

CHAPTER 7 : SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

“As Intrapreneurship programs provide opportunities for success, increasing future research may provide an objective basis for determining the extent to which such programs are feasible and have the potential to be incorporated into organisational structures.”

Marcus and Zimmerer (2003:18)

“Employees need to be trained to be business innovators..... Companies need to invest in people’s skills.”

Hamel in Allio (2008:7)

“If you give people the skills and opportunity to exercise their imagination, they will take advantage of it.

Individuals are adaptive and innovative, companies are not.” Hamel in Allio (2008:9)

7.1 INTRODUCTION

As indicated in chapter 1 and confirmed in chapter 3, it is clear that businesses and industries throughout the world are operating in an uncertain and dynamic global economy. Businesses of the future need continual innovation, growth and value creation to survive. Through corporate entrepreneurship the entrepreneurial spirit within the organisational boundaries can be created, allowing an atmosphere of innovation to prosper. Various researchers have highlighted the fact that there is inadequate research in corporate entrepreneurship, specifically with regard to providing empirical evidence in the field of corporate entrepreneurship. Thornberry (2003:333) noted that there is relatively little field research regarding the successes or failures of large businesses who have tried systematically to instil corporate entrepreneurship within their businesses. Zahra (1991:193) also indicated that “a lack of compelling evidence on the contributions of corporate entrepreneurship performance exists. Even though some research has attempted to fill this gap in literature there is still much more to be learned about the substance and process of corporate entrepreneurship”.

Limited South African research exists in the field of corporate entrepreneurship and more specifically in terms of evaluating corporate entrepreneurial mindsets, corporate entrepreneurship training programmes and the effect thereof, as well as fostering corporate entrepreneurship. The purpose of this study was to assess the corporate entrepreneurial and innovative levels in South African short-term insurance businesses.

In the previous chapter the research findings of the study were discussed. This chapter provides the revisited research objectives with an overview of the literature study. Thereafter the hypotheses statements are revisited and summarised according to the three areas of the research (assessment of the entrepreneurial intensity; the climate for corporate entrepreneurship and corporate entrepreneurship development programmes). A summary will be given on the hypotheses that are accepted and rejected based on the statistical techniques discussed in Chapter 6. The contribution to the science and limitations of the study are mentioned. Recommendations are provided and the path for further research into this field is given. Lastly, the chapter ends with a summary and conclusion to the study.

7.2 RESEARCH OBJECTIVES

The primary objective of this research was to assess corporate entrepreneurial and innovative levels in South African short-term insurance businesses.

The primary objective was achieved as a result of the assessment of corporate and entrepreneurial levels that was done through hypotheses Ho1 to Ho37.

In order to achieve this primary objective various secondary objectives were formulated. The secondary objectives of the study were:

To determine by means of a literature study:

- how entrepreneurship and corporate entrepreneurship relate to one another;
- the link between corporate entrepreneurship and innovation;
- the importance and value of corporate entrepreneurship;
- how to foster, develop and implement corporate entrepreneurship;

- how to sustain corporate entrepreneurship and innovation;
- the conceptual models that exist for corporate entrepreneurship;
- the methods of measuring entrepreneurial activity; and
- the design, content and structure of a corporate entrepreneurial development programme.

To determine by means of a case study design:

- how to assess corporate entrepreneurial and innovative levels in South African short-term insurance businesses, by means of a corporate entrepreneurial health audit instrument.

The secondary objectives were addressed and achieved by means of the literature review.

7.3 OVERVIEW OF THE LITERATURE STUDY

The literature review was covered in chapters 2 to 4. The following is a short overview of the literature:

In chapter 2 a review was given on various aspects in the field of entrepreneurship. The main purpose for addressing these aspects was to give a background on what entrepreneurship entails and what the relationship with corporate entrepreneurship is. From the various definitions provided by many researchers in the field of entrepreneurship the definition of Stevenson and Jarrilo (1986:10) was adopted for this study – “Entrepreneurship is the process of creating value by bringing together a unique combination of resources to exploit an opportunity”. Despite the fact that a universally accepted definition has not yet emerged, the field of entrepreneurship has grown tremendously since 1970. Cornelius, *et al.* (2006:394) gave an overview of the clusters in which entrepreneurship has developed over time, from 1986 to 2004 (refer to figure 2.1). In this cluster the connection between entrepreneurship and corporate entrepreneurship is clearly indicated, which started to develop rigorously from 1993.

Morris, *et al.* (2008:33) state that the definition of entrepreneurship does not indicate anything in particular about starting a small business. The context within which

entrepreneurship occurs is not part of the definition. The researcher also supports the viewpoint of Morris, *et al.*, that entrepreneurship can occur in start-up ventures, small businesses, medium-sized businesses, large conglomerates, non-profit businesses and even in public sector agencies. What essentially distinguishes corporate entrepreneurship from entrepreneurship is the context in which the entrepreneurial act takes place. Entrepreneurs innovate for themselves, while corporate entrepreneurs innovate on behalf of an existing business.

The similarities and major differences between corporate entrepreneurship and entrepreneurship (start-up ventures) were also given in chapter 2. The main aspect from these similarities and differences points out that entrepreneurship does not only refer to starting a small business and it is not limited to selecting a set of people. An entrepreneurial perspective can be developed in any individual – inside or outside a business.

In chapter 3 it was established why it is necessary for businesses to undertake corporate entrepreneurship. Businesses need corporate entrepreneurship to grow; to integrate and to develop an entrepreneurial spirit; create and sustain competitive advantage, and to be adaptable, flexible, fast, aggressive and innovative. The benefits of instilling corporate entrepreneurship in a business are endless. Businesses that instil corporate entrepreneurship can:

- gain and sustain competitive advantage at all levels of the business;
- rejuvenate and revitalise the existing business;
- develop new products, services and processes;
- pursue entrepreneurial opportunities;
- create new businesses within existing businesses;
- foster strategic renewal of existing operations;
- improve growth and profitability;
- sustain corporate competitiveness; and
- increase financial performance and create new value.

Corporate entrepreneurship can affect the economy by increasing productivity, improving best practices, creating new industries and enhancing international competitiveness.

As with entrepreneurship, researchers in the field of corporate entrepreneurship have not yet reached consensus on a common definition. For purposes of this study the definition of Sharma and Chrisman (1999:18) was adopted. "Corporate Entrepreneurship is the process whereby an individual or a group of individuals, in association with an existing business, creates a new business or instigates renewal or innovation within the business.

Corporate entrepreneurship is a relatively new field of study and therefore various conceptual models and frameworks exist. These conceptual models and frameworks are mostly developed to improve the understanding of the various issues related to the process and phenomenon of corporate entrepreneurship. Most researchers use these models to guide research actions.

Table 7.1 summarises the conceptual models discussed in this study:

Three models can be applied to this study. The interactive model of Hornsby, *et al.* (1993); the model of sustained corporate entrepreneurship by Kuratko, *et al.* (2004); and the model of Covin and Slevin as adapted by Morris, *et al.* (2008) - strategic integration of entrepreneurship throughout the business. The interactive model indicates the characteristics to foster corporate entrepreneurship, and the model for sustained corporate entrepreneurship focuses on the factors necessary to develop entrepreneurial behaviour and how to sustain entrepreneurship on an ongoing basis. The strategic integration of entrepreneurship throughout the business model focuses on how to integrate entrepreneurship throughout the business. The specific focus is on the entrepreneurial intensity.

TABLE 7.1 A summary of the conceptual models in the field of corporate entrepreneurship

Conceptual model	Year	Authors and researchers
A domain model for CE	1990	Guth and Ginsberg
A conceptual model for firm behaviour	1991	Covin and Slevin
A model of predictors and financial outcomes of CE	1991	Zahra
A revised conceptual framework of firm-level entrepreneurship	1993	Zahra (as adapted from Covin and Slevin)
An organisational model for internally developed ventures	1993	Brazeal
An interactive model of corporate entrepreneurship	1993	Hornsby, Haffziger and Montagno
A model of sustained corporate entrepreneurship	2004	Kuratko, Hornsby and Goldsby
Model CE and wealth creation	2004	Antoncic and Hisrich
The micro-model of corporate entrepreneurship and innovation	2005	Shaw, O'Loughlin and McFadzean
Strategic integration of entrepreneurship throughout the business	2008	Morris, Kuratko and Covin (as adapted from Covin and Slevin)

The biggest criticism towards the development of these models is that they have not been tested empirically.

A very important aspect that was also highlighted from research was the relationship between corporate entrepreneurship and innovation. It was indicated that continuous innovation and an ability to compete proactively in global markets are the key skills that will determine corporate performance in the twenty-first century. Corporate entrepreneurship can be seen as the vehicle to instil innovation in businesses.

Chapter 3 focused on how to foster, develop and implement corporate entrepreneurship in businesses. From all the various models, techniques and methods indicated, the

corporate entrepreneurship training or development programme has been indicated as most effective.

Literature on corporate entrepreneurship measuring instruments and development programmes was addressed in chapter 4. Six measuring instruments were highlighted: entrepreneurial orientation, the ENTRESALE, Corporate Entrepreneurship and Assessment Instrument (CEAI), factor based instrument to measure corporate entrepreneurship, Intrapreneurial Intensity Index (III), and lastly, the corporate entrepreneurial health audit. The corporate entrepreneurial health audit forms the basis of this study. The three steps of this instrument are followed. Firstly, the businesses entrepreneurial intensity needs to be established. Secondly, the climate for corporate entrepreneurship needs to be measured, and next a corporate entrepreneurial development programme is developed to address the areas of development in a business.

Lastly, in chapter 4, an overview was given on ten corporate entrepreneurship development programmes (CEDP). These development programmes are summarised and compared. Of these ten CEDPs, only two could be found in academic literature.

What is noticeable in terms of the field of corporate entrepreneurship is that a lot of new researchers are entering and researching this field (e.g. Heinoner, J and Toivonen, J; Ma, H and Ta, J; Frank, H; Wolcott, R.C. and Lippitz, M.J.; etc). Since 2007 much more international research is available in accredited journals. For the future of corporate entrepreneurship this is a positive sign, because it shows that there is increased interest in the field.

7.4 HYPOTHESES STATEMENTS REVISITED

The main findings of this study are summarised in this section and address the formulated. As indicated previously the three steps of the entrepreneurial health audit were used to assess the corporate entrepreneurial and innovative levels in South African short-term insurance businesses.

Hypotheses 1 to 26 relate to entrepreneurial intensity (step 1 of the entrepreneurial health audit); hypotheses 27 to 36 relate to the second step of the entrepreneurial health audit (determine the corporate entrepreneurial climate) and lastly hypothesis 37 relates to the third step of the entrepreneurial health audit the compilation of a development programme to address the gaps identified from steps 1 and 2). The findings will be presented according to these three steps and the applicable hypotheses.

7.4.1 Assessment of entrepreneurial intensity

Entrepreneurial intensity consists of two aspects, degree and frequency. As indicated in chapter 3 several researchers have confirmed that entrepreneurial intensity can be directly associated with increased organisational performance (Covin and Slevin, 1989; Davis, Morris and Allen, 1991; Miller and Friesen, 1982; Morris and Sexton, 1996; Wiklund and Shephard, 2005; Zahra, 1986).

A rigorous analysis was done to determine the influence of various dependent variables (relating to the degree of entrepreneurship) on certain independent variables (years working in the business; business unit and management level). An ANOVA was done to determine the significant statistical differences between the various dependent and independent variables. In all the cases listed in table 7.2, 7.3 and 7.4 where the major findings are summarised, there was a significant statistical difference between the variables.

TABLE 7.2 Summary of findings of the influence of various dependent variables (relating to the degree of entrepreneurship) on the years employees have been working in an insurance business

Independent variable	Dependent variable	Statistical significant difference
Years working in the business (less than 2 years, 3 to 10 years, 11 years and more)	The business is characterised by a high rate of new product/service introductions compared to competitors	The employees that have been working for less than 2 years indicated that their businesses do not compare favourably with competitors in terms of the high rate of new product/service introductions. The employees that have been working for 11 years and more indicated that their businesses do compare favourably with their competitors. (P value = 0.0009)
	Top level decision-making is characterised by an active search for big opportunities	The employees that have been working for 11 years and more agree that top management searches for big opportunities. The employees that have been working for less than 11 years disagree. (P value = 0.0045)
	Top level decision-making is characterised by large, bold decisions despite uncertainties of the outcomes	Employees that have been working for more than 3 years agree that top management makes large, bold decisions despite uncertainties. (P value = 0.0417)
	Top level decision-making is characterised by compromises among conflicting demands of stakeholders	The employees that have been working for longer than 3 years agree that top management compromises between the conflicting demands of stakeholders. The employees that have been working for less than 2 years disagree. (P value = 0.0070)

Collectively when considering the years that employees have been working in their businesses compared to the listed dependent variables it indicates that the employees that have been working for more than 11 years in their businesses are more positively oriented towards their businesses.

With regard to the findings illustrated in table 7.2 the following hypotheses can be rejected:

Ho1 is rejected: There is no statistical significant difference in terms of the years that the employees have been working in South African short-term insurance businesses and the perceptions on the rate of new products/service introductions compared to competitors.

Ho2 is rejected: There is no statistical significant difference in terms of the years that the employees have been working and the perceptions that top level decision-making is characterised by an active search of big opportunities by in South African short-term insurance businesses.

Ho3 is rejected: There is no statistical significant difference in terms of the years that the employees have been working and the perceptions that top level decision-making is characterised by large bold decisions despite uncertainties of the outcomes are made in South African short-term insurance businesses.

Ho4 is rejected: There is no statistical significant difference in terms of the years that the employees have been working and the perceptions that top level decision-making is characterised by compromises among the conflicting demands of owners, government, management, customers, employees and suppliers.

TABLE 7.3 Summary of findings of the influence of various dependent variables (relating to the degree of entrepreneurship) on the business units

Independent variable	Dependent variable	Statistical significant difference
Business units (Sales, Information Technology, Claims and Administration, Shared Services)	The business is characterised by an emphasis on continuous improvement in methods of production and/or service delivery	There is a difference in perceptions between the sales and claims and administration business units and also between the claims and administration and the shared services business units. The sales and claims and administrative business units are more positive towards their businesses continuous improvement in methods of production and/or service delivery. (P value = 0.0063)
	Top level decision-making is characterised by cautious, pragmatic, step-at-a-time adjustments to problems	The sales and shared services business units disagree that top management takes cautious, pragmatic, step-at-a-time adjustments to problems. The IT business unit agrees. (P value = 0.0245)

With regard to the findings illustrated in table 7.3, the following hypotheses can be rejected:

Ho5 is rejected: There is no statistical significant difference between the various business units regarding the emphasis which South African short-term insurance businesses' places on continuous improvement in methods of production and/or service delivery.

Ho6 is rejected: There is no statistical significant difference between the business units in the South African short-term insurance regarding how the top level decision-making is characterised by cautious, pragmatic, step-at-a-time adjustments to problems.

TABLE 7.4 Summary of findings of the influence of various dependent variables (relating to the degree of entrepreneurship) on management levels

Independent variable	Dependent variable	Statistical significant difference
Management levels (top, middle, lower, call and non-call centre)	The business is characterised by risk-taking by executives in exploring new opportunities	Top management indicate that their businesses do not take a lot of risks in exploring new opportunities. The other management levels disagree. (P value = 0.0161)
	The business is characterised by a “live and let live” philosophy in dealing with competitors	Lower and call and non-call centre employees indicate that their businesses do not have a “live and let live” philosophy in dealing with competitors. Top and middle management disagree. (P value = 0.0069)
	Top level decision-making is characterised by cautious, pragmatic, step-at-a-time adjustments to problems	Top and middle management agree that top level decision-making is characterised by cautious, pragmatic, step-at-a-time adjustments to problems. Lower and call and non-call centre employees disagree. (P value = 0.0310)
	Top level decision-making is characterised by large, bold decisions despite uncertainties of the outcomes	Top and lower management agree, and middle and call and non-call centre employees disagree that top level decision-making is characterised by large, bold decisions despite uncertainties of the outcomes. (P value = 0.0452)
	Top level decision-making is characterised by compromises among conflicting demands of stakeholders	Top and call and non-call centre employees agree, and middle and lower management levels disagree that compromises are made between the conflicting demands of stakeholders. (P value = 0.101)

From the findings presented in table 7.4 it is clear that there is a difference in perception between the various management levels, specifically between top and middle management and the rest of their businesses.

With regard to the findings illustrated in table 7.4 the following hypotheses can be rejected:

Ho7 is rejected: There is no statistical significant difference between the management levels in South African short-term insurance businesses and how the businesses executives take risks in exploring new opportunities.

Ho8 is rejected: There is no statistical significant difference between the management levels in South African short-term insurance businesses and the “live and let live” philosophy in dealing with competitors.

Ho9 is rejected: There is no statistical significant difference between the management levels in South African short-term insurance businesses and how top level decision-making is characterised by cautious, pragmatic, step-at-a-time adjustments to problems.

Ho10 is rejected: There is no statistical significant difference between the management levels in South African short-term insurance businesses and how top level decision-making is characterised by large, bold decisions despite uncertainties of the outcomes.

Ho11 is rejected: There is no statistical significant difference between the management levels in South African short-term insurance businesses and how top level decision-making is characterised by compromises among conflicting demands of owners, government, management, customers, employees and suppliers.

On the basis of the empirical results presented in table 6.13, the degree of entrepreneurship was found to be moderate. Hypothesis **Ho12 is accepted**. The degree of entrepreneurship in South African short-term insurance businesses is not high.

One obstacle in terms of degree of entrepreneurship is that it is difficult to determine whether the degree of entrepreneurship is low, moderate or high. No specific indication could be found in the academic literature as to what is an acceptable score to be categorised as high. Morris, *et al.* (2008:69) stated that it would assist if an industry's degree of entrepreneurship were known. Then businesses in an industry can measure themselves accordingly. The degree of entrepreneurship for businesses in the short-term insurance industry in South Africa has never been determined. This research is a first in this regard and can assist in establishing a benchmark.

With regard to the findings provided on the frequency of entrepreneurship, hypothesis **Ho13 is accepted**. The frequency of entrepreneurship in South African short-term insurance businesses is not high.

To be able to determine the entrepreneurial intensity of a business or industry the degree and frequency of entrepreneurship need to be combined. If this is done, hypothesis **Ho14 is accepted**: The entrepreneurial intensity in South African short-term insurance businesses is not high.

The summary of the frequency of entrepreneurship is presented in table 7.5. This is a summary of the findings as were presented in tables 6.14 to 6.19 and figures 6.9 to 6.13.

From table 7.5 it can be seen that 0 to 5 new products/services were introduced and 0 to 5 processes were implemented in a two year period. As with the degree of entrepreneurship it is difficult to determine whether this is relatively low, moderate or high, because no other figures or benchmarks exist for the short-term insurance industry in South Africa. Considering that the short-term insurance industry is a very competitive industry and that the demands, needs and wants of the consumer market differ considerably from the past, more new product/services offerings are expected. When looking at item 4 in table 7.5, it supports the item listed in the degree of entrepreneurship where the respondents indicated that their businesses are characterised by a high rate of new product/service introductions compared to competitors.

TABLE 7.5 Summary of major findings with regard to the frequency of entrepreneurship

Dependent variable		Result
1.	Number of new products/services that the business introduced during the past two years (2007 – 2009)	0 – 5
2.	Number of new processes that the business implemented during the past two years (2007 – 2009)	0 – 5
3.	Number of new product improvements or revisions that the individual respondents introduced during the past two years (2007 – 2009)	41 % indicated that they introduced more 37 % indicated that they introduced none
4.	Number of new product introductions compared with major competitors in the industry	51 % indicated their businesses introduce more than competitors
5.	Degree to which new product introductions include products that did not previously exist in the market	44 % indicated that theirs included more 34 % indicated that none was introduced

It seems as if the respondents acknowledge that there are new product/service introductions in their businesses but that they themselves are not responsible for this. It seems contradictory or it could be that there were a few individuals or a specific department that is responsible for all the new product/service introductions. This supports the fact that entrepreneurship needs to be developed in all the employees in the businesses, not just in a few. This would then be able to increase the number of unique and new product/service offerings and the implementation of new processes.

A rigorous analysis was also done on various aspects of the frequency of entrepreneurship and the independent variables (number of years working in the insurance business, business unit, management level and years that employees were working in their current jobs). A Chi-square analysis was done to determine the significant statistical differences between the various dependent and independent variables. These findings are

summarised in table 7.6. The in-depth analyses of the influence of the various dependent variables on the independent variables were given in tables 6.19, 6.20 and 6.21

TABLE 7.6 Summary of various independent variables on dependent variables (related to the frequency of entrepreneurship)

Independent variables	Dependent variables		
	Product improvements/revisions introduced by individuals in their business	New product improvements/revisions compared to competitors in the industry	Number of new product introductions that did not previously exist in the market ("new market")
Number of years working in the business	0.0300***	0.0199***	0.0001***
Business unit level	0.0264***	0.4968	0.7383
Management level	0.0850	0.0158***	0.0058***
Years in current job	0.0573	0.2408	0.0044***
P*** statistical significance at the 5% level			

Table 7.6 gives an overview of the areas where there is a significant statistical difference between the various dependent and independent variables. It is interesting to note that, in terms of the number of years that employee's have been working in their businesses, there is a significant statistical difference in all the listed dependent variables. If the detailed analyses (tables 6.19 to 6.21) were to be considered with table 7.6, then it could be noted that the biggest difference exists between the employees that have been working with the business for less than 2 years and the employees that have been working for more than 11 years. In most instances the employees that have been working for less than 2 years in their businesses indicated that there were no new product improvements. This could be that these employees were fairly new in their businesses and that they are not aware of

new products or product improvements, or that the communication lines are not followed through to all the employees.

With regard to the summarised findings in table 7.6, the following hypotheses are accepted and rejected:

Hypothesis Ho15 is rejected: There is no statistical significant difference between the years working in South African short-term insurance businesses and the number of product improvements/revisions.

Hypothesis Ho16 is accepted: There is no statistical significant difference between years in current job in South African short-term insurance businesses and the number of product improvement/revisions.

Hypothesis Ho17 is rejected: There is no statistical significant difference between the business units in South African short-term insurance businesses and the number of product improvement/revisions.

Hypothesis Ho18 accepted: There is no statistical significant difference between the management levels in South African short-term insurance businesses and the number of product improvements/revisions.

Hypothesis Ho19 is rejected: There is no statistical significant difference between the years working in South African short-term insurance businesses and the number of product improvements/revisions compared with competitors.

Hypothesis Ho20 is accepted: There is no statistical significant difference between years in current job in South African short-term insurance businesses and the number of product improvement/revisions compared with competitors.

Hypothesis Ho21 is accepted: There is no statistical significant difference between the business units in South African short-term insurance businesses and the number of product improvement/revisions compared with competitors.

Hypothesis Ho22 is rejected: There is no statistical significant difference between the management levels in South African short-term insurance businesses and the number of product improvements/revisions compared with competitors.

Hypothesis Ho23 is rejected. There is no statistical significant difference between the years working in South African short-term insurance businesses and the number of product improvements/revisions that include products that did not previously exist in the market (“new to the market”).

Hypothesis Ho24 is rejected. There is no statistical significant difference between years in current job and the number of product improvement/revisions that include products that did not previously exist in the market (“new to the market”).

Hypothesis Ho25 is accepted. There is no statistical significant difference between the business units and the number of product improvement/revisions that include products that did not previously exist in the market (“new to the market”).

Hypothesis Ho26 is rejected. There is no statistical significant difference between the management levels and the number of product improvements/revisions that include products that did not previously exist in the market (“new to the market”).

7.4.2 Climate for corporate entrepreneurship

To assess the climate for corporate entrepreneurship in a business, the Corporate Entrepreneurship Assessment Instrument (CEAI) can be used. This instrument has been proven to be valid and reliable internationally and in terms of a few South African studies (as indicated in chapter 6). To confirm the validity and reliability a factor analysis was done. The factor analysis confirmed the five factors as indicated in the CEAI.

Factor 1: Management support for corporate entrepreneurship

Factor 2: Work discretion

Factor 3: Rewards/reinforcement

Factor 4: Time availability

Factor 5: Organisational boundaries

The overall alpha value of these factors is 0.9252. A hypothesis testing procedure with an ANOVA was conducted to determine significant statistical differences whereby the hypothesis could be rejected or accepted.

The relationship between all the factors and eight independent variables of the sample respondents were examined. The eight independent variables included gender, age, ethnicity, highest qualification, years employed in the insurance business, business unit, management level and how many years the respondent has been working in his/her current job. Most important was the relationship between each factor and the business units and the management levels. Hypotheses were only formulated in terms of the factors and these two independent variables. Table 7.7 summarises the results of the various relationships between the five factors and the eight independent variables.

Table 7.7 indicates that there is a statistical significant difference between:

- management support and management level;
- work discretion and years in the business and management level;
- time availability and ethnicity, highest qualification, business unit and years in current job; and
- organisational boundaries and gender as well as management level .

A more rigorous analysis was done on each of the relationships in table 7.7 where there was a significant statistical difference. These analyses were reported in chapter 6 in tables 6.26, 6.28, 6.29, 6.32, 6.33, 6.34, 6.35, 6.37 and 6.38.

TABLE 7.7 Summary of relationship between the corporate entrepreneurial factors (dependent variables) and various independent variables

Independent variables	Factors				
	Management support	Work discretion	Rewards/ reinforcement	Time availability	Organisational boundaries
Gender	0.9088	0.1442	0.3194	0.5629	0.0065***
Age	0.2998	0.5894	0.6237	0.6120	0.7911
Ethnicity	0.5446	0.1328	0.2448	0.0067***	0.2957
Highest qualification	0.6754	0.3483	0.7130	0.0078***	0.9878
Years in insurance business	0.8198	0.0174***	0.2829	0.8227	0.7016
Business unit	0.3835	0.1170	0.6447	0.0107***	0.3656
Management level	0.0039***	0.0046***	0.8833	0.2706	0.0001***
Years in current job	0.4860	0.9445	0.1548	0.0230***	0.4355
p*** statistical significance at the 5% level					

With regard to the formulated hypotheses the following hypotheses are rejected or accepted:

Hypothesis Ho27 is rejected. There is no statistical significant difference between the corporate entrepreneurship opinions of the managers and the employees in South African short-term insurance businesses regarding the corporate entrepreneurship construct: managerial support.

Hypotheses Ho28 is accepted. There is no statistical significant difference between the corporate entrepreneurship opinions of the different business units in South African short-term insurance businesses regarding the corporate entrepreneurship construct: managerial support.

Hypothesis Ho29 is rejected. There is no statistical significant difference between the corporate entrepreneurship opinions of the managers and the employees in South African short-term insurance businesses regarding the corporate entrepreneurship construct: work discretion.

Hypothesis Ho30 can be accepted. There is no statistical significant difference between the corporate entrepreneurship opinions of the different business units in South African short-term insurance businesses regarding the corporate entrepreneurship construct: work discretion.

Hypothesis Ho31 is accepted. There is no statistical significant difference between the corporate entrepreneurship opinions of the managers and the employees in the South African short-term insurance industry regarding the corporate entrepreneurship construct: rewards/reinforcements.

Hypothesis Ho32 is accepted. There is no statistical significant difference between the corporate entrepreneurship opinions of different business units in South African short-term insurance businesses regarding the corporate entrepreneurship construct: rewards/reinforcements.

Hypothesis Ho33 is accepted. There is no statistical significant difference between the corporate entrepreneurship opinions of the managers and the employees in South African short-term insurance businesses regarding the corporate entrepreneurship construct: time availability.

Hypothesis Ho34 is rejected. There is no statistical significant difference between the corporate entrepreneurship opinions of the different business units in South African short-term insurance businesses regarding the corporate entrepreneurship construct: time availability.

Hypothesis Ho35 is rejected. There is no statistical significant difference between the corporate entrepreneurship opinions of the managers and the employees in South African short-term insurance businesses regarding the corporate entrepreneurship construct: organisational boundaries.

Hypothesis Ho36 is accepted. There is no statistical significant difference between the corporate entrepreneurship opinions of the different business units in South African short-term insurance businesses regarding the corporate entrepreneurship construct: organisational boundaries.

7.4.3 Corporate entrepreneurship development programme

The third and final step of the entrepreneurial health audit includes the compilation of a corporate entrepreneurial development programme that focuses on the development of entrepreneurial behaviour that the business is requesting of the relevant parties in the business. According to Ireland, *et al.* (2006b:29) this is the foundation of a successful entrepreneurial strategy.

From the results presented in 7.4.2 on the entrepreneurial intensity and in 7.4.3 on the climate for corporate entrepreneurship, it is clear that gaps exist that need to be addressed in South African short-term insurance businesses in order to improve the overall corporate entrepreneurial and innovation levels for this industry. Ireland, *et al.* (2006b:28) stated that if a business achieves a low corporate entrepreneurial score it will also indicate the areas that need to be addressed in a training programme.

The following gaps were identified from the results presented in this study:

- The degree and frequency of entrepreneurship, and the entrepreneurial intensity of short-term insurance businesses in South Africa is not high. This means that there needs to be training and development with regard to innovativeness, proactiveness and risk taking.
- There is a significant statistical difference between people who have been working in their businesses for 2 years and less versus the employees that have been working for 3 years or more.
- There are differences between the various business units (Sales, IT, Claims and Administration, Shared Services) with regard to innovations.
- There are differences in the perceptions of management levels (top, middle, lower management, and call and non-call centre employees) in terms of innovativeness,

- proactiveness and risk taking. There is a very distinct difference between top and middle level management and the rest of the employees).
- Only a few (41%) of the employees indicated that they had introduced new products or made improvements or revisions. It could be that most employees don't know how to innovate or that only certain employees or units in their businesses are able to innovate.
 - New employees do not have the same exposure to innovation compared to the employees that have been working longer in their businesses.
 - Only 0 to 5 new products were developed and 0 to 5 processes implemented in a two year period. There is a gap in terms of idea identification.
 - The scores on time availability and organisational boundaries were not high and need to be addressed.
 - Although the scores on management support for corporate entrepreneurship and work discretion were higher than for time availability and organisational boundaries, they are still not very high and also need to be addressed.

Because of the gaps identified from the two measuring instruments (EPI and the CEAI) it is clear that a need for a corporate entrepreneurship development programme exists. **Hypothesis Ho37 can be rejected:** There is no need for a corporate entrepreneurship development programme in short-term insurance businesses in South Africa.

From the ten CEDPs that have been identified in chapter 4 of this study a possible CEDP can be recommended for South African short-term insurance businesses. The main focus should be on the development of a positive entrepreneurial intensity and the identification of entrepreneurial opportunities. As identified in chapter 4 a CEDP should include the following:

- Introduction to Entrepreneurial Management
- Thinking creatively
- Idea development process
- Assessing entrepreneurial culture
- Barriers and facilitators to entrepreneurial thinking
- Action planning

With regard to South African short-term insurance businesses it is also suggested that a CEDP be developed for new employees and those that have been working for 2 years or less, which is different from that for the employees who have been working in the business for longer.

7.5 CONTRIBUTION TO THE SCIENCE

This study analysed the corporate entrepreneurship and innovative levels in South African short-term insurance businesses by means of an established corporate entrepreneurial health audit instrument. This study was the first of its kind in South Africa and also in the short-term insurance industry. Many times international researchers develop instruments and they are only tested in the country of origin. This does not imply that the instrument will be successful in other countries. This study proves that an internationally developed instrument can be applied in a South African context. Further contributions to the science are as follows:

- The latest theory on corporate entrepreneurship has been organised, captured and documented. This can assist in the increase of the body of knowledge on corporate entrepreneurship.
- The results of this study can serve as the beginning of establishing benchmarks for the South African short-term insurance industry in terms of entrepreneurial intensity and a culture for corporate entrepreneurship.
- No research has been done on the South African short-term insurance industry and corporate entrepreneurship. The Entrepreneurial health audit tool can be used by decision makers as part of their effort to help their businesses successfully to engage in entrepreneurship as a path to organisational effectiveness.
- As indicated by Thornberry (2003:333) and Zahra (1991:193), not enough empirical research exists in the field of corporate entrepreneurship. This study contributes to the empirical studies in the field of CE to support the literature and those models that have not been tested empirically.
- The findings can assist the managers not only in South African short-term insurance businesses but also in other businesses to understand the corporate entrepreneurial

process, and can provide guidelines for businesses involved in corporate entrepreneurship.

- The guidelines given in this study to foster and implement corporate entrepreneurship can be used by industry leaders, businesses and managers. Insights are helpful to businesses in understanding what can be done to improve the businesses ability to compete in the complex, rapidly changing, competitive environments. These guidelines can also assist managers in undertaking change efforts directed at stimulating a corporate entrepreneurial and innovative mindset.

7.6 LIMITATIONS OF THE STUDY

Cooper and Schindler (2008) emphasise that all research studies have their limitations, and the sincere investigator recognises that researchers need aid in judging the study's validity. In this regard the reader should be aware of the following limitations of this study:

- For future research the sample size should be increased to explain fully the population's characteristics and to limit the chance of a sampling error occurring, and to increase the response rate of the respondents.
- No benchmarks exist in the South African short-term insurance businesses and it is difficult to determine whether the entrepreneurial intensity score is low, high or moderate. As literature indicated (Morris, *et al.*, 2008) industry benchmarks need to be established.
- This was a cross-sectional study and constrained to be completed within a given period of time. If the study could have been conducted over a longer period the response rate could have been increased. An increased response rate could have given a better view of the corporate entrepreneurship environment in South African short-term insurance businesses.
- A more in-depth analysis could have been done on the various business units and management levels to assist in the compilation of a specific corporate entrepreneurship development programme. The study is nevertheless a step towards providing insight into the entrepreneurial behaviour in South African short-term insurance businesses.

- Information on corporate entrepreneurship development programmes is not freely available or easily accessible.
- Results of the entrepreneurial health audit applied in other international countries are not available. This could have been beneficial to compare with this study.

7.7 RECOMMENDATIONS AND FUTURE RESEARCH

Corporate entrepreneurship is a relatively young field in South Africa. South African industries and businesses can take note of the findings of international research on how to structure their businesses to become more entrepreneurial. The two South African corporate entrepreneurial development programmes offered by the University of Pretoria (discussed in chapter 4) could be used to address the gaps identified for South African short-term insurance businesses as they include all the relevant aspects needed to increase corporate entrepreneurial activity.

For future research the following recommendations can be made:

- It is recommended that the conceptual models and frameworks identified in this study be tested empirically.
- Corporate entrepreneurial and innovative benchmarks should be established for the South African short-term insurance industry. This could encourage the individual insurance businesses to assess their corporate entrepreneurial and innovative levels. This could also assist them in improving their entrepreneurial intensity and corporate entrepreneurial climate.
- The empirical knowledge on the processes associated with corporate entrepreneurial activities is mostly based on case studies. Different research approaches to document the processes and problems associated with the implementation of corporate entrepreneurship need to be exploited.
- A longitudinal study should be conducted to determine whether high levels of entrepreneurial intensity are sustainable over time, and what the effect will be after conducting a corporate entrepreneurial development programme.
- Research can also be done on how the corporate entrepreneurial process develops on successfully exploiting opportunities in a South African context.

- Determining the barriers to corporate entrepreneurship for South African short-term insurance businesses. Once these barriers are identified the corporate entrepreneurial strategies can be adjusted accordingly.
- An extensive research project can be launched to determine which South African businesses make use of corporate entrepreneurship development programmes and the content of these programmes, plus how they compare to international programmes. It could also be determined whether these development programmes are evaluated to determine their successfulness.
- After conducting corporate entrepreneurship development in South African short-term insurance businesses, the effect of the development programme needs to be assessed.
- Other industries in South Africa can be encouraged to use the corporate entrepreneurial health audit. Research can then be done to determine the successfulness and compare it with this study.

The study has the following managerial implications:

- Businesses must assess their entrepreneurial intensity and climate for corporate entrepreneurship to identify gaps to address in developing corporate entrepreneurship in their businesses.
- A corporate entrepreneurial programme is one of the best methods to instil corporate entrepreneurship and innovation in a business.
- Not only top- and senior level management, but all the employees in the business need to undergo training and development in corporate entrepreneurship and innovation.
- Entrepreneurial activity is driven by individuals and the more a business can exhibit entrepreneurial qualities and its people believe in behaving entrepreneurially – the greater the businesses ability to achieve maximum innovation or entrepreneurial success.
- Corporate entrepreneurship needs to be integrated throughout the entire business – cannot focus on just one specific area.
- Entrepreneurial intensity has a direct influence on organisational performance.

- A business's entrepreneurial intensity is influenced by the businesses strategic management practices.
- In businesses that want to foster and develop corporate entrepreneurship, the executives must first of all know what they want to achieve. They must begin with establishing the desired corporate entrepreneurial outcomes, develop measurable goals, make decisions on degree and frequency of entrepreneurship, determine whether the business wants to be a follower or leader in terms of innovation; determine how much time employees can devote to new versus existing initiatives and lastly the amount and type of innovation that needs to come from the different levels in the business.
- Businesses can structure themselves according to the framework for corporate entrepreneurship of Ireland, *et al.* (2006).
- Research has shown that businesses that want to be successful in terms of corporate entrepreneurship and innovation need to adhere to the following:
 - Small number of managerial layers
 - Organisational structure without highly structured job roles
 - Controls that are able to balance loose and tight properties promote and nurture entrepreneurial behaviour
 - The human resource management system is a valuable tool to encourage and reinforce entrepreneurial behaviour
 - Training should be continuous, less structured and focused on individualised knowledge requirements.
 - High importance is placed on the empowerment of people to allow them to act creatively and to fulfil their potential
 - Authority and responsibility are decentralised
 - Business is structured with clear communication of employees' roles and responsibilities, and is supportive
- Managers should pay attention to the organisational antecedents: management support, work discretion; time availability; rewards/reinforcement and organisational boundaries.

7.8 SUMMARY AND CONCLUSION

The literature review of this study introduced various important elements within the field of corporate entrepreneurship specifically in terms of the conceptual models, how to foster and develop corporate entrepreneurship and an analysis of various corporate entrepreneurship development programmes. In this chapter the major aspects of corporate entrepreneurship literature was highlighted with regard to the primary and secondary objectives that were formulated for this study. This showed that the objectives of the study were met. The hypotheses were revisited, summarised and indicated whether they were rejected or accepted.

The findings of the empirical part of the study indicated that the internationally developed corporate entrepreneurial health audit instrument can be used to assess the corporate entrepreneurial and innovative levels in South African short-term insurance businesses. With this instrument, gaps can be identified for which a corporate entrepreneurial development programme can be developed to address the gaps. A corporate entrepreneurial development programme can assist a business to become more innovative and entrepreneurial.

The study also identified several avenues for further research in the area of corporate entrepreneurship.

Hopefully the findings of this study will serve as a motivation and guideline for other industries and businesses in South Africa to assess their entrepreneurial intensity and corporate entrepreneurial climate in an attempt to instil corporate entrepreneurship and innovation in their businesses.