do what I want
3. Our primary focus is on the health of all living entities as integrated systems
4. Our circle is strong as we work together and sacrifice for each other
5. Successful performance advances my career and I can get ahead
6. Human feelings and needs come first as we all share equally in a caring community
7. Systemic and long-range thinking count more than people, money, traditions, or quick fixes

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[] 12. THESE WORDS AND PHRASES DO NOT DESCRIBE ME... \***

Please write your answer(s) here:

1. An experiential being, who is guided by impressions, values minimalistic living, and carries a poetic perception of reality
2. A person who loves power, lives for the moment, and likes to be respected for feats of strength, intelligence, or conquest
3. A kindred spirit, who is clannish and superstitious, and senses the spirits in nature, objects, and animals
4. A humanist egalitarian, who believes every human being should have an equal opportunity to develop
5. A competitor who values material possessions and technology, who thinks pragmatically and pursues success
6. A person with strong moral convictions, who is patriotic, caught up in culture pride, and is a true believer
7. A non-materialist, who is non-compulsive, internally-driven, variety-seeking and accepts life as it is

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[] 13. I DON'T THINK IT'S IMPORTANT FOR ME TO WORK FOR AN ORGANISATION THAT... \***

Please write your answer(s) here:

1. Treats everybody by the same rules and is committed to going by the book
2. Lets me cream what I can off the top and gives me the respect I deserve
3. Adapts to its natural environments so the organisational form is determined by its current functions
4. Synthesises knowledge from competent sources to make decisions that are beneficial to all life
5. Preserves our traditional customs, observes seasonal celebrations, and protects our close-knit groups
6. Tends to the inner and outer health of all of its people so they can become fully human
7. Thinks strategically and acts competitively to be successful in its niche

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[] 14. IT'S LESS IMPORTANT THAT PAY AND REWARDS BE DETERMINED BY... \***

Please write your answer(s) here:

1. What people like me need to keep the wolf away from the door
2. Individual contributions based on knowledge, levels of competency, and degree of importance to the function
3. What you're powerful and quick enough to get, since it's everybody for themselves in this dog-eat-dog world
4. The collective needs of the entire human community so that everyone can benefit, instead of the select few
5. Personal ambition and initiative, successful accomplishments, and the willingness to take risks
6. What fosters the development of global collective imperatives and mutual interdependencies
7. The need to maintain our standard of living, honour seniority and loyal service, and provide for rainy days ahead

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[] 15. MY OWN CAREER PRIORITIES ARE LEAST DETERMINED BY... \***

Please write your answer(s) here:

1. Whatever will allow my work group to stay together like a family
2. What I have to do to get what I want without having to give in to anybody or conform to any system
3. What is just and proper, since my job and profession should reflect my rightful place in society
4. The goals I have set for myself in my pursuit of the good things in life
5. How I can dedicate myself on behalf of human causes that work to reduce hunger, poverty, racism, and violence
6. What I really want to be doing, now, even if it may mean charting a whole new course
7. A need to unite with other minds to resolve global challenges through serious endeavour

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[] 16. I DON'T SHARE THE VIEW THAT THE WORLD IS... \***

Please write your answer(s) here:

1. Under the control of destiny and the direction of the Higher Power
2. Like a jungle where the strongest and most cunning must exploit to survive
3. A sophisticatedly-balanced system of interlinking forces
4. A magical place alive with spirit beings where there's safety and security in tribal ways
5. A pool of unlimited possibilities and opportunities for those willing to take some risks
6. The human habitat in which we share the experiences of living
7. A chaotic organism driven by differences and change, but with no guarantees

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[] 17. IN AN IDEAL WORLD IT'S LESS IMPORTANT THAT... \***

Please write your answer(s) here:

1. We feel safe knowing the spirits of our ancestors watch over us
2. I've been heroic in conquest and my name will live forever
3. Righteousness triumphs over evil and the faithful receive their just rewards
4. I have achieved material success and enjoy the very finest this world has to offer
5. We all join hands and hearts to prosper equally in peace and togetherness
6. Our population matches the available natural resources, as each person learns to do more with less
7. All living things cohabit Earth, adjusting to the realities of their existence as part of a synergistic order

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[] 18. WHENEVER I'M CRITICISED, IT'S SELDOM FOR BEING... \***

Please write your answer(s) here:

1. Too rebellious and self-centred, a power-seeker who likes to rock the boat and seeks instant gratification
2. Too ambitious and materialistic, a wheeler-dealer game-player who exploits others in an attempt to "win"
3. Too metaphysical, ungrounded, and deeply serious
4. Too sensitive and caring with people, a naive social worker type who is blind to the realities of life
5. Too rigid and judgmental, a person who is such a true believer life becomes narrow, restrictive, and unforgiving
6. Too superstitious and mystical, a person plagued by charms, spirits, fortunes, and spells
7. Too aloof and detached, an individual who does his own thing, lacking self-sacrifice and commitment to others' good

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[] 19. WHEN UNDER REAL STRESS I RARELY... \***

Please write your answer(s) here:

1. Rely on my faith and convictions to see me through adversity
2. Get down and fight even harder to survive in this world where "the toughest get the most".
3. Recognise why it's there and decide whether to live with it or remove it, even if it means a complete life-style change
4. Observe self and situation, then choose an appropriate state of being and an informed response
5. Do things to make fortune smile on me and go to where I feel safe
6. Manoeuvre strategically to influence both people and events to get back in control of the situation
7. Seek support and assistance from others to explore and deal with my feelings and fears

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

**[] 20. FEW OF MY DEEPEST BELIEFS AND VALUES... \***

Please write your answer(s) here:

1. Come from the customs of my people and our ancestral folk ways
2. Are what I want them to be and its nobody's business but my own
3. Stand on the firm foundation of my faith and the One True Way
4. Grow from confidence that we have the power to shape tomorrow
5. Emerge from an acceptance of our need for interdependency and sharing
6. Reflect very personal views of what will work in a complex and changing world
7. Are an expression of an awe-filled experience of unity

Allocate your 15 points by dragging the appropriate bars. When you have allocated 15 points the total at the bottom changes from red to green. Press NEXT to proceed, or PREVIOUS to back-up.

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**End of Questionnaire**

## APPENDIX D:

### SURVEY AVERAGE VALUES FOR THE OBJECTIVE VARIABLES PER BUSINESS CLUSTER

**Table D.1: Survey population average values for the objective, contextual and structural, variable data collected per identified business cluster based on Ward's clustering method.**

Cluster #	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Survey average
Cluster Size (n)	14	44	6	19	14	97
% of sample	14.43%	45.36%	6.19%	19.59%	14.43%	100%
OrgAge	7.36	12.27	15.67	27.47	17.64	15.53
OrgSize	17.21	14.41	8.83	19.32	100.71	27.89
OrgGrowth Rate %	50.9%	3.1%	-64.7%	4.2%	5.9%	6.4%
OrgStructure	1.57	1.59	1.67	1.32	2.07	1.61
OrgFormal	42.57	42.59	49.50	39.32	50.57	43.53
OrgDecisionMaking	2.43	2.50	2.33	2.21	2.36	2.40
OrgSpecialisation	4.36	4.00	4.17	5.42	10.00	5.21
OrgCentralisation	24.93	26.68	25.33	26.37	24.14	25.92
OrgLevels	2.54	2.94	2.80	2.71	4.17	3.00

Organisation contextual and structure value interpretation key:

- ArgAge: Measured from inception till the end of year 2014.
- OrgSize: Number of employees employed at the end of year 2014.
- OrgGrowth Rate%: Number of employees employed at the end of year 2014, less those of year 2013, divided by year 2013.
- OrgStructure: Range from 1 to 4, where 1 = Simple, 2 = Functions, 3 = Divisional, 4 = Other Structure
- OrgFormal: Range from 10 to 70, where 10 represents Low formality, 70 represents High formality
- OrgDecisionMaking: Range from 1 to 5, where 1 represents High Entrepreneurial Style, 5 represents High Professional Style
- OrgSpecialisation: Range from 0 to 20, where 0 represents Low levels of Specialisation, 20 represents High Levels of Specialisation
- OrgCentralisation: Range from 5 to 30, where 5 represents Low levels of Centralisation, 30 represents High levels of Centralisation
- OrgLevels: The number of work levels in the organisation, where Low numbers = less complexity, High numbers = high complexity

**APPENDIX E:****MCMAHON SUMMARY OF THREE LEVEL DEVELOPMENTAL CLASSIFICATION OF BUSINESS CLUSTER****Table E.1: Summary of three level developmental classification of business cluster**

Low-growth Summary	Average		Average		Average		Average		Average		Average	
OrgAge	7		9		11		19		25		27	
OrgSize	13.85		15.3		13.55		15.9		25.75		23.85	
OrgGrowthRate	3%		-9.45%		4.45%		-1.0%		-1.0%		-2.05%	
Low – Data #	2.3	3.7	4.2	5.1	6.5	6.6	2.1	3.4	4.4	5.5	6.4	
OrgAge	7	7	9	9	11	11	19	25	25	27	27	
OrgSize	16.3	11.4	17.9	12.7	14.2	12.9	15.9	25.9	25.6	25	22.7	
OrgGrowthRate	0.0%	6.0%	-10.1%	-8.8%	13.9%	-5%	-1.0%	2.0%	-4.0%	-2%	-2.1%	

Moderate growth Summary	Average				Average				Average		Average			
OrgAge	8.5				11				25		29.25			
OrgSize	19.9				45.13				60.3		81.48			
OrgGrowthRate	72.25				5.08				5.5%		3.73			
Moderate – Data #	2.2	3.2	4.6	5.4	3.5	4.5	5.6	6.3	2.6		3.6	4.3	5.3	6.1
OrgAge	7	9	9	9	11	11	11	11	25		29	29	29	30
OrgSize	16.7	18.1	22.2	22.6	48.9	21.4	55.9	54.3	60.3		88.9	83.9	81.2	71.9
OrgGrowthRate	70.5%	124.7 %	48.5%	45.3%	6.8%	10.8%	-1.55%	4.3%	5.5%		4.8%	2.8%	3.9%	3.4%

Table continues on next page

**Table E.1: Summary of three level developmental classification of business cluster (continued)**

High-growth Summary	Average			Average	Average
OrgAge	8.3			13	19
OrgSize	103.63			123.3	127.9
OrgGrowthRate	7.9%			10.1	9.5
High – Data #	2.5	3.1	4.1	5.2	6.2
OrgAge	9	7	9	13	19
OrgSize	97.7	112.4	100.8	123.3	127.9
OrgGrowthRate	7.1%	12.3%	4.3%	10.1%	9.5%

Source: McMahon, 2000 (amended).

## APPENDIX F:

### SUMMARY OF HANKS SIX CLUSTERS' VARIABLE DATA

**Table F.1: Six cluster business stages: summary of average variable data values per cluster**

**group**

Cluster #	Cluster A	Cluster B	Cluster C	Cluster D	Cluster E	Cluster F	Average
Cluster size (n)	24	33	29	10	7	23	126
OrgAge	4.29	7.36	6.66	16.20	18.71	12.65	8.91
OrgSize	6.46	23.64	62.76	495.40	7.00	24.65	66.07
OrgGrowth Rate %	21%	33%	15%	7%	-15%	-8%	14%
OrgStructure	1.21	2.00	2.28	2.40	1.00	1.61	1.82
OrgFormal	39.92	45.88	52.90	53.20	29.71	42.39	45.21
OrgSpecialisation	1.50	4.91	10.17	15.30	0.57	6.17	6.29
OrgCentralisation	19.29	18.09	14.45	15.10	19.57	15.26	16.81
OrgLevels	2.21	3.18	4.00	5.70	1.71	3.22	3.31

Source: Hanks et al., 1993 (amended).

## APPENDIX G:

### CLUSTER VARIABLES COMPARED TO LITERATURE

**Table G.1: Survey clusters' variable data: Comparison with business classification findings of prior studies.**

Low-growth pathway			Moderate-growth pathway			High-growth pathway		
Age	Size	Grow%	Age	Size	Grow%	Age	Size	Grow%
<b>Study Survey Cluster Findings</b>								
12.27	14.41	3.1	7.36	17.2	50.9	17.64	100.71	5.9
15.67	8.83	-64.7						
27.47	19.32	4.2						
<b>Hanks et al. (1993) Clusters</b>								
12.65	24.65	-8	7.36	23.64	33.0	6.66	62.76*	15.0
18.71	7.00	-15				16.20	495.40	7.0
<b>McMahon (2000) Clusters</b>								
7	13.85	3.0	8.5	19.9	72.25	8.3	103.63	7.9
9	15.3	-9.45	11	45.13	5.08	13	123.3	10.1
11	13.55	4.45	25	60.3	5.5	19	127.9	9.5
19	15.9	-1.0	29.25	81.48	3.73			
25	25.75	-1.0						
27	23.85	-2.05						

\* Size less than 100, but organisation significantly younger than 15 years with relatively large size for its age in comparison to moderate-growth pathway.

Sources: McMahon, 2000 and Hanks et al., 1993 (amended).

## APPENDIX H:

### CLUSTER CONTEXT AND STRUCTURE CHARACTERISTICS COMPARED TO LITERATURE

**Table H.1: Survey clusters' objective characteristics: Comparison with findings of prior studies, associated with the high-growth classification**

High-growth classification	
Literature	Survey Data
<ul style="list-style-type: none"> <li>❖ <b>McMahon (2000)</b> <ul style="list-style-type: none"> <li>• After approximately 15 years they employ over 100 employees</li> <li>• Employment growth on average exceeding 5% per annum</li> <li>• Specialisation suggests technical and commercial innovation, international outlook, and other business qualities that could see them eventually become large enterprises</li> <li>• Ambitious growth aspirations</li> <li>• Associated with entrepreneurial aptitude</li> </ul> </li> <li>❖ <b>Hanks et al. (1993)</b> <ul style="list-style-type: none"> <li>❖ <b>Cluster C (III)</b> <ul style="list-style-type: none"> <li>• Organisation levels average score 4</li> <li>• Functional basis of organisation structure</li> <li>• Lowest centralisation scores</li> <li>• High formalisation (scored second highest)</li> <li>• Specialisation seems to indicate expansion and increased professionalisation</li> <li>• Full-time specialists present in Stage III, not present in Stages I or II, includes shipping and receiving, finance, purchasing, quality control, customer/product service, production planning and scheduling, and payroll.</li> </ul> </li> <li>❖ <b>Cluster D (IV)</b> <ul style="list-style-type: none"> <li>• Organisation levels average score 5.7</li> <li>• Majority of firms employ a functional basis of organisation structure</li> <li>• Centralisation is low</li> <li>• High formalisation (score the highest of all clusters and just slightly higher than Stage III above.)</li> <li>• Specialisation seems to indicate greater formalisation of human resource programmes and policies, cost control, and market expansion</li> <li>• Specialised functions with high representation in this cluster configuration, over and above those present in the preceding stages, include personnel, building maintenance, advertising, market research, and inventory control</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>❖ <b>Cluster 5</b> <ul style="list-style-type: none"> <li>Average age: 17 years, employing on average 100.71 employees.</li> <li>Average employee growth rate 5.9% per annum.</li> <li>Average organisation levels score 4.17</li> <li>Functional structure</li> <li>Lowest centralisation score</li> <li>High formalisation (score the highest of all clusters )</li> <li>Specialisation with high representation in this cluster profile (with the highest and second highest average values' scores) include:           <ul style="list-style-type: none"> <li>• Sales 85.71%, Customer Service 50%, Advertising 28.57%,</li> <li>• Research &amp; Dev 35.71%, Market Research 28.57%</li> <li>• Purchasing 85.71%, Inventory Control 64.29%, Shipping Receiving 28.57%,</li> <li>• Production Planning 64.29%, Quality Control 71.43%, Industrial Engineering 14.29%,</li> <li>• Personnel 57.14%, Payroll 64.29%</li> <li>• Accounting 92.86%, Finance 74.43%</li> <li>• Public Relations 35.71%, Legal 21.43%</li> <li>• Safety / Security 50%, Building &amp; Maintenance 28.57%</li> </ul> </li> </ul> </li> </ul>

Source: McMahon 2000 (amended), Hanks et al. 1993 (amended) and survey data analysis.

**Table H.2: Survey clusters' objective characteristics: Comparison with findings of prior studies, associating with the moderate-growth classification**

<b>Moderate-growth classification</b>	
<b>Literature</b>	<b>Survey Data</b>
<ul style="list-style-type: none"> <li>❖ <b>McMahon (2000)</b></li> <li>• After approximately 15 years they employ less than 100 employees</li> <li>• Employment growth on average exceeds 3% per annum</li> <li>• These concerns generally have modest growth aspirations that seems to be from: <ul style="list-style-type: none"> <li>• Externally imposed by the nature of their competitive environment</li> <li>• Intrinsic given the nature of their operations</li> <li>• Frequently deliberately capped by owner-managers to a rate that limits dependence upon external financing, thus minimising surrender of control and accountability obligations this support would normally bring</li> </ul> </li> </ul> <ul style="list-style-type: none"> <li>❖ <b>Hanks et. al (1993)</b></li> <li>❖ <b>Cluster B (II)</b></li> <li>• Firms at this stage average the highest rate of sales and employment growth (33%)</li> <li>• Have generally adopted a functional basis of organisation</li> <li>• Organisation decision-making is still very centralised</li> <li>• Formalities tend to be low and are little more formal than start-up (Cluster A (I)) businesses</li> <li>• Specialised functions indicating that these firms are actively involved in the commercialisation of their product(s)</li> <li>• In addition to research and development, specialised functions present in at least 50% of these firms include sales and accounting</li> </ul>	<ul style="list-style-type: none"> <li>❖ <b>Cluster 1</b></li> <li>Average age: 7.36 years, employing on average 17 employees</li> <li>Average employee growth rate 50.9% per annum, the highest score of all clusters</li> <li>Organisation structure seems to be in the processes of adopting a functional structure, with an average score of 1.51, moving from a simple structure score value of 1 to a functional score value of 2</li> <li>On average, more centralised decision-making than the high-growth cluster group above.</li> <li>Organisation formalisation seems to be low, with the second lowest score of all clusters</li> <li>Specialisation with high representation in this cluster profile include: <ul style="list-style-type: none"> <li>• Sales 69.23%</li> <li>• Customer Service 61.54% (the highest average score for all clusters)</li> <li>• Research &amp; Development 38.46% (the second highest score to the High-growth path above)</li> <li>• Accounting 61.54%</li> </ul> </li> </ul>

Source: McMahon, 2000 (amended), Hanks et al., 1993 (amended) and survey data analysis.

**Table H.3: Survey clusters' objective characteristics: Comparison with findings of prior studies, associating with the low-growth classification**

Low-growth classification	
Literature	Survey data
<ul style="list-style-type: none"> <li>❖ <b>McMahon (2000)</b></li> <li>• After approximately 15 years they employ less than 20 employees</li> <li>• Almost no employment growth</li> <li>• Generally these organisations have few, if any, growth aspirations - they principally exist to provide their owner-managers with a source of employment and income</li> <li>• They are frequently operated in a manner consistent with the life-style aspirations of their owner-managers</li> </ul> <ul style="list-style-type: none"> <li>❖ <b>Hanks et. al (1993)</b></li> <li>❖ <b>Cluster E&amp;F</b></li> <li>• Clusters E and F, while similar in employee size to a start-up (Clusters A (I)) business and a moderate growth (Cluster B (II)) business, these businesses are significantly older than their counterparts</li> <li>• These firms seem not to fit the traditional life-cycle model and are thus more difficult to interpret and classify</li> </ul> <ul style="list-style-type: none"> <li>❖ <b>Cluster E</b></li> <li>• Similar in size and structure to start-up organisation (Cluster A (I)), these organisations on average are significantly older, and are experiencing slower employee growth</li> <li>• These are old small organisation. They are not presently growing, and appear to have their product(s) fairly well developed</li> <li>• While similar in size and structure to the start-up stage, they are distinctly different in terms of context</li> <li>• Perhaps they represent life-style organisations, where owners have consciously chosen to keep their organisation small (Davidson (1989), found that for many small business managers, the negative effects of growth appeared to outweigh the positive outcomes once the organisation had reached the size of five to nine employees, roughly the size of organisations in this cluster)</li> <li>• These organisations may represent organisations whose growth is limited because they operate in very small market niches</li> </ul>	<ul style="list-style-type: none"> <li>❖ <b>Cluster 2, 4 and 3</b></li> </ul> <ul style="list-style-type: none"> <li>❖ <b>Cluster 3</b></li> <li>Average age 15.7 years, employing on average 8.8 employees, with a negative employee growth rate scoring on average minus 64.7% per annum</li> </ul>

Table continues on next page

**Table H.3: Survey clusters' objective characteristics: Comparison with findings of prior studies, associating with the low-growth classification (continued)**

Low-growth pathway	
Literature	Survey data
<ul style="list-style-type: none"> <li>❖ <b>Cluster F</b></li> <li>• While similar in size to moderate growth organisation (cluster B (II)), these organisation are significantly older and experiencing slower employee growth</li> <li>• Organisation average age is 12.65 years, employing on average 24.65 employees, with a low employee growth rate scoring on average 4% per annum</li> <li>• Organisation structure is between simple and functional (1.6)</li> <li>• Organisation levels on average are just over 3</li> <li>• Organisation formalisation is moderately low, with an average score of 42.39</li> <li>• It seems that this configuration includes organisations that are undergoing a cycle of stagnated growth (these organisations could possibly represent what Churchill and Lewis (1983:34) called a "Success-Disengagement" sub-stage of business development)</li> </ul>	<ul style="list-style-type: none"> <li>❖ <b>Cluster 2</b></li> <li>Average age 12.3 years, employing on average 14.4 employees, with a low employee growth rate scoring on average 3.1% per annum</li> <li>Organisation structure seems to be in the processes of adopting a functional structure, with an average score of 1.59 and organisation levels seem to be just below 3, with an average score of 2.94</li> <li>Organisation formalisation is low, with a very simular score (42.59) to the moderate-growth cluster 1 above.</li>   <li>❖ <b>Cluster 4</b></li> <li>Average age 27.4 years, employing on average 19.3 employees, with a low employee growth rate scoring on average 4.2% per annum</li> <li>Organisation structure seems to be simple, with an average score of 1.32 and organisation levels seem to be just below 3, with an average score of 2.71</li> <li>Organisation formalisation is low, with the second lowest score (39.32) of all clusters</li> </ul>

Source: McMahon, 2000 (amended), Hanks et al., 1993 (amended) and survey data analysis.

## APPENDIX I: SURVEY SAMPLE DATA'S THEMATIC COPING-VALUE PROFILE PER BUSINESS DEVELOPMENT CLUSTER GROUP

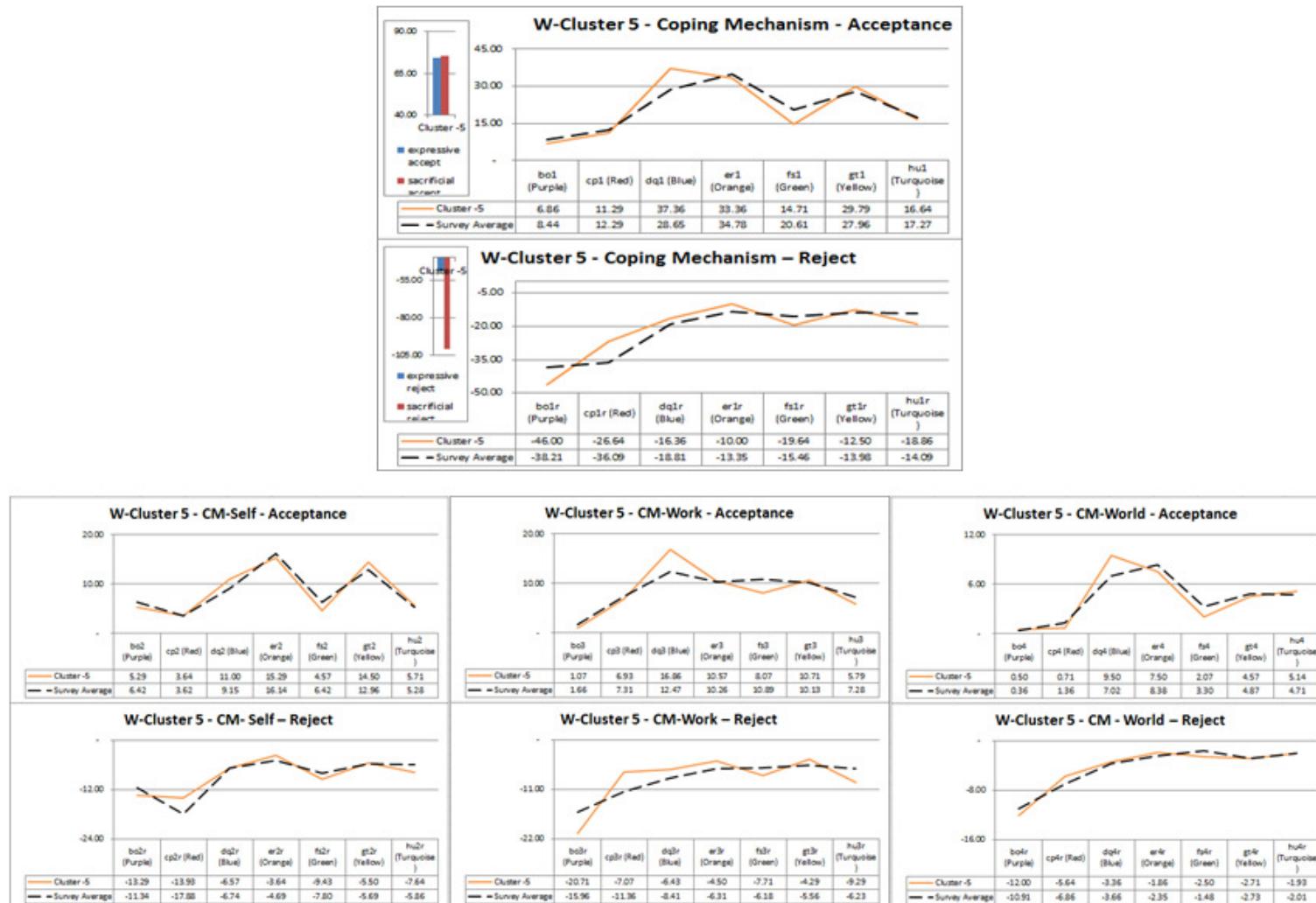


Figure I.1: Coping-value average profile scores for business development cluster 5



Figure I.2: Coping-value average profile scores for business development cluster 1

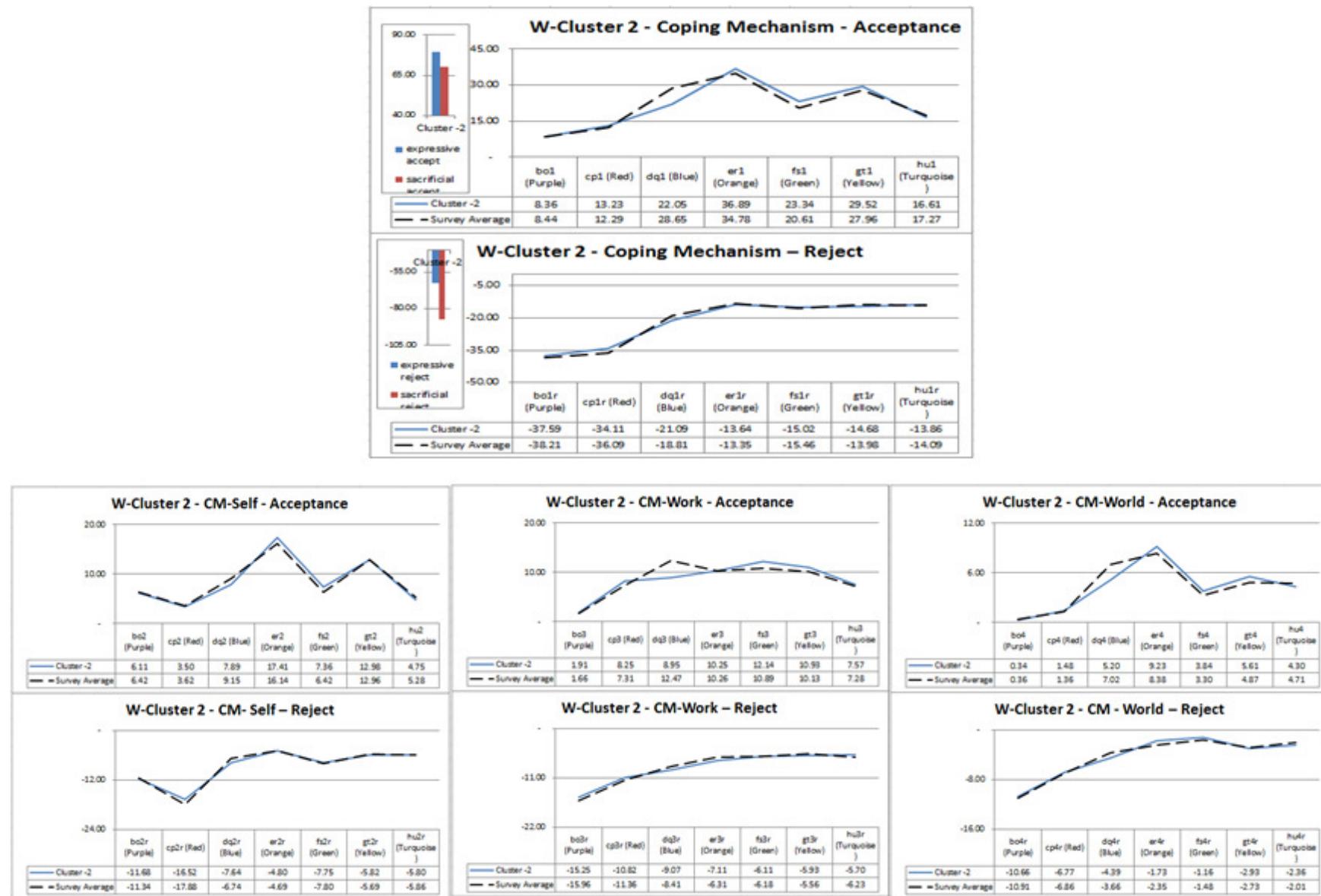


Figure I.3: Coping-value average profile scores for business development cluster 2

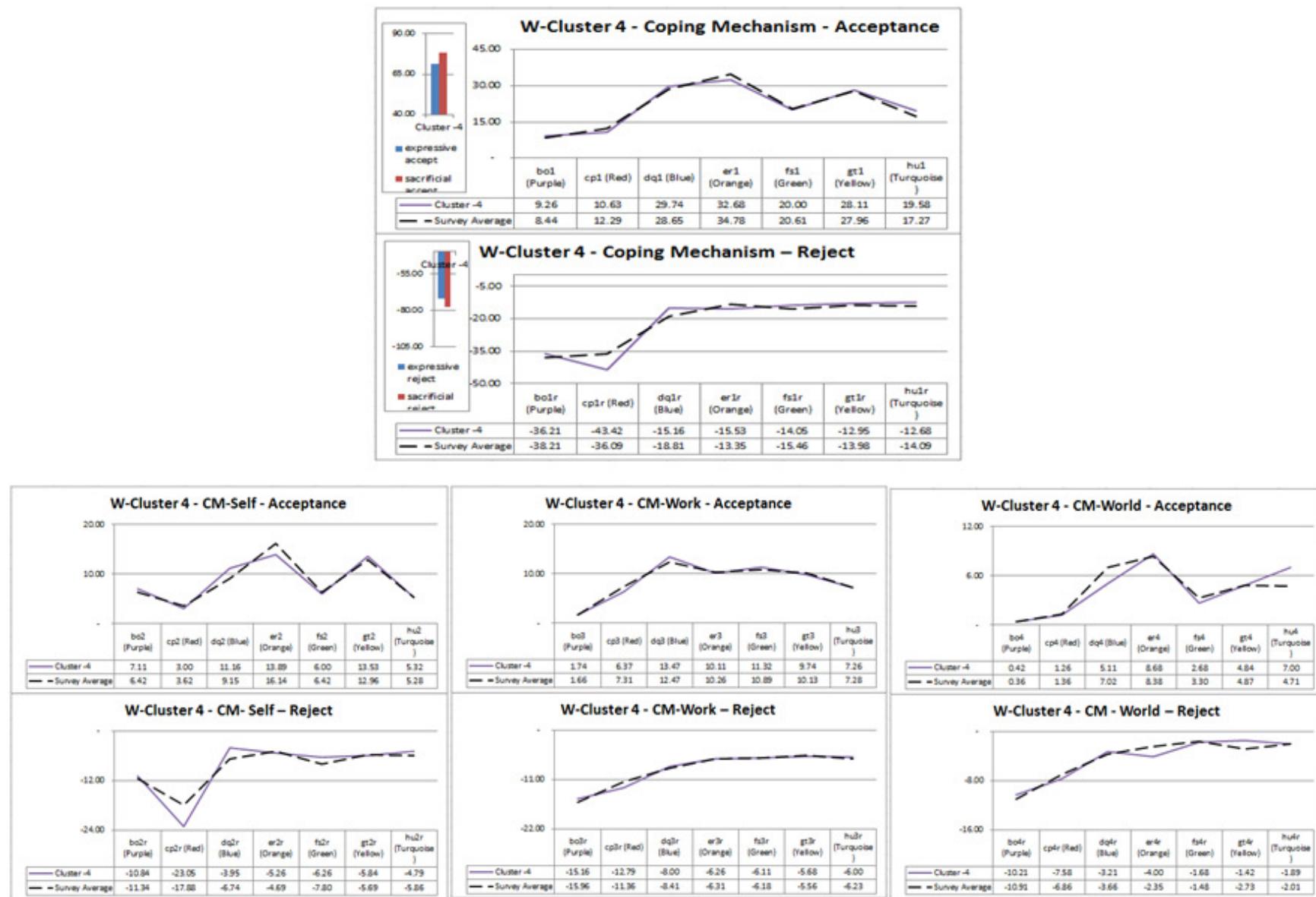


Figure I.4: Coping-value average profile scores for business development cluster 4

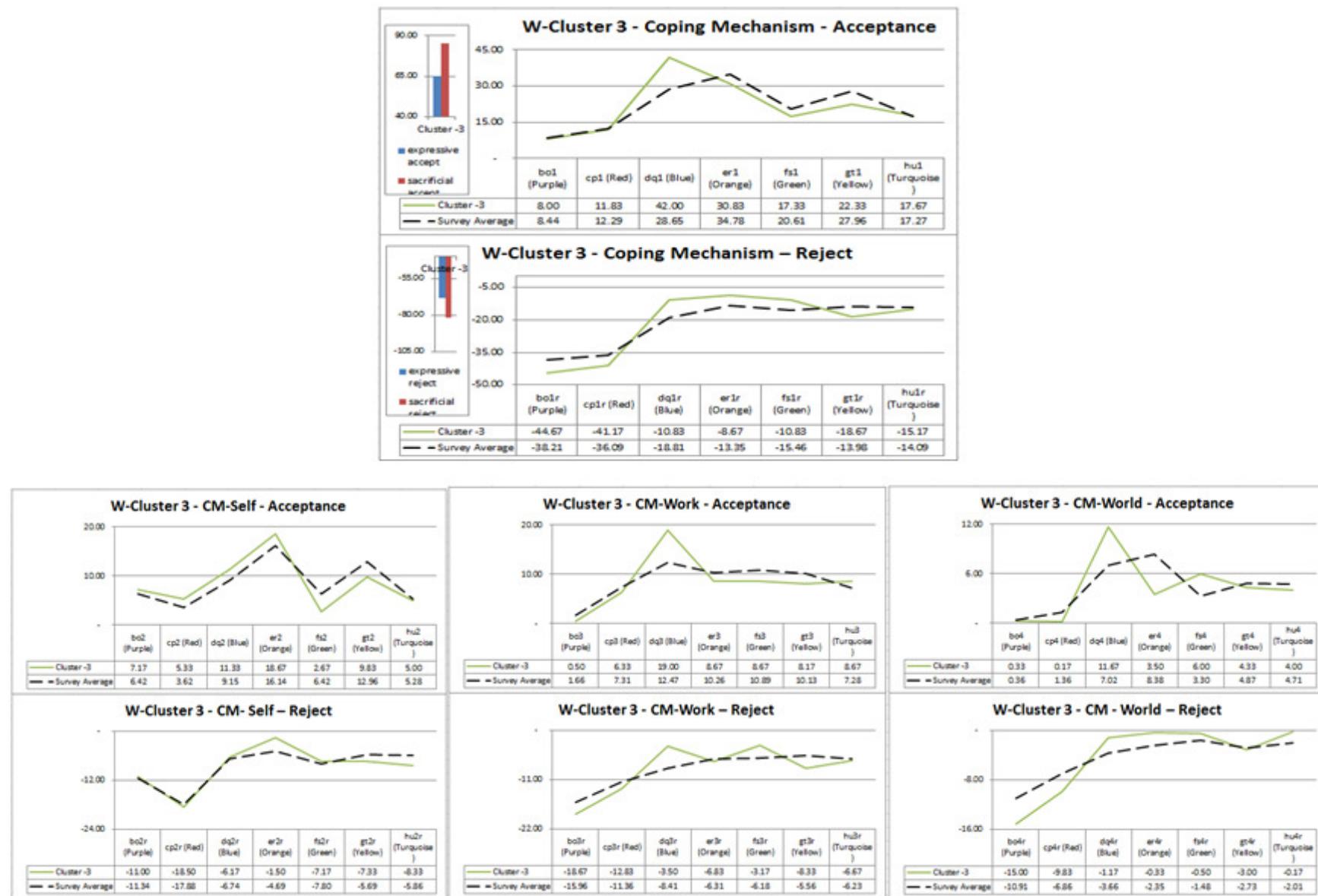


Figure I.5: Coping-value average profile scores for business development cluster 3

## APPENDIX J:

### SUMMARY OF GRAVES' BASIC THEMATIC COPING-VALUE SYSTEM

**Table J.1: Summary of Graves' basic thematic coping-value system**

LEVEL	CODES	POPULAR NAME	THINKING	LEADERSHIP INTELLIGENCE	CULTURAL MANIFESTATIONS AND PERSONAL DISPLAYS
Level 8	Turquoise (HU)	Global View	Holographic	Global Catalyst	Collective individuals, cosmic spirituality, whole earth changes
Level 7	Yellow (GT)	Flex Flow	Ecological	Systemic Navigator	Natural systems, self-principled, multiple realities, knowledge
Level 6	Green (FS)	Human Bond	Consensus	Sensitive Facilitator	Egalitarian, feelings, authentic, sharing, caring, community
Level 5	Orange (ER)	Strive Drive	Strategic	Strategic Entrepreneur	Materialistic, consumerism, success, image, status, growth
Level 4	Blue (DQ)	Truth Force	Authority	Rightful Authority	Meaning, discipline, traditions, morality, rules, sacrifice now for benefit later
Level 3	Red (CP)	Power Lords	Egocentric	Respected Boss	Gratification, glitz, conquest, action, impulsive, lives for now
Level 2	Purple (BO)	Kin Spirits	Animistic	Traditional Protector	Rites, rituals, taboos, superstitions, tribes, folk ways and lore
Level 1	Beige (AN)	Survival Sense	Instinctive	Nurturing Provider	Food, water, procreation, warmth, protection, stays alive

Source: 5DVS, 2014b (amended).

**Table J.2: Summary of Graves' basic thematic coping-value system transition stages**

FROM	TRANSITION	TO
BEIGE	<ul style="list-style-type: none"> <li>Awareness of distinct self</li> <li>Awakening of cause and effect</li> <li>Concerns with threats/fears</li> <li>Survival requires group effort</li> </ul>	PURPLE
PURPLE	<ul style="list-style-type: none"> <li>Emergence of dominant ego</li> <li>Self more powerful than group</li> <li>Confronts adversaries and dangerous forces to control</li> <li>Niches are limited</li> </ul>	RED
RED	<ul style="list-style-type: none"> <li>Recognition of mortality</li> <li>Quest for meaning and purpose in life</li> <li>Extended time-frame / future</li> <li>Consequential thinking arises</li> </ul>	BLUE
BLUE	<ul style="list-style-type: none"> <li>Aspires to better life now for self</li> <li>Challenges higher authority to produce tangible results</li> <li>Seeks one best way among many options</li> </ul>	ORANGE
ORANGE	<ul style="list-style-type: none"> <li>Discovers material wealth does not bring happiness or peace</li> <li>Renewed need for community, sharing, and richer inner life</li> <li>Sensitivity to have and have-not gaps</li> </ul>	GREEN
GREEN	<ul style="list-style-type: none"> <li>Overwhelmed by economic and emotional costs of caring</li> <li>Confronted by chaos / disorder</li> <li>Need for tangible results and functionality</li> <li>Knowing moves above feeling</li> </ul>	YELLOW
YELLOW	<ul style="list-style-type: none"> <li>Senses order within chaos</li> <li>Search for guiding principles</li> <li>Whole-earth problems arise as technology connects everybody</li> <li>Spirituality re-emerges with physics</li> </ul>	TURQUOISE
TURQUOISE	<ul style="list-style-type: none"> <li>The next system will be a new form of expressiveness, extended to the planetary level</li> <li>Global problems may be acknowledged, and framed in terms of the Kosmic significance of planet and species</li> <li>Unified responses may emerge</li> <li>A new way of being to fit a world where collective living has changed the milieu</li> </ul>	CORAL

Source: 5DVS, 2014b (amended).

## APPENDIX K:

### THEMATIC COPING-VALUE PROFILE IDENTIFICATION GUIDELINE

<b>Peak Stage</b>	<p>In a peak stage, there is usually a strong (high acceptance score) core thematic coping-value system supported by two or three softer (lower but still comparatively high acceptance score) thematic coping-values (Beck &amp; Cowan, 2006).</p> <p>High acceptance scores with low rejection scores indicate a strong association with a thematic value system. When a person associates strongly with a thematic coping-value way of thinking, there is relatively little negative attention attached to this way of thinking, and this way of thinking is most probably seen as appropriate for the contextual environment (Beck, 1992).</p>
<b>Transition Stage</b> (this can be an entering or exiting stage)	<p>In a transition stage there is usually a combination of two core thematic coping-value systems (comparatively high acceptance scores) from an expressive and sacrificial nature (Beck &amp; Cowan, 2006).</p> <p>A strong acceptance and high rejection, is an indication of a high intensity, indicating the person's focus is predominantly on that particular coping-value system and that the person associates both positively and negatively with this type of thinking. This is a possible indicator of dissonance in the person generated by the entering or exiting stage of a thematic coping-value system and can be an indication that the person is in a transition stage and experimenting with a new way of thinking. The transition is usually to more complex thematic coping-value systems (Beck, 1992).</p>
<b>Other considerations</b>	<p>Low intensity towards more complex thematic value systems is an indication of latency. The person does not recognise or associate with the problems and life conditions associated with these more complex thematic coping-value systems (Beck, 1992).</p> <p>Low intensity towards less complex thematic coping-value systems is an indication of more complex thematic coping-value systems that replaced these less complex thematic coping-value systems (Beck, 1992).</p> <p>Rejection points are assigned when a person recognises a thematic coping-value system, but actively rejects that system (Beck, 1992).</p>
<b>Contextual nature of values</b>	Graves' theory is about ways of thinking and not personality types. Hence, it is quite possible that the same person may prefer a different type of thinking in different contextual circumstances (Beck, 1992).
<b>Other general observations</b>	Comparing score values to the survey average differences of 10% to 20% can contribute to identifying the key structures of thinking (Beck, 1992) and should be considered in context to the above observations.
<b>Open / Arrest / Closed</b>  Indication of the readiness for change and the willingness to consider the relevance of other thematic coping-value systems.	<p>A strong association (high acceptance/low rejection) with a thematic value system can be an indication of a zone of comfort, probably stability and congruence (Beck, 1992). Hence, this type of peak is interpreted as most probably being closed to other thematic coping-value systems.</p> <p>High intensity transition may be a sign of dissonance and uncertainty or fear created by the entering or exiting with a particular thematic coping-value system (Beck, 1992). Hence, this type of transition is regarded to be more of an arrest state.</p>

Source: Beck & Cowan, 2006; Beck, 1992 (amended).

**APPENDIX L:**  
**THEMATIC COPING-VALUE PROFILE CONFIGURATION: SUMMARIES**  
**FOR CLUSTER GROUPS**

<b>High-growth classification – Cluster Group 5 – Thematic coping-value profile summary</b>			
<b>Overall Profile:</b>	<b>Self-perspective:</b>	<b>Work-perspective:</b>	<b>World-perspective:</b>
Transition between sacrificial DQ and expressive ER/GT Rejects FS Tolerates CP	Peak ER based on strong association with GT/DQ support system Rejects FS Tolerates CP	Peak DQ based on strong association with ER/GT support system Rejects FS Tolerates CP	Transition between sacrificial DQ and expressive ER Rejects FS Tolerates CP
<i>In Summary</i>			
<p>This group seems to be in a DQ/ER/GT transient stage. The FS rejection and GT acceptance indicate a possible first-tier higher complexity transient stage with possibly early second-tier thinking.</p> <p>The tolerance for CP supports contextual application of multiple thematic values, which is an attribute associated with second-tier thinking.</p> <p>From a change openness perspective, considering a possible transition spread over more than two thematic coping-value systems towards the second-tier of thinking, it seems that this group can be classified towards the open/arrest rating of the open, arrest, closed scale.</p>			
<b>Moderate growth classification - Cluster Group 1 – Thematic coping-value profile summary</b>			
<b>Overall Profile:</b>	<b>Self-perspective:</b>	<b>Work-perspective:</b>	<b>World-perspective:</b>
Transition between sacrificial DQ and expressive ER Latency FS/GT/HU	Transition ER based on intensity Rejects CP / DQ / FS Latency towards GT/HU	Transition DQ based on intensity Rejects CP Latency towards GT/HU	Transition between sacrificial DQ and expressive ER Latency towards FS/GT/HU
<i>In Summary</i>			
<p>This group seems to be in a DQ/ER transient stage. Transition seems to be between first-tier levels of thinking, with latency towards second tier thinking.</p> <p>From a change openness perspective, considering the nature of transition to be dissonance based in first-tier thinking with latency towards the second-tier of thinking, it seems that this group can be classified towards the arrest/closed rating of the open, arrest, closed scale.</p>			

<b>Low-growth (Life Style) classification – Cluster Group 3 – Thematic coping-value profile summary</b>			
<b>Overall Profile:</b> Peak DQ based on strong association, possible ER support system. Rejects BO/CP Latency towards FS/GT/HU	<b>Self-perspective:</b> Peak ER based on strong association. Latency towards FS/GT/HU	<b>Work-perspective:</b> Peak DQ based on strong association Rejects BO/CP Latency towards ER/FS/GT/HU	<b>World-perspective:</b> Peak DQ based on strong association Rejects BO/CP Latency towards ER/FS/GT/HU
<b>In Summary</b>			
This group seems to peak in the DQ thinking stage based on strong association and low rejection. This group seems to operate in the first-tier with a latency towards second-tier thinking. From a change openness perspective, considering the strong association nature of the DQ peak, and second-tier latency, it seems that this group can be classified towards the closed rating of the open, arrest, closed scale.			
<b>Low-growth (Disengaged) classification – Cluster Group 2 – Thematic coping-value profile summary</b>			
<b>Overall Profile:</b> Peak ER with, possible DQ/FS/GT support system.	<b>Self-perspective:</b> Peak ER with, possible GT support system.	<b>Work-perspective:</b> Peak FS with, possible ER/GT support system.	<b>World-perspective:</b> Peak ER based on strong association, Rejects DQ
<b>In Summary</b>			
This group seems to peak in the ER thinking stage supported by DQ/FS /GT. This group seems to peak in the first-tier with possible support from the second-tier thinking. From a change openness perspective, considering the nature of the peak, being supported by other thematic coping-value systems, it seems that this group can be classified towards the arrest/closed rating of the open, arrest, closed scale.			
<b>Low-growth (Disengaged) classification – Cluster Group 4 – Thematic coping-value profile summary</b>			
<b>Overall Profile:</b> Transition between sacrificial DQ and expressive ER / GT Rejects CP	<b>Self-perspective:</b> Transition between sacrificial DQ and expressive ER / GT Rejects CP	<b>Work-perspective:</b> Peak DQ with, possible ER/FS/GT support system. Rejects CP	<b>World-perspective:</b> Transition ER based on intensity
<b>In Summary</b>			
This group seems to be in a DQ/ER/GT transient stage. The GT and in some cases the relative acceptance for HU can be an indicator of possible first-tier higher complexity transient supported by possibly second-tier thinking. The CP rejection may be an indication that they feel that any egocentrism is very unlike them, opposing to their own moral codes and value system.			
From a change openness perspective, considering the nature of the transition to be mostly between sacrificial and expressive systems, with possible support from second-tier thinking, it seems that this group can be classified towards the open/arrest rating of the open, arrest, closed scale.			

## APPENDIX M:

### BASIC ATTRIBUTES OF THEMATIC COPING-VALUE SYSTEMS

Thematic coping-value system – Attributes identification guide	
DQ - Thematic coping-value system	ER - Thematic coping-value system
<p><b>General outlook:</b> The world is deterministic and rationally ordered and characterised with rigid categories for ideas, people, objects and events etc.</p> <p><b>Life goals:</b> Conforming to a directive, as designed by a superior force, which guides man and his destiny along a prescribed path. The purpose is to maintain stability for the present to guarantee future reward, which is being earned through conforming to present commitments.</p> <p><b>Coping mechanism:</b> To follow rules, striving to maintain an orderly existence and to pursue steadfastly what is “perceived as right”, and to reject what is “perceived as wrong” and those who engage in it. To support the system, the way, the belief, and the cause through sacrifice and discipline.</p> <p><b>Manifestations:</b> Obedience, Systems and Punitive orientation</p>	<p><b>General outlook:</b> The world is rich in natural resources, which provide vast opportunities to create “the good life” full of material abundance.</p> <p><b>Life goals:</b> To achieve materialistically as an individual person through the skilful use of power, popularity, and prestige, enjoying to win and the satisfaction of accomplishment. To conquer the world, by learning its secrets, in order to provide a higher level of existence here and now.</p> <p><b>Coping mechanism:</b> From an individual perspective, a high achievement motivation need for success as the result of competitiveness, investment of time, energy and determination. Multiplicity thinking and the acceptance of risk. Manipulative skills and effective game-playing abilities. From a social group (culture) perspective, progress as the result of pragmatic decision-making and strategies that reflect political realities, rewarding entrepreneurship and progressive thinking and the promotion of a self-manifest destiny</p> <p><b>Manifestations:</b> Overt and Covert</p>

Thematic coping-value system – Attributes identification guide	
DQ - Thematic coping-value system (continued)	ER - Thematic coping-value system (continued)
<p><b>Range of functioning:</b></p> <p><b>Low functioning:</b> (<i>Unhealthy, Closed, Focus “Human Doing”</i>)</p> <p>Rigid, intolerant, authoritarian, fanatical, punitive and insensitive.</p> <p><b>High functioning:</b> (<i>Healthy, Open, Focus “Human Being”</i>)</p> <p>Stability and responsibility, strong sense of law and justice, order and tradition, healthy commitment to systems and procedures, systematic and well organised.</p> <p><b>Transition initiators:</b></p> <p>Challenges higher authority to produce tangible results, Aspires to better life now for self, Seeks the one best way among many potential options</p> <p><b>Other considerations and summary:</b></p> <p>High levels of rigidity are expected in the DQ and FS thematic coping-value systems. They relate to staid bureaucracies where maintaining the <i>status quo</i> is priority and obedient constancy rewarded.</p> <p>They respond to information from a righteous higher authority, typical from structured environments that respect chains of command and prefer documentation.</p> <p>Dogmatism peak in DQ and reduce towards the GT thematic coping-value system.</p> <p>Guilt behaviour tends to show in DQ and FS and disappears in ER and GT.</p> <p>There seems to be a preference for stability and they do not like change or uncertainty.</p> <p>They focus on the preparation for the future and prefer to concentrate on a higher purpose in living that seems to guarantee a stable future.</p> <p>Community involvement is common in volunteer programmes where duty and obedience to authority are driving forces.</p>	<p><b>Range of functioning:</b></p> <p><b>Low functioning:</b> (<i>Unhealthy, Closed, Focus “Human Doing”</i>)</p> <p>Purely selfish motives and drives that can be manipulative and willing to do anything for a price.</p> <p><b>High functioning:</b> (<i>Healthy, Open, Focus “Human Being”</i>)</p> <p>Constructively ambitious, highly energetic in the pursuit of organisational and societal goals, with actions that reflect a concern for the welfare for others as well as one's own.</p> <p><b>Transition initiators:</b></p> <p>Discovers that material wealth does not bring happiness or peace and a need for a richer inner life. Renewed need for community and sharing with a sensitivity to a richer inner life.</p> <p><b>Other considerations and summary:</b></p> <p>Focus to win in life, an entrepreneurial and option-oriented mind-set, which looks to grow, emerge and improve with time. A drive to move and shake and exercise influence will be strong although it may be concealed rather than overtly displayed.</p> <p>Demands for freedom is most in CP, reduced to autonomy in ER, and become unemotional individualism without isolation in GT. May be frustrated with heavily structured systems, viewing them as unnecessary restraints on progress.</p> <p>Will often state a deep concern for well-being of others, but usually admits to a “me-first” wherein good deeds usually result in self-rewards. Guilt behaviour tends to show in DQ and FS and disappears in ER and GT.</p> <p>High scores reflect an awareness of economic and political factors and issues in decision-making processes.</p> <p>ER may perceive FS thinking as ambiguous, undirected and standing in the way of progress.</p>

Thematic coping-value system – Attributes identification guide	
FS - Thematic coping-value system	GT - Thematic coping-value system
<b>General outlook:</b> The world has been depersonalised through determinism and tarnished through technology, creating a spiritual void that can only be filled by rediscovering basic humanity.	<b>General outlook:</b> A world in danger of collapse because the humans misused nature and themselves, creating scarcities. Sees life as a diverse, paradoxical and pluralistic experience in which man must restore nature.
<b>Life goals:</b> To seek peace with the inner self and those of others, in the belief that people need to be needed.	<b>Life goals:</b> To re-acquaint man and nature to approach the problems of living in a world of scarcity with delicate diminishing resources.
<b>Coping mechanism:</b> From an individual perspective, an emergence of true interpersonalism with a focus on relationships.  From a social group (culture) perspective, equality for people to develop to their fullest potential and the moral imperative to provide for all the needs of members of the human race.	<b>Coping mechanism:</b> To examine man's relationship with the world and to begin to explore behaving in systemic terms.
<b>Range of functioning:</b> <b>Low functioning:</b> ( <i>Unhealthy, Closed, Focus "Human Doing"</i> )  Overly permissive and unrealistically idealistic, unbalanced emphasis on affect or feelings and tends to ignore the need to produce tangible results.  <b>High functioning:</b> ( <i>Healthy, Open, Focus "Human Being"</i> )  Genuinely people-oriented, seeks inner tranquillity in a reality base, emphasis on warm interpersonal relationships and social responsibility.	<b>Range of functioning:</b> <b>Low functioning:</b> ( <i>Unhealthy, Closed, Focus "Human Doing"</i> )  Self-protective avoidance of problems of other realities, tends to let it be to excess.  <b>High functioning:</b> ( <i>Healthy, Open, Focus "Human Being"</i> )  Flexible and accepting of diverse experiences, emphasis on functionality primarily concerned with quality of being

<b>Thematic coping-value system – Attributes identification guide</b>	
<b>FS - Thematic coping-value system (continued)</b>	<b>GT - Thematic coping-value system (continued)</b>
<p><b>Transition initiators:</b> Confronted by chaos and/or disorder, there is an overwhelmedness of economic and emotional costs of caring and a need for tangible results and functionality where knowing moves above feeling.</p> <p><b>Other considerations and summary:</b> Guilt behaviour tends to show in DQ and FS and disappears in ER and GT. Rigidity is high in DQ and FS. FS promotes an egalitarian humanitarian appreciation of living in “the now” with attentiveness to human concerns and feelings. People’s needs are seen as more important than production and schedules, willing to ignore rules if in favour of perceived human benefits. The ability to work together takes precedence over getting ahead. Priorities tend to be based on the feeling of the situation on hand, rather than uniform standards or long-term functional success. Interpersonal involvement can be high with group forming and a priority focus on consensus-building and well-being of all. Ambiguity can be high with relatively low specifics.</p>	<p><b>Transition initiators:</b> As technology connects everybody, an awareness of whole-earth problems arise with a sense of order within chaos and a search for guiding principles. Spirituality re-emerges with physics.</p> <p><b>Other considerations and summary:</b> Not driven by negative motivators associated with fear, loss of status and threats of rejection, actions tend to be based on personal and internalised principles. It may be difficult to identify priorities, as GT thinking may have a wide variety of interests and most probably diverse, seemingly unrelated competencies that do integrate. They may express discomfort at over-simplified models with a perception to ignore complexity. May become impatient with routines and have a tendency to let others do their own thing as long as it does not appear harmful. Acceptance and rejection scores tend to increase in the entering transition stage into GT thinking. In relation to dislike of CP egocentrism, GT rejection can be expected.</p>

Source: 5DVS, 2014b; Beck, 1992, Beck & Cowan, 1979 (amended).