



**The promotion of Corporate Entrepreneurship in the
South African financial services organisations**

**Simon Nhlapo
WITS Business School**

**Thesis presented in partial fulfilment for the degree of Master of
Business Administration to the Faculty of Commerce, Law, and
Management, University of the Witwatersrand**

February 2021

WITS
UNIVERSITY



DECLARATION

I Simon Nhlapo declare that this research report entitled ‘The promotion of Corporate Entrepreneurship in the South African financial services organisations is my own unaided work. I have acknowledged, attributed, and referenced all ideas sourced elsewhere. I am hereby submitting it in partial fulfilment of the requirements of the degree of Master of Business Administration at the University of the Witwatersrand, Johannesburg. I have not submitted this report before for any other degree or examination to any other institution.

Simon Nhlapo

Signed at Johannesburg on 30th April 2021

Name of candidate	Simon Nhlapo
Student number	2289358
Telephone numbers	0176710464
Email address	fananhlapo.fn@gmail.com
First year of registration	2020
Date of proposal submission	16 November 2020
Date of report submission	30 April 2021
Name of supervisor	Sedjro Aaron Alovokpinhou

ABSTRACT

Author: Simon Nhlapo **Supervisor** Sedjro Aaron Alovokpinhou

Thesis title: The promotion of Corporate Entrepreneurship in the South African financial services organisations

There has been a growing interest in corporate entrepreneurship in the last four decades. Corporate entrepreneurship has therefore become a necessary attribute that organisations that wish to gain competitive advantage and be market leaders should possess. This study assesses the extent to which corporate entrepreneurship is promoted and encouraged in South African financial services organisations. The research study identifies and investigates organisational internal factors, which affect the promotion of corporate entrepreneurship in South African financial services organisations through administering Corporate Entrepreneurship Assessment instrument (CEAI).

The research results indicate that work discretion is the only construct that respondents perceived to be encouraged and promoted. This was further confirmed by higher positive responses on items relating to autonomy and freedom. Participants reflected a neutral sentiment regarding the promotion of corporate entrepreneurship irrespective of gender, age, organisational level, tenure, and overall employment tenure. The research results also suggests that management sentiment is low on time availability for the promoting entrepreneurial activities. Therefore, we conclude that the South African financial services industry still has an enormous task to create an environment conducive for corporate entrepreneurship.

Johannesburg, April 2021

TABLE OF CONTENTS

DECLARATION.....	iii
Abstract	iv
Table of contents	v
List of tables	vii
List of figures	viii
ACKNOWLEDGEMENTS.....	ix
Definition of key terms and concepts	x
1 Introduction to the research	11
1.1 Background and context.....	11
1.2 Research conceptualisation	13
1.2.1.1 The research problem statement	13
1.2.1.2 The research purpose (aim and objectives) statement	14
1.2.1.3 The research questions, research hypotheses and research propositions	15
1.3 Delimitations and assumptions of the research study	17
1.4 Significance of the research study	17
2 Literature review	19
2.1 Entrepreneurship	19
2.2 Corporate Entrepreneurship Defined	20
2.2.1.1 Corporate entrepreneurship	20
2.3 Factors affecting the promotion of corporate entrepreneurship.	22
2.3.1.1 External Factors	22
2.3.1.2 Internal (Antecedents) factors that promote Corporate Entrepreneurship.	23
2.3.1.3 Management support.....	24
2.3.1.4 Work discretion	25
2.3.1.5 Reward/reinforcement.....	26
2.3.1.6 Time availability.....	27
2.3.1.7 Organisational boundaries	28
2.3.1.8 Innovation Defined	29
2.3.1.9 Competitive Advantage.....	30
2.3.1.10 Self-Renewal.....	31
2.3.1.11 Risk Taking.....	31
2.4 Framework(s) for interpreting research findings	33
2.5 Summary and conclusion.....	35
2.5.1.1 Summary of literature reviewed.	35
2.5.1.2 Proposed research strategy, design, procedure, and methods arising from the literature reviewed.	37
3 Research strategy, design, procedure and methods	39
3.1 Research strategy.....	39
3.2 Research design	41
3.3 Research procedure and methods	41
3.3.1.1 Research data and information collection instrument(s)	42
3.3.1.2 Research target population and selection of respondents	42

3.3.1.3	Ethical considerations when collecting research data	43
3.3.1.4	Research data and information collection process	44
3.3.1.5	Research data and information processing and analysis	45
3.3.1.6	Description of the research respondents.....	46
3.4	Research strengthens—reliability and validity measures applied.	46
3.5	Research weaknesses - technical and administrative limitations	47
4	Presentation of research results	48
4.1	Introduction	48
4.2	Descriptive statistics	48
4.3	Reliability and validity of the measuring instrument	54
4.4	Test for Normality	55
4.5	Inferential statistics	60
4.5.2.1	ANOVA test on organisational level	61
5	Discussion of research findings.....	69
5.1	Introduction.....	69
5.2	Respondents Profile	69
	Gender	69
	Age	69
	Organisational tenure	69
	Organisational level	70
	Educational level	70
	Overall employment tenure.....	70
5.3	Research results.....	70
5.3.1.1	Null Hypothesis 1: there is no management support for Corporate Entrepreneurship activities in the South African financial services organisations.	71
5.3.1.2	Null hypothesis 2: Work discretion is not used to promote corporate Entrepreneurship activities in the South African financial services organisations.	72
5.3.1.3	Null hypothesis 3: Rewards/Reinforcements are not appropriately used to promote Corporate Entrepreneurship activities in the South African financial services organisations.	73
5.3.1.4	Null hypothesis 4: Time is not made available to promote corporate entrepreneurship activities in the South African financial services organisations.	74
5.3.1.5	Null hypothesis 5: Organisational boundaries impede the promotion of Corporate Entrepreneurship activities in the South African financial services organisations.	75
5.3.1.6	Null hypothesis 6: There is no statistical difference in respect to time availability between different categories of managers in the organisations. .	76
6	Summary, conclusions, limitations, and recommendations	80
6.1	Summary.....	80
6.2	Conclusions.....	83
6.3	Limitations	84
6.4	Recommendations	84
6.5	Reference list	86

LIST OF TABLES

Table 1: Variables of the study	34
Table 2: Gender of Respondents.....	50
Table 3: Age of Respondents	51
Table 4: Ethnicity of Respondents	52
Table 5: Respondents' number of years in the organisation.....	52
Table 6: Respondents' organisational level.....	53
Table 7: Respondents' Education level.....	54
Table 8: Respondents' overall number of years employed.....	55
Table 9: Construct averages.....	56
Table 10: Cronbach alpha test scores.....	57
Table 11: Normality tests: Gender.....	58
Table 12: Normality test: Age.....	59
Table 13: Normality test: organisational level.....	60
Table 14: Normality test: organisational tenure.....	61
Table 15: T-test on gender.....	62
Table 16: One-way ANOVA organisational level.....	64
Table 17: Multiple comparison on rewards/reinforcement.....	65
Table 18: Management support factor loading.....	66
Table 19: Innovation factor loading.....	67
Table 20: Work discretion factor loading.....	68
Table 21: Organisational boundaries factor loading	68
Table 22: Rewards factor loading.....	69
Table 23: Time availability factor loading.....	69
Table 24: Organisational structure support factor loading	69
Table 25: Eigen value.....	70

LIST OF FIGURES

Figure 1: Corporate entrepreneurship framework.....	36
Figure 2: A model of corporate entrepreneurship and wealth creation	37
Figure 3: Gender of Respondents.....	50
Figure 4: Age of Respondents.....	51
Figure 5: Ethnicity of Respondents.....	51
Figure 6: Respondents' number of years in the organisation	52
Figure 7: Respondents' organisational level	53
Figure 8: Respondents' Education level.....	54
Figure 9: Respondents' overall employment tenure.....	53

ACKNOWLEDGEMENTS

I would like to thank and acknowledge the following people for their support and contribution.

- First and foremost, I would like to thank God for his grace and granting me the strength to complete the research study.
- My Supervisor, Sedjro Aaron Alovokpinhou, thank you so much for your guidance, input, patience, and calm leadership during such a difficult time. You really made this journey bearable for me.
- My wife Lebohang Nhlapo, your unwavering love and support is really appreciated. To my son Vuyo Nhlapo thank you for your understanding and patience.
- To my family, my father Sipho Nhlapo thank you for always looking out for me in this journey. My mother Magdelin Nhlapo thank you so much for your prayers and support. My sisters Nonhlanhla and Gertrude Nhlapo thank you for always showing up when I needed you. My Brother Bheki Nhlapo this wouldn't be possible if it weren't for you. Thank you for always keeping me focused.
- To my friends and colleagues thank you for your love, support, understanding, patience and participation. I really appreciate your efforts.
- To my fellow students, thank you for the team work. Team work makes the dream work.

DEFINITION OF KEY TERMS AND CONCEPTS

- Corporate entrepreneurship also known as intrapreneurship or corporate venturing is defined as the effort of encouraging innovation from a firm's internal view, through the valuation of new opportunities and alignment of resources, with the intention to exploit the opportunities.
- Management support is defined as length employees view management ability to create a conducive environment that facilitates and encourage entrepreneurial attitudes such as leading innovative initiatives and backing it with the resources needed to deploy entrepreneurial action.
- Work discretion is defined as the autonomy and will to give subordinates freedom to make decisions believed to be effective.
- Reward/reinforcement is defined as the incentive that encourage and promote entrepreneurial thinking process and action.
- Time availability is concerned with assessment of workload to ensure sufficient coverage for individuals and groups that want to innovate with work structures that support the achievements of goals.
- Organisational boundaries are the bridges that allow departments to align and share information in an efficient way and enables an efficient decision-making process for subordinates

1 INTRODUCTION TO THE RESEARCH

1.1 Background and context

The financial sector is key to the economy and has a notable contribution to the Gross Domestic Product (GDP). According to (Brand SA report 2018 titled SA's key economic sector), the financial sector contributes about 20% of the country's GDP. This sector has demonstrated to be the cornerstone of the country's economic growth over the years. The sector drives the country's growth performance. It fuels the economy through provision of credit. The Financial sector has consistently added to the country's annual growth even in periods where the economy contracted. The financial sector grew 1.8% in 2018 (development bank group report, South African Economic Update 11th edition 2018) whilst the overall SA economy only grew 1.4% in 2018 according to (stats SA 2018 economic update report).

South Africa's financial services sector supports many local and international institutions. The sector offers a spectrum range of services including commercial, retail and merchant banking, mortgage lending, insurance and investment (African Development Bank Group report: South African outlook, 2019). The South African banking system is highly regulated and well developed. It comprises of a handful large financially strong banks and investment institutions with a couple of smaller banks. This market is very competitive and fares well with those of developed countries, despite being highly regulated (Brand SA, 2018).

The reserve bank is responsible for registering institutions as banks or mutual banks and mandated to enforce the requirements of the Acts. The Financial Services Board (FSB) also regulates the non-banking sector. The Financial Services Board (FSB) bares the responsibility to independently regulate financial markets and institutions. It covers insurance, fund managers and brokering operations. The National Credit Regulator (NCR) has the responsibility to regulate the credit industry. This includes registering credit providers, bureaux and debt review agencies also known as counsellors. It ensures compliance with the National Credit Act (NCA) and its primary focus is to facilitate access to credit market.

The Banking Association of South Africa (BASA) is an industry body that represent registered banks in South Africa. It is the mandated representative of the sector, and represents the industry through lobbying, engagement with stakeholders and political influence.

The economic environment is volatile and ever changing. These changes compel organisations to cultivates their entrepreneurial environment to ensure survival, competitiveness and growth (Van Wyk and Adonisi, 2012).

The South African financial services industry has evolved rapidly in the services and products that it offers. This is due to increasing market competition and has led to organisations having to refine their strategies, repurpose themselves and explore alternative ways to gain competitive advantage. Whilst organisation who are leading seek alternative approaches to maintain competitive advantage (Morris et al., 2008). Therefore, running a business has become more complex over time and to manage these complexities, organisations continue to explore ways to innovate and differentiate beyond product or price (Mogopodi, 2016).

This has given rise to the concept of corporate entrepreneurship and is seen by the heightened emergence of literature in the last four decades on corporate entrepreneurship. Hornsby et al., (2009) recognises corporate entrepreneurship as a credible rail to superior levels of organisational performance. Corporate entrepreneurship facilitates organisational growth (Antoncic and Antoncic, 2011). Many theories on corporate entrepreneurship asset the significance of facilitating corporate entrepreneurship and its effects on performance and innovation (Hornsby et al., 1993; Morris and Kuratko, 2002; Goosen et al., 2002).

Hayton, (2015) noted that the corporate environment has become more complex and dynamic. As a results firms need to be entrepreneurial in order to identify new opportunities for sustained superior performance, competitive advantage and growth. Covin and Miles (1999) research study found that corporate entrepreneurship supports sustained competitive advantage through the continuous generation and exploitation of new sources of knowledge. However, organisations need to be willing and able to take risks, be proactive and innovative.

Kanter (1985) eluded that managing corporate entrepreneurship is different from traditional management. This is due to the increased uncertainty and knowledge-intensity. There is an increased need to acquire new knowledge and digest it, this is largely attained through cross functional teams. The complexity that corporate entrepreneurship brings, requires coordination through mutual adjustment rather than command and control. As a results management struggle with the corporate entrepreneurship phenomenon.

1.2 Research conceptualisation

1.2.1.1 The research problem statement

Management find it difficult to promote Corporate Entrepreneurship activities. Corporate entrepreneurship has become a necessary attribute that organisations that wish to be innovative, gain competitive advantage and be market leaders should possess. This study aims to identify and investigate factors, which affect the promotion of corporate entrepreneurship in South Africa's financial services organisations.

Indeed, various scholars suggests that managers in the financial sector are faced with complex, dynamic, volatile environment with high rate of change. Therefore managers find it difficult to handle these changing circumstances as a result of bureaucratic organisational structure, limited resources, globalization's rapid growth, technological advancement, fierce market competition and organisational culture *inter alia* (Bower and Christensen, 1995; Ahuja and Morris, 2001; Kearney et al., 2009; O'Reilly and Tushman, 2013; Blomkvist et al., 2017). Barrett et al., (2012) emphasised that often managers fail to identify the factors that breed organisational performance and strategise appropriately.

Organizational antecedents such as Organisational leadership, structure and culture are imperative for an environment that promotes corporate entrepreneurship (Covin and Slevin, 1991; Urban, 2017). Hornsby et al., (2002) further eludes that Internal factors such as top management support, organisational structure and boundaries, reward and resources availability, time availability, work discretion and risk taking are important signs of corporate entrepreneurship efforts. These factors impact the internal

environment, which establish interest in and support of entrepreneurial initiatives within an organisation.

Burgelman and Sayles (1986) advice that a supportive organizational structure should offer an administrative mechanism for idea evaluation and a process for choosing and implementing ideas. Corporate entrepreneurship and its activities are not easy to achieve. In order to achieve a higher level of entrepreneurship activities, organisation needs to ensure alignment of entrepreneurial activities amongst employees with a supportive corporate structure (Ireland et al., 2009; Kuratko et al., 2015). According to Morris et al., (2018) Management should champion the corporate entrepreneurship behaviour and consistently lead by example.

Nayager and Van Vuuren, (2005) suggest that the internal environment is an important element in establishing entrepreneurial behaviour in an organisation. Management support is critical to groom entrepreneurial activities (Antoncic and Zorn 2004). Organisational structures should be flexible to enable efficient movement of information between the organisation and the external environment. Hornsby et al., (2009) further adds that an appropriate reward system, organisational values and explicit goals are necessary to facilitate and embed a supportive corporate climate for entrepreneurship.

1.2.1.2 The research purpose (aim and objectives) statement

The purpose of this study is to assess the extent corporate entrepreneurship promoted and encouraged in South African financial services organisations. The research study will also identify and investigate factors, which affect the promotion of corporate entrepreneurship in financial services organisations in South Africa. This will be done through the administration of the Corporate Entrepreneurship Assessment instrument (CEAI). The study will commence with reviewing literature to obtain a thorough understanding of the factors that promote corporate entrepreneurship in South African financial services organisation context.

The primary objective of the study is to assess the extent in which corporate entrepreneurship internal factors are promoted and encouraged in the financial services organisations. The secondary objectives are:

- To ascertain the extent which management supports corporate activities in the organisation.
- To ascertain the extent work discretion is used to promote corporate entrepreneurship activities in the organisation.
- To ascertain the extent rewards/reinforcements are used appropriately to promote corporate entrepreneurship activities in the organisation.
- To ascertain the extent organisational boundaries, encourage or impede corporate entrepreneurship.
- To evaluate whether there is a statistical difference in respect to time availability between different categories of managers in the organisation.

1.2.1.3 The research questions, research hypotheses and research propositions

Question 1: To what extent does management support promote corporate entrepreneurship activities in the South African financial services organisations?

Null hypothesis: There is no management support for Corporate Entrepreneurship activities in the South African financial services organisations.

Research hypothesis: There is management support for Corporate Entrepreneurship activities in the South African financial services organisations.

Proposition: If there were management support, corporate entrepreneurship activities would be promoted.

Question 2: To what extent is work discretion used to promote corporate entrepreneurship activities in the South African financial services organisation?

Null hypothesis: Work discretion is not used to promote corporate Entrepreneurship activities in the South African financial services organisations.

Research hypothesis: Work discretion is used to promote corporate entrepreneurship activities in the South African financial services organisations.

Proposition: If there was appropriate use of Work discretion there would be a promotion of corporate activities in the South African financial services organisations

Question 3: To what extent does the appropriate use of rewards/reinforcements promote corporate entrepreneurship activities in the South African financial services organisations?

Null hypothesis: Rewards/Reinforcements are not appropriately used to promote Corporate Entrepreneurship activities in the South African financial services organisations.

Research hypothesis: Rewards/Reinforcements are appropriately used to promote Corporate Entrepreneurship activities in the South African financial services organisations.

Proposition: If there was appropriate use of Rewards/Reinforcements there would be a promotion of corporate activities in South African financial services organisation

Question 4: To what extent time is made available to promote corporate entrepreneurship activities in South Africa's financial services organisations?

Null hypothesis: Time is not made available to promote corporate entrepreneurship activities in the South African financial services organisations.

Research hypothesis: Time is made available for corporate entrepreneurship activities in the South African financial services organisations.

Proposition: If time were made available there would be a promotion of corporate activities in the South African financial services organisation.

Question 5: To what extent does organisational boundaries promote corporate entrepreneurship activities in the South African financial services organisations?

Null hypothesis: Organisational boundaries impede the promotion of Corporate Entrepreneurship activities in the South African financial services organisations.

Research hypothesis: Organisational boundaries promote Corporate Entrepreneurship activities in the South African financial services organisations.

Proposition: If there was an appropriate promotion of organisational boundaries, corporate entrepreneurship activities would be encouraged

Question 6: To what extent does time availability between different categories of managers promote Entrepreneurship activities in the organisation?

Null hypothesis: There is no statistical difference in respect to time availability between different categories of managers in the organisations.

Research hypothesis: There is a statistical difference in respect to time availability between different categories of managers in the organisations.

Proposition: If there was statistical difference in respect to time availability between different categories of managers in the organisation, corporate entrepreneurship activities would be promoted

1.3 Delimitations and assumptions of the research study

The research scope is limited to firms in the financial services organisation in South Africa. The limitation of the study is that it focuses on the financial services organisation in South Africa and therefore the research findings cannot be generalised in other industries in South Africa and outside South Africa. The study will provide recent and any new emerging insights in relation to corporate entrepreneurship antecedents in South African financial services industry.

Numerous assumptions made for this study were that, online questionnaire provides accessibility and broader reach to managers and executive who are normally not easily accessible. The use of social media platform to distribute the questionnaire will increase the response rate. There respondents are adequately equipped to complete the questionnaire correctly without supervision. Respondents have adequate understanding of the corporate entrepreneurship concept. Respondents are conscious of the entrepreneurial activities taking place in their organisation.

1.4 Significance of the research study

Hornsby et al., (2002) expanded the views on Corporate Entrepreneurship activities and identified common organisational factors that are consistent in literature. These are “strategic leadership and management support for Corporate Entrepreneurship; empowered and autonomous employees; the use of appropriate rewards/reinforcement for Corporate Entrepreneurship; the availability of resources and management’s time; and supportive organisational structure” (Hornsby et al., 2002, p.260).

Corporate entrepreneurship scope is widening and organisations that tend to embrace corporate entrepreneurship survive and succeed in dynamic and volatile markets (Urban, 2017). Corporate entrepreneurship has therefore become a necessary attribute that

organisations that wish to gain competitive advantage and be market leaders should possess. Hancer, et al., (2009) notes that corporate entrepreneurship is an important element of organisational growth and development and offers organisations with an opportunity to have a competitive advantage. Kuratko et al., (2011) stresses that entrepreneurship serves as a core source of competitive advantage in today's marketplace. Xavier et al. (2012) also emphasises the need for organisations to support corporate entrepreneurship to be competitive and grow the economy. Researchers have acknowledged the importance of internal organizational dimensions to promoting and supporting an environment for innovation (Hornsby et al., 2002; Kuratko et al., 2014).

2 LITERATURE REVIEW

This chapter has three broad objectives; namely to understand the research problem, to identify the knowledge gap, and to develop a framework for interpreting the research findings. It details the research problem and review literature on studies that have attempted a similar research on corporate entrepreneurship in the private sector. With information arising from the literature review, I identify and detail quantitative variables that are key to this research as well as a framework that will be used to interpret the research findings in Section 2.4.

2.1 Entrepreneurship

There is no agreement on a universal definition for entrepreneurship. Drucker (1985) defined entrepreneur as anyone who creates and manages a new business and therefore entrepreneurship is the creation of a new business. Global Entrepreneurship Monitor expanded on Drucker's definition and added that it includes an attempt to create new business, or enlarge an existing one (GEM, 2001).

Whilst the above definition of entrepreneurship focuses on economic aspect of entrepreneurship. Some scholars attempt to define entrepreneurship from a personality trait perspective. They put forward that attitudinal and behavioural factors are important in defining an entrepreneur (McClelland and Winter, 1969). Both school of thought commonly outline the characteristics of entrepreneurship such as need for achievement, self-confidence, pro-activeness, future orientation and risk taking.

Several scholars maintained that entrepreneurship is a critical element for innovation (Stevenson and Jarillo, 1990; Amit et al., 1993; McGrath, 1996;). Similarly, Schumpeter's (1961) shares similar sentiments that entrepreneurship is a stimulus for innovativeness. The above perspective focuses completely on entrepreneurial affairs as a radical change mechanism. Recent research findings suggest that this might not always be the case (Afuah, 2003; Tidd and Bessant, 2018). Kuratko et al., (2011) stresses that entrepreneurship serves as a core source of competitive advantage in today's marketplace. Therefore, the marketplace demands organisations to be entrepreneurial for their survival and growth aspiration. This has led to the rise of corporate entrepreneurship.

2.2 Corporate Entrepreneurship Defined

Zara (1993) states that corporate entrepreneurship is a conduit for organizational renewal which focuses on innovation, venturing and strategic renewal. The concept of corporate entrepreneurship also known as intrapreneurship or corporate venturing was deployed in established corporates to drive profitability, foster innovation, acquiring insights for future income streams and global success (Zahra, 1991). McFadzean et al., (2005) defines corporate entrepreneurship as the effort of encouraging innovation from a firm's internal view, through the valuation of new opportunities and alignment of resources, with the intention to exploit the opportunities.

Stopford and Baden-Fuller (1994) argued that corporate entrepreneurship is a term used to describe entrepreneurial behaviour inside established small, mid-sized, and large organizations. However, Morris and Kuratko (2002) suggested that it is limited to the established mid-sized and large organisations. Sharma and Chrisman (2007) proposed an expanded definition that looked at corporate entrepreneurship as a holistic process whereby employees or a group of employees are enabled to be creative, innovate to create, improve and or revamp a product, service, processes within the organisation.

2.2.1.1 Corporate entrepreneurship

Urban (2017) notes that corporate entrepreneurship has evolved in the last 40 years as a capability to stimulate innovation for firms to handle the intense competition in these competitive markets. The scope of corporate entrepreneurship is broadening as more organisations are embracing and adopting the entrepreneurship behaviour in order to survive and compete in these complex and dynamic markets (Urban, 2017). Previous Researchers have attempted to understand the factors that promote corporation entrepreneurship focusing on the effect of firm's strategy, organization and external environment (Zara, 1993; Kuratko et al., 2001; Hornsby et al., 2002). The environment plays a role in influencing corporate entrepreneurship activity (Urban, 2017). Researchers have conceptualised corporate entrepreneurship as embodying entrepreneurial efforts that require organizational sanctions and resource commitments for the purpose of carrying out innovative activities in the form of product, process, and organizational innovations (Hornsby et al., 2002).

Corporate entrepreneurship centers on re-energizing and enhancing the ability of an organisation to acquire innovative skills and capabilities (Hornsby et al., 2002). Corporate entrepreneurship is used to encourage entrepreneurial activities in firms. It deploys management fundamentals, while borrowing leadership attributes that question bureaucracy and encourages innovation. Corporate entrepreneurship stimulates innovation within the organisation through the assessment of new opportunities and monetisation of the new products or services (Hornsby et al., 2002; Ireland et al., 2009; Kuratko et al., 2015). Hisrich et al., (2010) posits that corporate entrepreneurship involves redefining firm's current products and services, development of new markets, creating autonomous business units.

Corporate entrepreneurship also includes various attitudes and actions that enhance organisation's ability to take risks, seize opportunities and innovate (McFadzean, et al., 2005). Corporate entrepreneurship organisations are generally seen as dynamic and agile entities prepared to exploit new business opportunities as they emerge (Kuratko et al., 2012). Corporate entrepreneurship and its activities are not easy to achieve. In order to achieve a higher level of entrepreneurship activities, one needs to ensure that the entrepreneurial activities of all employees across the organisation are aligned with a supportive corporate structure (Ireland et al., 2009; Kuratko et al., 2015).

According to Urban (2017) Organizational antecedents are essential for the environment that encourages corporate entrepreneurship. (Ahmed, 2018) notes that Organisational leadership, structure, culture, management support, Innovativeness, risk taking, and pro-activeness are characteristics that promote corporate entrepreneurship behaviour in an organisation. Established insights on corporate entrepreneurship shows that internal organizational antecedents of corporate entrepreneurship foster innovativeness and improved organisational performance (Zahra, 1991; Zahra and Covin, 1995; Antoncic and Hisrich, 2001; Hornsby et al., 2009; Umrani et al., 2016). Phan et al., (2009) observed that corporate entrepreneurship has become popular in organisations that were not considered as entrepreneurial in nature. This popularity is driven by the need for organisations to survive and compete in these highly competitive markets and financially challenging environments.

Corporate entrepreneurship has been noted as an important driver for growth strategy and an effective means for achieving sustainable results and competitive advantage, however Hornsby (2002) argues that literature has rather been anecdotal and testimonial and lacked empirical evidence on the contribution of CE in organisational performance.

Recent research studies on corporate entrepreneurship have focused more on internal and external environment and the role of management in corporate entrepreneurship (Hornsby et al., 2002) and leaving a research gap on which corporate entrepreneurship activities are conducive to superior financial performance in financial service industry.

2.3 Factors affecting the promotion of corporate entrepreneurship.

2.3.1.1 External Factors

External environmental factors have both a direct and indirect impact on corporate entrepreneurship. Over time scholars of corporate entrepreneurship have recognised the significance of external environment in the promotion of corporate entrepreneurship. Therefore, environmental scanning is vital for the promotion of corporate entrepreneurship activities. Managers need to ensure that they have an extensive external environmental scanning system. This helps with the identification and interpretation of changes that influence corporate entrepreneurship (Zara, 1993).

Kearney et al., (2013) notes that previous scholars and corporate entrepreneurship practitioners acknowledge that factors such as environmental dynamism, environmental complexity and environmental munificence play a critical role in influencing corporate entrepreneurship. Antoncic and Hisrich (2001, pp503) posits that “Dynamism refers to perceived instability and continuing changes in the firm’s market.” Dynamism offers entrepreneurial organisation opportunities to exploit whereas turbulent conditions encourage organisations to drive innovation as a competitive advantage (Russel, 1999; Halme et al., 2012). Corporate entrepreneurship is affected by the environmental changes and technology advancements driven by industry competitive structures. Dynamic environments tend to have a high change frequency and thereby are unpredictable and typically include heightened levels of uncertainty and risk. As a result, managers have to make critical decisions from limited data (Miller, 2007). Organisations that succeed are the ones who are able to adapt their activities to align with the changing

environment and have the ability to anticipate competitors and customers activities (Indrawati et al., 2015).

Kearney et al., (2013) cites that environmental munificence is involves critical resources required by organisation to operate in an environment. Jurado et al., (2015) defines environmental munificence as “the level of resources available to organisations from various sources of the environment”. munificent environment present opportunities for expansion and helps firms to organise resources for growth (Kearney et al., 2013). Simsek et al., (2007) noted that munificence environment is directly proportional to internal rate of return on corporate entrepreneurship. This is simply because performance outcomes can be measured more accurately in munificence environment relative to proactive investment made. Therefore, firms have to adjust to heighten environmental munificence to recognise new endeavours that strengthen competitiveness.

2.3.1.2 Internal (Antecedents) factors that promote Corporate Entrepreneurship.

According to Urban (2017) Organizational antecedents are a prerequisite for the environment that encourage or impedes corporate entrepreneurship. Nayager and Van Vuuren (2005) noted the importance of organisation’s ability to respond to internal environment as a key element in founding entrepreneurial orientation. Research shows that positive perception on antecedents of corporate entrepreneurship is important and drives performance improvement such as innovation (Hornsby et al., 2009). Covin and Slevin (1991) noted these antecedents are key in promoting corporate entrepreneurship. Internal factors are believed to be important indicators of corporate entrepreneurship efforts because they affect the internal environment, which determines interest in and support of entrepreneurial initiatives within an established organisation (Hornsby et al., 2002).

These internal factors constitute a frugal description of the internal organizational factors that affect managers to promote entrepreneurial activities within established firms. Numerous authors ((Kuratko et al., 2001; Urban, 2017) suggest that employees with a positive perception regarding management support, work discretion, Reward and reinforcement, time availability, organisational boundaries are more likely to be involved in innovative activities (Hornsby et al., 2009; Ireland et al., 2009).

2.3.1.3 Management support

Management support refers to the length employees view management ability to create a conducive environment that facilitates and encourage entrepreneurial attitudes such as leading innovative initiatives and backing the with resources needed to deploy entrepreneurial action (Lyon et al., 2000; Kuratko et al., 2001; Antoncic and Hisrich, 2002). Management support is the willingness of managers to facilitate and promote entrepreneurial activities in the organisation (Hornsby., 2002; Kuratko et al., 2015). Schachtebeck and Nieuwenhuizen (2015) suggested that management support is viewed as the “provision of an enabling work environment” for subordinates to execute their work and be innovative. Hornsby et al., (1993) cites that management support is about creating an inclusive culture where everyone promotes innovation as a critical work component.

Batson and Yoder (2012) argued that managers can amplify the perception subordinates have about their support for corporate entrepreneurship behaviour by providing necessary resources, creating clear objectives and provide frequent feedback. It is also equally important for managers to develop interpersonal relationship with colleagues and subordinates. In addition managers should promote continuous improvement by encouraging new methods of doing things as per (De Jong and Wennekers 2008).

Corporate entrepreneurship scholars (Hisrich and Peters, 1986; Musa, 2016) suggests that managers can provide support by providing resources, leading innovative ideas and institutionalising entrepreneurial behaviour and creating systems in the organisation. This suggests that senior management involvement in supporting the entrepreneurial strategy is of utmost importance to foster entrepreneurial activities (Ireland et al., 2009).

Nayager and Van Vuuren (2005) Management support improves the perception employees have about the entrepreneurial mindset of the organisation. Filser and Eggers (2014) established a link between management support for innovation, risk taking and organisational performance. It is therefore clear, that management support is a critical factor that drives organisational performance, innovation and growth. Literature has also shown the growing trend for management support in promoting corporate entrepreneurship behaviour in organisations. However, there is a research gap to understand this relationship in the South African financial services context. Hence the

study seeks to understand the extent in which management support promotes corporate entrepreneurship activities in South Africa's financial services organisations.

2.3.1.4 Work discretion

According to Anigbogu and Nduka, (2014) the idea of work discretion suggests the ease of an organization's structure, regarding decision making process and freedom to allow employees to take actions regarding their career in the lower ranked levels of management. It has significant relationship with corporate entrepreneurship and the organisations performance. Freedom to allow employees an opportunity to make decisions plays a significant role in generating ideas. It accelerates satisfaction level and innovation activities (Chienwattanasook et al., 2019).

Hornsby et al., (1993) described autonomy as the will to give subordinates freedom to make decisions believed to be effective. Taking calculated risk is an important aspect of autonomy. Work discretion empowers subordinates to make decisions unsupervised and allow managers to delegate responsibilities to subordinates. This in turn motivates subordinates to learn and drive innovative behaviour (Hornsby et al., 2009).

Work discretion provides autonomy to subordinates and allow them to make judgement calls and therefore influence the perception of subordinates on corporate entrepreneurship (Mohamed and Arafa, 2016). Work discretion affords subordinates the freedom of decision making. This freedom influences subordinate's behaviour and needs management to have appetite for failure (Rajeev and Mamabolo, 2019). Prominent researchers in the field of corporate entrepreneurship advise that management should have a degree of tolerance for failure towards subordinates who involved in entrepreneurial strategy. Management should provide subordinates with mandate to make decisions. Work discretion heightens the positive effect of corporate entrepreneurship and organisational performance (Anyanwu et al., 2016).

Various studies (Kuratko et al., 2004; Hornsby et al., 2009; Rajeev and Mamabolo, 2019;) found a strong link between work discretion and improved organisational performance, work discretion and high level of innovation (Boone et al., 2019) and organisations that enable autonomous work environment seemed to have competitive advantage (Kuratko and Morris, 2013). It is for this reason that the study seeks to assess

the extent work discretion is used to promote corporate entrepreneurship activities in South African financial services organisation.

2.3.1.5 Reward/reinforcement

Hornsby et al., (2002) argue that if a reward system is to be effective, it needs to consider inter alia organisational goals and be results driven incentives. The use of incentive and suitable rewards enhances managements' willingness to assume the risks associated with entrepreneurial activity. Management should drive initiatives and take necessary actions such as providing incentives, monetary or otherwise, for corporate entrepreneurship activities. This drives employee motivation, innovation, and transformation (Schachtebeck and Nieuwenhuizen, 2015). However, employees have a low likelihood to participate if they suspect that the organisation does not have the necessary resources to complete the project or if they suspect that management does not fully back the initiative (Urban, 2013).

Recent studies affirm that the collaboration between management and employee is critical in seeking to understand corporate entrepreneurship activities (Hornsby et al., 2009). Rewards typically promote corporate entrepreneurship activities. The nature of rewards establishes ownership and subordinates must believe that their entrepreneurial efforts will be rewarded (Hornsby et al., 2002). Rewards can drive performance and have the power to impact organisations' ways of work. Reward and reinforcement are important corporate entrepreneurship component to facilitate the achievement of desired goals. (Hornsby et al., 2009).

Empirical research findings indicate that rewards system should be designed to promote entrepreneurial thinking process and action (Ireland et al., 2009; Kuratko et al., 2004). Fostering corporate entrepreneurship can be achieved through the deployment incentives. These incentives have to be in alignment to the performance appraisals process and drive the needed entrepreneurial vigilance. Subordinates are more likely to participate in corporate entrepreneurship activities if they can clearly see the link between their input and output and output and reward (Kuratko et al. 2011).

It is important to note that different types of rewards influence employees to partake in corporate entrepreneurship initiatives. Some employees are motivated by intrinsic

rewards whereas others are motivated by financial incentives. Morris et al., (2008) suggested that some employees are motivated by opportunities for future growth, whilst others are motivated by the idea of accomplishment, gratification from concluding a fascinating and taxing work, and heightened decision-making autonomy.

The appropriate use of rewards is important to establish an environment that supports the development of entrepreneurship architecture (Damanpour 1991). It is for this reason that the study seeks to understand the extent the appropriate use of rewards/reinforcements promote corporate entrepreneurship activities in the South African financial services organisations. Research studies shows that there is a growing need to understand the impact reward and reinforcement have on the promotion of corporate entrepreneurship. However, there is limited research to understand this phenomenon in South African financial services context.

2.3.1.6 Time availability

Time Availability involves to the assessment of workload to ensure sufficient coverage for individuals and groups that want to innovate with work structures that support the achievements of goals (Piyachat, 2017). Morris (2008) argued that time is a critical component for corporate entrepreneurship behaviour. Jingnan (2018) argued that whilst time availability is an important factor for corporate entrepreneurship behaviour, it can be an obstacle for corporate entrepreneurial behaviour. Employees have different kinds of daily duties to complete, and others are kept busy and have to account for the daily workload (Hornsby et al., 2009). As a result, they do not have enough time to try new things. It is critical to encourage management to create capacity for subordinates to engage in corporate entrepreneurship activities.

Time availability encourages subordinates to pivot important elements of their jobs that support corporate entrepreneurial efforts (Hornsby et al., 2009). Slevin and Covin, (1997) suggested that management's ability to make available time and resources are critical components to drive entrepreneurial activities. Researchers put forward that management must develop a positive sentiment on time availability in the organisation. They should do so by making available resources to drive entrepreneurial opportunities. Ireland et al., (2009) cites that managers should not be risk averse, instead they should display risk taking attitude and have a degree of tolerance for failure (Kuratko et al.,

2004). Mowlaei (2017) cited that time availability is important to allow employees to learn and secure new information and experiences. Time availability is an input to derive innovative ideas and organisational performance (Rajeev and Mamabolo, 2019). As such the study seeks to understand the extent time is made available to promote corporate entrepreneurship activities in South Africa's financial services organisations.

2.3.1.7 Organisational boundaries

Organizational boundary is the bridge that allows departments to align and share information in an efficient way. This flow of information builds insights and enables subordinates for an efficient decision-making process (Hornsby et al., 2009). The movement of information between the organisation and external environment is facilitated by the organisational boundaries. These boundaries further facilitate the movement of information amongst business units.

Organisational boundaries allude to the perception that the organisation embodies flexibility and has motivating boundaries that are well coordinated and empower positive entrepreneurial behaviour. These boundaries act as an enabler for innovation (Chienwattanasook et al., 2019). Kuratko et al. (2014) emphasised that organisational boundaries enable innovation and can almost guarantee high asset utilisation.

Urban (2017) cited that most entrepreneurial organisation have flexible structure, the greater flexibility supports federated decision making, informal processes, increased locus of control and competence as compared to traditional management philosophies based on power. Entrepreneurial organisations thrive where processes are flexible, information networks are free flowing and there is room challenge policy and rules. Organizational boundaries empower subordinates to make decisions and exploit opportunities (Urban, 2017).

The degree of organisational flexibility determines the speed in which information can travel from the external environment to the internal environment. This provides the organisation with an opportunity to exploit innovative ideas quicker and gain competitive advantage (Hornsby et al. 2009; Kuratko et al. 2014; Miller, Fern & Cardinal 2007).

Flexible organization boundaries support employees to operate freely and innovate new things to improve organisational performance (Chienwattanasook et al., 2019). Various researchers (Van Wyk and Adonis, 2012; Maurice, 2013; Malarvizhi et al., 2018) found that there is a positive relationship between flexible organisational boundaries and employee performance. Moreover (Malarvizhi et al., 2018) posits flexible organisational boundaries increase staff satisfaction level which in turn translates to improved employee performance thereby contributing to organisational performance. On the contrary Hornsby et al., (2002) study found that the relationship between organisational boundaries and corporate entrepreneurship was not strong and has a low Cronbach's alpha score. Based on the above discussion it is the interest of the study to understand the extent organisational boundaries promote corporate entrepreneurship activities in South Africa's financial services organisations.

2.3.1.8 Innovation Defined

Jingnan et al., (2018) defines Innovation as a process of making incremental changes on certain known things through instituting new value add things for customers and contributes to the firm's growth in respect to financial performance, efficiency and quality (O'Sullivan and Dooley, 2008). Dess and Lumpkin (2005) define Innovation as a predisposition and the will to partake in creative behaviours that introduces new product and services or process. Typically, the phenomenon is evident when organisations are actively deploying novel ideas, processes, product and services (Hurley and Hult, 1998).

Innovation is an important component promoting corporate entrepreneurship behaviour and corporate venture performance (Covin and Miles, 1999). There are three main types of innovation namely product innovation, process innovation and services innovation. The product innovation relates to making changes to the physical product, the process innovation focuses on changing process that produces the products and services, whereas service innovation is has to do with changes to the services utilised by customer (O'Sullivan and Dooley, 2008).

Innovation and venturing are concerned with the creation of new business growth through the creation of innovative product, process and technology (Zara, 1993). (Schachtebeck and Nieuwenhuizen, 2015) posits that internal innovativeness is a critical

component for business performance. Management support, resources availability, risk-taking appetite for the establishment of intrapreneurial atmosphere and organizational structure are important in driving innovation in the organisation (Hornsby et al., 1990).

Morris (2008) also recommends that if an organisation seeks to cultivate a culture of innovativeness, the organisation has to make some considerations such as increased management participation, empower and reward subordinates for delivery, provide more autonomy and increase span of control. Furthermore, management needs to encourage activities that promote innovative behaviour (Jingnan, et al., 2018). Financial services organisations face daunting challenges driven by globalization's rapid growth, technological advancement and organizational complexity (Boone et al., 2019). Organisations look to innovation and entrepreneurial spirit to achieve a sustainable competitive advantage and to succeed in the long run (Bower and Christensen, 1995; Ahuja et al, 2001; O'Reilly and Tushman, 2013; Blomkvist, et al., 2017).

Covin and Miles (1999) identified innovation as a common factor underpinning all kinds of corporate entrepreneurship. Flexible boundaries that encourage free flowing of information promote innovation (Rajeev and Mamabolo, 2019). Corporate entrepreneurship is an option to advance product and service innovation (Calisto and Sarkar, 2017). Corporate entrepreneurship dimensions significantly predict innovation (Rajeev and Mamabolo, 2019).

2.3.1.9 Competitive Advantage

In the wake of increasing competition, organisations are required to innovate and be agile in order to succeed and have a competitive advantage in the market. Managers are then responsible for creation of the higher levels of innovation in the organisation (Schachtebeck and Nieuwenhuizen 2015).

Organisations that support corporate entrepreneurship culture, their ways of work instrumental in developing a competitive edge (Zara, 1993). Ireland et al. (2009) argued that organisations need to develop and nurture today's and tomorrow's competitive advantages simultaneously. Organisations nowadays rely on the advantages that are grounded in innovation implying a heavy reliance in corporate entrepreneurship. Ahmed (2018) notes that corporate entrepreneurship is important because it helps

organisation have competitive advantage and increases the country's productivity levels thereby stimulating the country's economy. Corporate entrepreneurship, has demonstrated to improve the organisations competitive advantage and organisational performance (Grawe et al., 2009; Corbett et al., 2013)

2.3.1.10 Self-Renewal

Renewal also requires developing or adopting new organizational structures that spur innovation and venturing (Zara, 1993). The aim of corporate entrepreneurship is to engender innovativeness and strategic renewal. Therefore, it is critical for managers promote corporate entrepreneurship to bolster innovation (Schachtebeck and Nieuwenhuizen, 2015). To achieve renewal, organisations need to redefine their mission through the redeployment of resources. This facilitates the emergence of new technologies and products (Guth and Ginsberg 1990).

2.3.1.11 Risk Taking

Risk taking indicates management's willingness to take risks and show a tolerance for failure when it occurs (Hornsby, 2002). Schachtebeck and Nieuwenhuizen (2015) emphasises that internal support for innovation and risk-taking has an undeviating effect on the organisations' performance.

Risk taking is "the degree to which managers are willing to make large and risky resource commitments" (Miller and Friesen 1978: 923). Rauch et al., (2009) defines risk taking as an act of decision making with uncertain outcomes. Risk taking enable organisation to act quickly and introduce innovative products and services. It offers organisations first movers' advantage. However, risk averse organisations delay from instituting innovative products and services and this results in substandard performance because of missed market opportunity. Timely risk-taking has been associated with strategic decision speed and it has subsequently been linked to improved business performance (Eisenhardt, 1989). However, Hughes and Morgan (2007) found that risk taking can lead to adverse business performance at the infancy phase of organisational growth.

Research question	Variables
To what extent does management support promote corporate entrepreneurship activities in the South African financial services organisations?	<u>Independent variable</u> Management support <u>Dependent variable</u> Promotion of corporate entrepreneurship
To what extent is work discretion used to promote corporate entrepreneurship activities in the South African financial services organisation?	<u>Independent variable</u> Work discretion <u>Dependent variable</u> Promotion of corporate entrepreneurship
To what extent does the appropriate use of rewards/reinforcements promote corporate entrepreneurship activities in the South African financial services organisations?	<u>Independent variable</u> - Reward and reinforcement <u>Dependent variable</u> - Promotion of corporate entrepreneurship
To what extent time is made available to promote corporate entrepreneurship activities in South Africa's financial services organisations?	<u>Independent variable</u> - Time availability <u>Dependent variable</u> - Promotion of corporate entrepreneurship
Question 5: To what extent does organisational boundaries promote corporate entrepreneurship activities in the South African financial services organisations?	<u>Independent variable</u> - Organisational boundaries <u>Dependent variable</u> - Promotion of corporate entrepreneurship
To what extent does time availability between different categories of managers promote Entrepreneurship activities in the organisation?	<u>Independent variable</u> - Managerial time availability <u>Dependent variable</u> - Promotion of corporate entrepreneurship

Table 1: Variable of the study

2.4 Framework(s) for interpreting research findings

There has been a growing appreciation of Corporate entrepreneurship in the last four decades. This has led to the establishment of a number of theoretical frameworks in literature. According to McFadzean et al., (2005) most scholars have made significant contribution on the theoretical development of corporate entrepreneurship and there is little exploration on the application of these theoretical frameworks. This is largely driven by the fact that the corporate entrepreneurship has been explored as an independent process and as a result limiting utility and application.

Corporate Entrepreneurship Assessment Instrument (CEAI) has proven to be reliable and valid as showcased by various studies (Hornsby et al., 2002; Kuratko et al., 2005; Van Wyk and Adonisi, 2012) to name a few. Therefore, this research study will adopt CEAI as a measure as it strong bolsters theoretical support and displays significant relationships of the corporate entrepreneurship antecedents (Hornsby et al., 2002; Kuratko et al., 2014).

The below model in fig.1 demonstrates how corporate entrepreneurship antecedents' efforts influence the organisational environment (corporate entrepreneurship) to drive performance. Kearney et al., (2007) cited that each variable and the corresponding dimension must be derived from literature fundamental to the development of a good model. The model comprises of three components namely corporate entrepreneurship, corporate entrepreneurship antecedents and impact on performance.

The foundation of the model is based on idea that corporate entrepreneurship activities lead to improved performance as proven by previous research findings (Hornsby et al., 2002; Kuratko et al., 2005; Van Wyk and Adonisi, 2012). It is expected that organisations that engage in CE activities should achieve increased profitability, high growth level and gain competitive advantage compared to organisation that don't. It is important to note that in order to realise maximum utility of their CE activities, organisation must consider other factors such as the external environment.

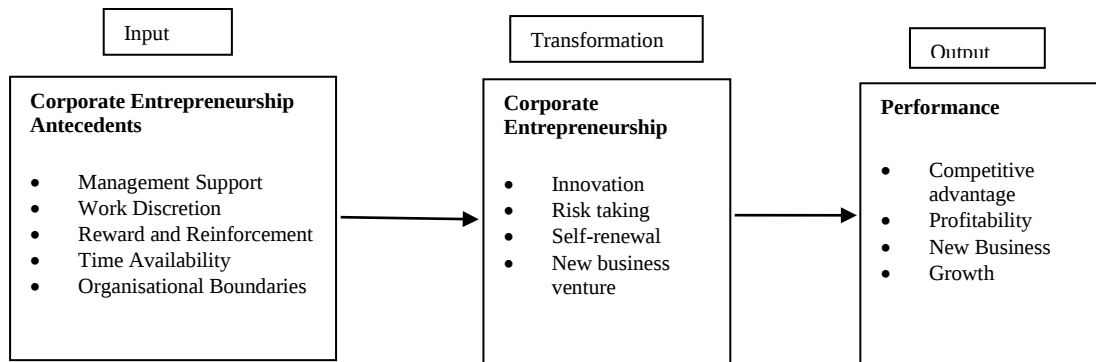


Fig.1 Corporate entrepreneurship framework

Source: own figure based on literature

Corporate entrepreneurship and its antecedents are enablers for organisational wealth creation, growth and profitability as cited by Antoncic and Hisrich (2004). Antoncic and Hisrich (2004) proposed a model of corporate entrepreneurship and organisational performance/wealth creation (see fig.2 below). This model demonstrates the relationship between corporate entrepreneurship and performance and also expresses the influence environmental conditions and organisational factors have in driving performance. Antoncic and Hisrich (2004) found that the relationship between CE and organisational performance holds for longer sustained periods. Indicating that corporate entrepreneurship delivers sustainable performance.

In their study (Antoncic and Hisrich, 2004) found that management support had a significant influence in the promotion of corporate entrepreneurship. So much that management also influenced organisational support. Various researchers (Zahra and Covin, 1995; Hornsby et al., 2002; Nkosi, 2011; Van Wyk and Adonisi, 2012) also found that there was a positive relationship between corporate entrepreneurship antecedents and organisational performance. Furthermore, Urban (2017) also notes corporate entrepreneurship as a critical driver for organisational performance and present an opportunity for organisations to increase profitability.

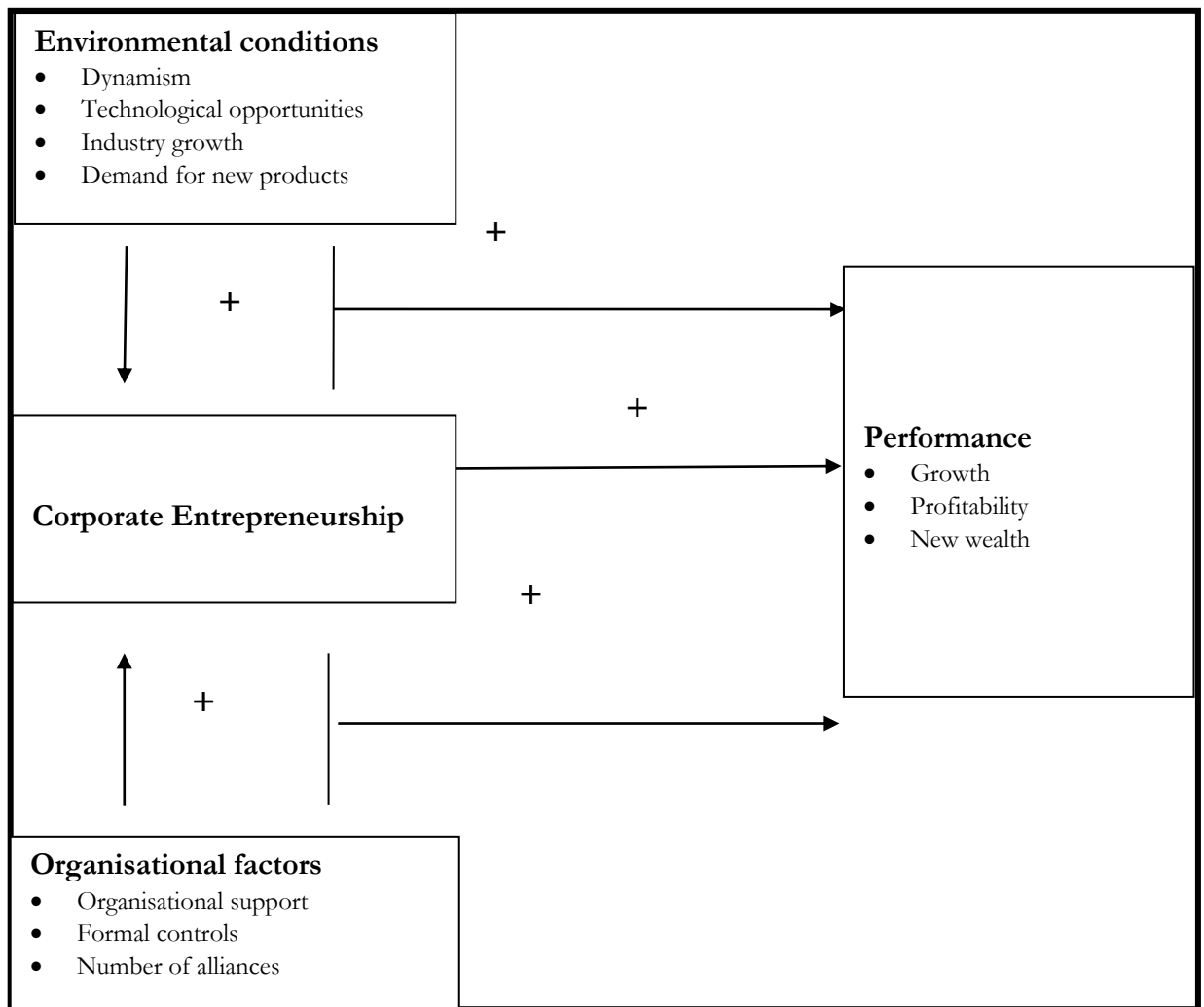


Fig. 2 A model of corporate entrepreneurship and wealth creation

Source: Antoncic and Hisrich (2004)

2.5 Summary and conclusion

2.5.1.1 Summary of literature reviewed.

The aim of this chapter was to give a critical review of literature prominent to corporate entrepreneurship. This chapter started by providing a background and definition of entrepreneurship. It expanded the definition to illustrate the value entrepreneurship adds and its impact to the economy. It further introduced corporate entrepreneurship through definitions, held a discussion on factors affecting the promotion of corporate entrepreneurship both external and internal factors such as management support, work

discretion, reward and reinforcement, time availability, organisational boundaries, innovation, risk taking, self-renewal, competitive advantage. It also outlines the research questions and linked them to the research variable of the study. It then closed with the theoretical framework that will be used to interpret research findings.

The literature on entrepreneurship unpacked the different perspective of entrepreneurship. Entrepreneurship is widely viewed from an economic perspective. The study paid attention to the personality trait perspective and focused on the entrepreneur and the behavioural characteristics that an entrepreneur possesses. To this day, scholars have not agreed on the universal definition of entrepreneurship, but they have collectively agreed that entrepreneurship underpins innovation and offers a competitive advantage.

As a result, this has created a need for organisations to deploy entrepreneurship in the corporate environment in pursuit of competitive advantage and improved organisational performance. In doing so, it is important for organisations to understand the factors that promote corporate entrepreneurship. External factors such as dynamism, complexity, and munificence. It is, therefore, vital for management to continuously scan the external environment and have effective enabling systems. The ability for an organisation to scan the environment allows the organisation to respond appropriately to the changes and adapt. If done well this can serve as a competitive advantage as this include the ability to anticipate how will the competitors respond towards changes and how does the changes impact customer needs.

The internal factors that promote corporate entrepreneurship are important and are within the management control compared to external factors. Management support remains to be the strong variable that promotes corporate entrepreneurship. Various studies have shown consistent findings that there is a positive relationship between management support, work discretion, reward and reinforcement, time availability and organisational boundaries and the promotion of corporate entrepreneurship. These internal factors influence organisational culture and create an environment underpinned by innovation, risk taking and self-renewal. This culture tends to improve organisational performance as shown by the corporate entrepreneurship and wealth creation model developed by Antoncic and Hisrich (2004).

In conclusion there is an overwhelming support for the argument that corporate entrepreneurship antecedent promotes entrepreneurial activities and lead to improved organisational performance. Therefore, it is in the interest of the study to assess the extent corporate entrepreneurship is promoted and encouraged in South African financial services organisations.

2.5.1.2 Proposed research strategy, design, procedure, and methods arising from the literature reviewed.

Creswell and Creswell (2018) define research strategy as an overarching plan and procedure detailing the general steps of data collection, analysis and interpretation. According to Leavy (2017) there are three key approaches to data collection namely Quantitative, qualitative and mixed approach. Likewise, data can be analysed through the deductive, inductive or mixed approach with combines both inductive and deductive approach (Leavy, 2017). This research study has adopted the quantitative research strategy. Quantitative strategy is distinguished by its deductive approach and seeks to either refute or prove or lend credence to established hypothesis. It includes usage of statistical instruments and procedures to measure variables (Johnson and Christensen, 2014).

According to (Leavy, 2017) research design is a structure of formal procedures for data collection, analysis, and interpretation in which a researcher (Johnson and Christensen, 2014) uses to answer research questions. Bryman's (2012) outlines five generic designs that researchers can use in line with their research study. These are cross-sectional, longitudinal, case study, comparative, and experimental. This study employs a cross-sectional research design. Cross-sectional study includes collecting data on many instances at a specific point in time. It involves many variables at the data collection point to collect quantifiable data (Creswell and Creswell, 2018).

Research data collections instrument are defined as the tools that researchers use to collect data (Leavy, 2017). The common data collection instruments in research include interviews, questionnaires, documentary analysis and observation schedule (Munir, 2017). For the purpose of the study a fully structured interview schedule will be

deployed through the use of CEAI. The target population for my research study is South African Financial services managers at all levels.

According to Leavy (2017) Sampling is the process of selecting a number of people from a total population, who are of interest to your study. A Probability sampling strategy will be applied for the purpose of the study. This strategy offers each unit a chance to be selected.

3 RESEARCH STRATEGY, DESIGN, PROCEDURE AND METHODS

Section 1.2.1.3, poses questions that this research report intends to answer—that is, to what extent does management support promote corporate entrepreneurship activities in the South African financial services organisations? to what extent does the appropriate use of rewards/reinforcements promote corporate entrepreneurship activities in the South African financial services organisations? to what extent is work discretion used to promote corporate entrepreneurship activities in the South African financial services organisation? to what extent time is made available to promote corporate entrepreneurship activities in South Africa’s financial services organisations? to what extent does time availability between different categories of managers promote entrepreneurship activities in the organisation?

Literature was reviewed and an interpretative as well as conceptual framework were developed to guide the choices of techniques that will used. This chapter identifies and describes research approach, design as well as procedure and methods that are employed in this research to collect, process, and analyse empirical evidence. This chapter has three objectives which are to outline and describe the research strategy, the research design, as well as the procedure and methods. The chapter also describes the reliability and validity measures that this research applies to make it credible as well as the technical and administrative limitations of the choices made.

3.1 Research strategy

Creswell and Creswell (2018) define research strategy as an overarching plan and procedure detailing the general steps of data collection, analysis and interpretation. Moreover, these plans encompass various decisions that are informed by the research design. Essentially the research strategy requires the researcher to decide on data collection approach and data analysis approach. According to Leavy (2017) there are three key approaches to data collection namely Quantitative, qualitative and mixed approach. Likewise, data can be analysed through the deductive, inductive or mixed approach with combines both inductive and deductive approach (Leavy, 2017).

This research study has adopted the quantitative research strategy. Quantitative strategy is distinguished by its deductive approach and seeks to either refute or prove or lend credence to established hypothesis. It includes usage of statistical instruments and procedures to measure variables. It also encompasses testing relationship amongst variables to surface any causal relationships, correlations or patterns (Johnson and Christensen, 2014). It uses numerical data to acquire information regarding the subject matter with a precise, systematic and impartial process.

The value of quantitative strategy is underpinned by neutrality, objectivity, breadth and its ability to generalise (Leavy, 2017). Johnson and Christensen (2014) recommends this approach when the purpose of the study is to evaluate or assess.

The approach is appropriate for the study because the researcher is particularly interested in assessing the extent corporate entrepreneurship promoted and encouraged in South African financial services organisations. Therefore, this assessment requires quantifiable data and quantitative research allows for statistical analysis through variables. Furthermore, this type of study is correlational design because it seeks to identify factors, which affect the promotion of corporate entrepreneurship in financial services organisations.

This strategy approach was also adopted by Van Wyk and Adonisi (2012). The aim of their study was to explore the prediction of corporate entrepreneurship as dependent variable by means of market orientation, flexibility and job satisfaction as independent variables. They selected the strategy because they wanted to understand the relationship of corporate entrepreneurship with different work variable. They also wanted to test the correlation between internal organisational factors with corporate entrepreneurship. The benefits received from the strategy are evident in the research results with the application of different statistical methods applied to prove their hypothesis. Different variable had different Cronbach's score which enabled the researcher to rank and explicitly identify which variables were most influential.

The expected benefits of the chosen strategy over and above the one's mentioned already are to be able to explain and measure the variable quantitatively and generalise the research findings to a certain degree.

3.2 Research design

According to (Leavy, 2017) research design is a structure of formal procedures for data collection, analysis, and interpretation in which a researcher (Johnson and Christensen, 2014) uses to answer research questions. Bryman's (2012) outlines five generic designs that researchers can use in line with their research study. These are cross-sectional, longitudinal, case study, comparative, and experimental

This study employs a cross-sectional research design. Cross-sectional study includes collecting data on many instances at a specific point in time. It involves many variables at the data collection point to collect quantifiable data (Creswell and Creswell, 2018).

The research design adopted is relevant for the study because the study seeks to assess the extent corporate entrepreneurship promoted and encouraged in South African financial services organisations. Given the fact that corporate entrepreneurship is evolving and highly affected by both internal and external factors, it is important to collect as much data as possible at a specific time. This will ensure the validity and usability of data collected.

Urban (2017) also adopted cross-sectional research design. The aim of the study was to understand how entrepreneurial alertness may facilitate CE activity. The design was chosen because it afforded the researcher the ability to collect plethora of quantifiable data. The research study also had many variables to test, and cross-sectional design is appropriate for such requirement. The benefit of this study is that it will allow for collection of data at a point in time and reduce the risk of data manipulation.

3.3 Research procedure and methods

This section documents the actual procedure and the methods employed in this research to collect, collate, process, and analyse empirical evidence. Broadly, it details the data and information collection instruments (Section 3.3.1), the target population and sampling of respondents (Section 3.3.2), the ethical considerations during the research process (Section 3.3.3), data and information collection process and storage (Section 3.3.4), data and information processing and analysis (Section 3.3.5) as well as the background description of the respondents who provided empirical evidence for this research study (Section 3.3.6).

3.3.1.1 Research data and information collection instrument(s)

Research data collections instrument are defined as the tools that researchers use to collect data (Leavy, 2017). Munir (2017) refers to research data collections instrument as fact finding tools. The common data collection instruments in research include interviews, questionnaires, documentary analysis and observation schedule (Munir, 2017). Munir (2017) states that researchers need to check the validity and reliability of the instrument they choose. A questionnaire will be used for the study. Hornsby (et al., 1990) developed a (CEAI) Corporate Entrepreneurship Assessment Instrument which has been widely used and provided consistent result. This instrument is designed to measure organisational antecedents that promote corporate entrepreneurship activities. The instrument has been used by many researchers (Hornsby, et al., 2002; Morris et al., 2008; Urban, 2017) and regarded as valid and reliable. The instrument is considered as a feasible way of assessing the domain that need attention for CE organisations.

Data collection instrument also have a structure, they can be unstructured, semi-structured, and fully structured. For the purpose of the study a structured a fully structured interview schedule will be deployed through the use of CEAI. The instrument has proven to be valid and reliable. The offers the benefit of consistent results and minimize the risk of data inconsistencies whilst it makes it easier for the study to be replicated.

Mabala (2012), used a similar approach and the aim of her study was to assess the extent to which corporate entrepreneurship is promoted and encouraged in the department of correctional services. The reason for the selection was based on reliability and validity of instrument.

CEAI instrument already exist however there are additional question that were added, and these were sourced from previous research studies in the field of corporate entrepreneurship.

3.3.1.2 Research target population and selection of respondents

3.3.2.1 Research target population

Johnson and Christensen, (2014) define target population as set of all units or large group that a researcher is interested in learning more about with the intention of

generalising the results of their study. A sample size is drawn from the target population and the target population has to be sizeable to be valid.

The target population for my research study is South African Financial services managers at all levels and specialists. Urban (2017) applied his study to similar population. The aim of the study was to understand how entrepreneurial alertness may facilitate Corporate Entrepreneurship activity. Corporate entrepreneurship has the ability to improve organisation performance, profitability and growth therefore applying this phenomenon in a financial services organisation will add tremendous value. Therefore, understanding the extent in which corporate entrepreneurship is promoted in South Africa's financial services organisations will benefit the study and sector as competition in this sector has intensified with many digital entrants.

3.3.2.2. Sampling or selecting respondents from the target population.

According to Leavy (2017) Sampling is the process of selecting a number of people from a total population, who are of interest to your study. These are the cases whom the researcher will collect, generate data for the study and later make claims on. The purpose for a sample size is a matter of cost and time. Quantitative studies thrive with large data sets as it improves accuracy however it is costly and consumes time (Leavy, 2017). A Probability sampling strategy was applied for the purpose of the study. This strategy offers each unit a chance to be selected. Urban (2017) applied a probability sampling strategy through simple random technique. The benefit of this approach is that it is likely to yield a representative sample of the population and results can be generalised. It is for the same reason that this study adopted a simple random sample underpinned by probability strategy.

3.3.1.3 Ethical considerations when collecting research data.

Leavy (2017) suggested that ethics are concerned with issues of morality, integrity, fairness, and truthfulness. Morality refers to the idea of right or wrong, whilst integrity centers on acting on knowledge. It is therefore important to ensure that researchers act ethically at all time, ensuring that our research is not harmful to the subject matter or us as researchers. There are three subcategories of ethics namely: procedural ethics, situational ethics, and relational ethics.

Resnik (2015) outlines the importance of adhering to ethical norms and suggest that norms promote research aim like avoidance of error and also for promotion of moral and social values such as human rights, social responsibility and so on. Ethics apply throughout the research process from the beginning with a choice of a topic through data collections and interpreting results (Leavy, 2017). Resnik (2015) reminds us to be vigilant and weary of ethical lapse especially when analysing data. He emphasises the adverse impact and harm that unethical behaviour has.

The research is conducted by Simon Nhlapo. Employed by Absa bank and works as a lead for transformation programme and heads up credit risk capabilities and optimization department. I have over 15 years' experience in the world of work. Academically I have a BA general degree acquired at the North West University, B/hon Industrial Sociology attained at University of Johannesburg and Management Advance Programme attained at Wits Business school. Corporate entrepreneurship is an interesting phenomenon which I would like to learn more about. It has the potential to create value and produce meaningful work through innovation. It is therefore of interest to me to establish the extent the financial service industry promotes intrapreneurship.

In light of my commitment to remaining ethical. I will uphold the highest level of integrity throughout the process. Data collection will be conducted online and will be anonymous. There will be no face to face contact during this research period. All respondent will need to consent in order to participate in the study. There will be no incentive for participation.

3.3.1.4 Research data and information collection process

Dudovskiy (2018) notes that data collection refers to the process of assembling information from different sources and stakeholders in pursuit of finding answers to the research question and include hypothesis testing and evaluation of outcomes. Capturing quality evidence is a key objective as it enables rich data analytics build a foundation for credible answer to research questions (Kabir, 2016). There are key common data collections methods such as participant observation or ethnography, interviews, focus group discussion. and documents.

Paradis et al., (2016) notes that the participant observation uses senses to gather information. This method does not rely on people's own views or but allows researcher to observe people's everyday behaviour. Interviews are used to collect information at an individual level on a one-on-one basis. Interviews can be structured or unstructured. Focus groups are used to collect information in a group setting through pre-arranged set of question (Paradis et al., 2016)

The study made use of the online survey (Qualtrics) to collect data as outlined in section 3.3.1. Corporate Entrepreneurship Assessment Instrument is a valid and reliable instrument. An email and a social media (WhatsApp) message were sent to targeted population with the link to the survey platform. The survey platform only allows one entry per computer or device. Once the questionnaire was complete, it was stored on the central repository for collation. The data is stored both on the platform cloud and backed on a portable external hard drive.

3.3.1.5 Research data and information processing and analysis

Research data and information processing

Johnson and Christensen, (2014) refer to data processing as sequential steps of transformation of unorganised data into a usable data for analysis. This data is collected from sample of the targeted population.

Data coding has to do with identifying and assigning answers with a character or numerical score. The transformation can be done manually or automatically. Data entry onto computer is a computerised way of populating large table of codes. data cleaning or editing is process of ensuring that all the data is ready for coding, its core objective is to provide assurance that data is complete, consistent and reliable.

The survey was sent to over 300 participants who are employed in South African financial services organisations. Just over 50% response rate was observed with 154 participants responding. 35 respondents did not complete the questionnaire and resulted in a 23% exclusion rate. An assessment for errors and outliers was conducted through basic data checks, and where necessary inferences were made on some responses based on the category of question, if the respondent answered a similar question previously.

Research data and information analysis

Research data analysis is described as a process used to reduce large amount of data to sizeable amount of data to derive meaningful insights (LeCompte and Schensul, 1999). This process follows after data has collected, edited and coded, implying that it ready to be used. There are various methods that are used to analyse data. Since this is a quantitative study, the researcher will reflect on quantitative methods for data analysis. Descriptive statistics is an important starting point when analysing data as it makes provision for high level trends and or pattern but does not go beyond that. Descriptive statistics measure frequency, central tendency, variation and position (LeCompte and Schensul, 1999). There are also inferential statistics that are used for their predictability. Inferential statistics are deployed to understand the relationship between variables. Correlation, cross tabulation, regression analysis and analysis of variance.

The current study adopted various statistical analysis such normality tests, Cronbach Alpha, T tests, ANOVA and Factor analyses. The study seeks gain deeper understanding of the relationship between Corporate Entrepreneurship antecedents and the promotion of Corporate Entrepreneurship activities.

3.3.1.6 Description of the research respondents

The questionnaire had demographic section (age, gender, education, ethnicity, number of years in the organisation, level in the organisation, overall years of employment) over and above the CEAI 48 likert scale questionnaire.

3.4 Research strengthens—reliability and validity measures applied.

Broadly reliability and validity used to assess the quality of research. Reliability is concerned with consistency of a measure whilst validity focuses on accuracy of measure (Middleton, 2019). There are different statistical methods one can use to ensure research is reliable. One can make use of test retest measures consistency over time, looking for same results. Interrater measures of consistency across observers. Internal consistency this measures consistency of itself (Middleton, 2019).

Validity focuses on the accuracy of the measure and has four types that researches can explore to ensure validity: measurement validity, internal validity, external validity, and ecological. Research design will be the driving factor for validity through a larger sample that is statistically significant (Trochim and Donnelly 2001).

3.5 Research weaknesses - technical and administrative limitations

Dess and Lumpkin (2005) posits that environmental climate differs from sector to sector. Given the risk averseness of financial industry, there is a potential for low response rate. Another limitation is that the study focusses on South African financial services therefore the results may not be generalised outside South African and outside finance sector. Lastly time constraint to administer questionnaire given the impact of Covid-19 respondents might not have time to participate.

4 PRESENTATION OF RESEARCH RESULTS

4.1 Introduction

This chapter aims to present the research findings from the respondents who completed the Corporate Entrepreneurship Assessment Instrument questionnaire. The findings are presented through the use of pie chart, bar charts and tables. This section also covers the descriptive statistics and inferential statistics.

4.2 Descriptive statistics

Descriptive statistics is an important starting point when analysing data as it makes provision for high-level trends and or pattern but does not go beyond that. Descriptive statistics measure frequency, central tendency, variation and position (LeCompte and Schensul, 1999).

4.2.1 Gender

Figure 3 Gender of Respondents

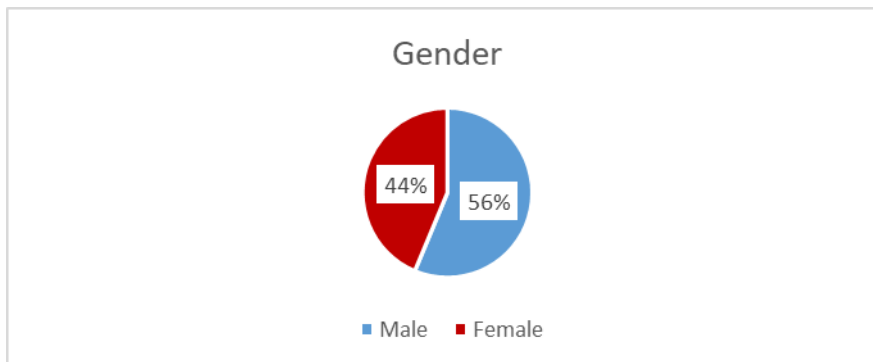


Table 2 Gender of Respondents

Frequency		
Gender	Count	%
Male	67	56%
Female	52	44%
Total	119	100%

The above results shown in figure 3 and table 2 indicate that there was a relatively fair representation of respondents with males contributing 56% and females 44%.

4.2.2 Age

Figure 4 Age of Respondents

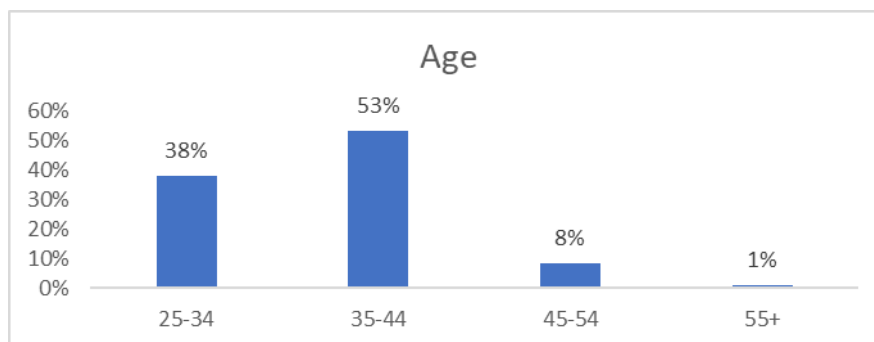


Table 3 Age of Respondents

Frequency		
Age	Count	%
25-34	45	38%
35-44	63	53%
45-54	10	8%
55+	1	1%
Total	119	100%

Figure 4 and table 3 show a distribution of respondents' age. Most respondents were between the ages of 35-44 years with age group 55+ years showing the least respondents. A total of 38% of respondents were between the ages of 24-34 years, 53% were between the ages of 45-44 years, 8% were between the ages 45-54 years and 1% were 55+.

4.2.3 Ethnicity

Figure 5 Ethnicity of Respondents

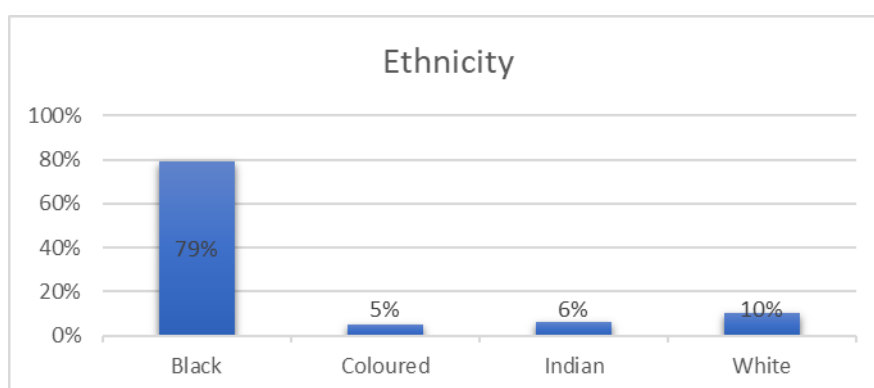


Table 4 Ethnicity of Respondents

Frequency		
Ethnicity	Count	%
Black	94	79%
Coloured	6	5%
Indian	7	6%
White	12	10%
Total	119	100%

The above figure 5 and table 4 shows the distribution of respondents by ethnicity. Most participants were Black. A total of 79% identified themselves as Black, 5% as Coloured, 6% as Indian and 10% as White, respectively.

4.2.4 Number of years in the organisation

Figure 6 Respondents' number of years in the organisation

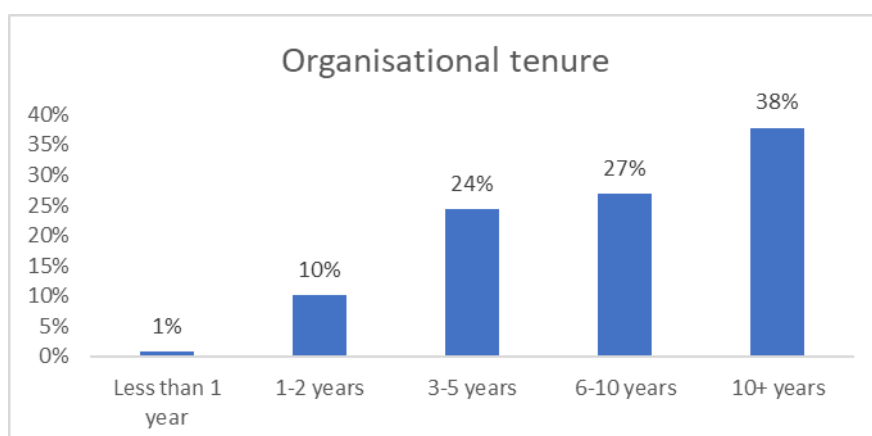


Table 5 Respondents' number of years in the organisation

Frequency		
Organisational tenure	Count	%
Less than 1 year	1	1%
1-2 years	12	10%
3-5 years	29	24%
6-10 years	32	27%
10+ years	45	38%
Total	119	100%

The above figure 6 and table 7 show the years the respondents' have been with the organisation. A total of 38% have been with the organisation for more than 10 years, 27% of respondents have been with the organisation between 6-10 years, 24% between 3-5 years, 10% between 1-2 years and 1% less than a year.

4.2.5 Respondents' organisational level

Figure 7 Respondents' organisational level

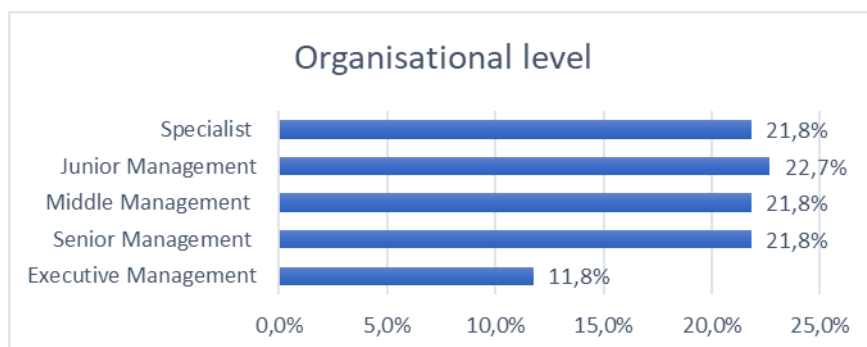


Table 6 Respondents' organisational level

Frequency		
Organisational level	Count	%
Executive Management	14	11,8%
Senior Management	26	21,8%
Middle Management	26	21,8%
Junior Management	27	22,7%
Specialist	26	21,8%
Total	119	100%

The above figure 7 and table 6 shows the organisational level of respondents. In total there were 119 respondents with executive management contributing 11.8%, junior management contributing 22.7%, senior management, middle management, and specialists each contributed 21.8 % respectively.

4.2.6 Education Level

Figure 8 Respondents' Education level

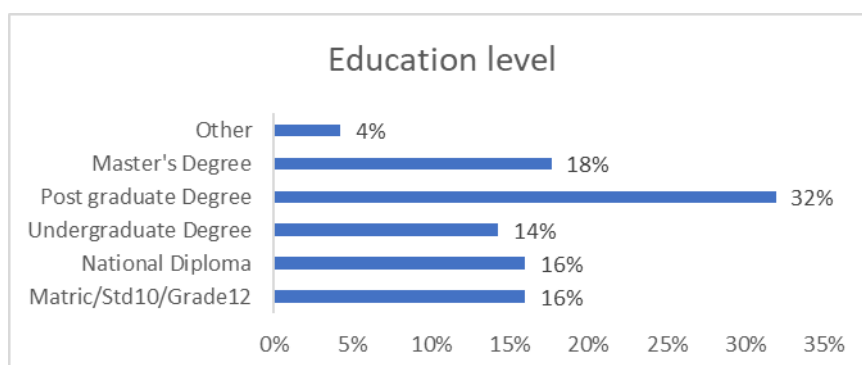


Table 7 Respondents' Education level

Frequency		
Education level	Count	%
Matric/Std10/Grade12	19	16%
National Diploma	19	16%
Undergraduate Degree	17	14%
Post graduate Degree	38	32%
Master's Degree	21	18%
Other	5	4%
Total	119	100%

The above figure 8 and table 7 shows the education level of respondents. Most respondents obtained post graduate degree contributing 32% of the overall distribution, followed by 18% of respondents with master's degree, both matric and national diploma had 16% respectively with 14% of respondents' obtaining an undergraduate degree and 4% indicated that they had obtained other.

4.2.7 Overall number of years employed.

Figure 9 Respondents' overall employment tenure.

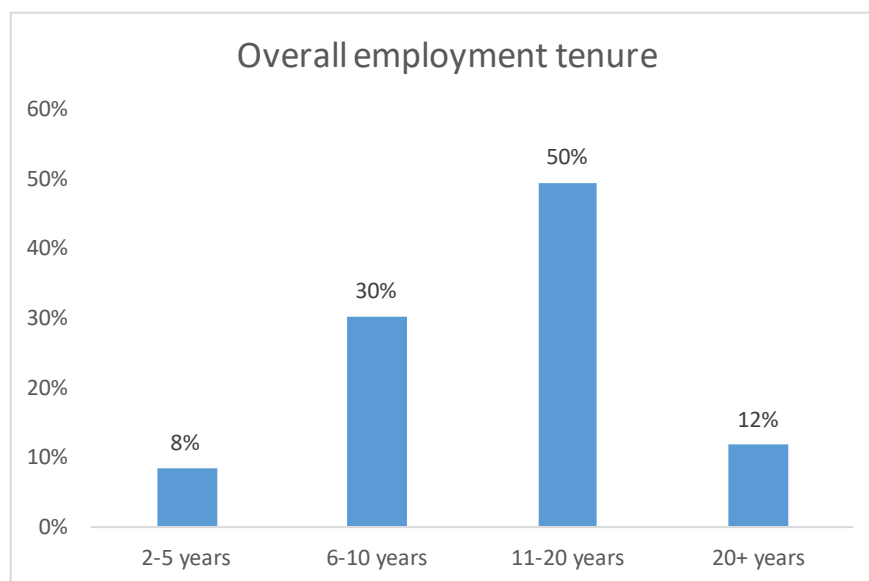


Table 8 Respondents' overall number of years employed.

Frequency		
Overall employment tenure	Count	%
2-5 years	10	8%
6-10 years	36	30%
11-20 years	59	50%
20+ years	14	12%
Total	119	100%

The above figure 9 and table 8 shows the overall number of years the respondents were employed. The results indicate that most respondents are employed between 11-20 years. A total of 50% have been employed between 11-20 years, 30% between 6-10 years, and 12% more than 20 years whilst 8% of respondents were at least employed for 2 years.

Table 9 Construct average

Construct Mean Scores			
	N	Mean	Std. Deviation
Management Support	119	3.21	0.87
Work Discretion	119	3.34	0.84
Reward/Reinforcement	119	3.77	0.74
Time Availability	119	3.18	0.68
Organisational Boundaries	119	3.77	0.74

Table 9 shows the results of the average scores for Corporate Entrepreneurship Assessment Instrument. The mean scores were calculated by taking an average for a construct measured.

Management support score was calculated as a mean of question 1 to 19, work discretion as a mean of question 20 to 29, reward/reinforcement as a mean of question 30 to 35, time availability as mean of question 36 to 41 and organisational boundaries as mean of question 42 to 48.

4.3 Reliability and validity of the measuring instrument

Many research studies have made use of the Corporate Entrepreneurship Assessment Instrument (CEAI) and has proved to be both reliable and valid. Phan et al., (2009) observed that Corporate Entrepreneurship has become popular in many organisations and such an increased utilisation of the instrument is observed in the Corporate Entrepreneurship domain as evidenced by the works of (Hornsby et al., 2002; Kuratko et al., 2005; Groenewald, 2010; Van Wyk and Adonisi, 2012). The instrument's reliability was assessed in this study. The Cronbach Alpha test was utilised to assess the internal consistency of the measuring instrument (Brown, 2002).

4.3.1 Cronbach Alpha test

The below table 10 shows the estimates of the internal consistency as expressed by Cronbach's Alpha measurement.

Table 10 Cronbach alpha test scores

CEAI Construct	Item	Cronbach Alpha value	Reliability
Management support	19	0.946	Very Good
Work discretion	10	0.861	Good
Reward/reinforcement	6	0.767	Acceptable
Time availability	6	0.519	Adequate
Organisational boundaries	7	0.758	Acceptable

The reliability of the questionnaire on the 5 factors/construct of the Corporate Entrepreneurship Assessment Instrument were analysed and the above table 10 outlines the results of the test. Management support construct had a Cronbach Alpha value of 0.946 indicating a very good internal consistency therefore deemed reliable. The analysis on work discretion constructs also showed a good internal consistency with a Cronbach Alpha value of 0.861. Reward/reinforcement showed an acceptable Cronbach Alpha value of 0.767 also indicating internal consistency of the measuring tool. The reliability analysis on time availability construct revealed a Cronbach Alpha value of 0.519 which is deemed adequate.

Whilst many scholars such as (Santos, 1999; Pleasant and Kuruvilla, 2008) to name a few, recommend that the Cronbach Alpha value should be greater than 0.7 to be deemed reliable. Mogopodi (2016) suggested that a Cronbach Alpha greater than 0.6 is acceptable. Griethuijsen et al., (2014) also noted that a Cronbach Alpha value that is greater 0.5 can be deemed satisfactory. Steyn and De Bruin (2018) also noted a Cronbach Alpha greater than 0.5 as adequate for research.

4.4 Test for Normality

The Normality test was taken to examine the normal distribution of respondents' scores with regards to their demographic variables such as gender, age, ethnicity, organisational

tenure, organisational level, educational level, overall employment tenure. Many statistical tests have an underlying assumption that data is normally distributed therefore it is important to test for normality as a pre-condition before using any tests for comparison. Testing for normality in this study assisted in selecting an appropriate test for normality given the sample sizes. Mishra et al., (2019) notes that there are many tests' methods to test the normality of data however the most popular methods are Shapiro–Wilk test and Kolmogorov–Smirnov test.

The Shapiro–Wilk test is typically used when handling a smaller sample size of < 50 respondents whilst Kolmogorov–Smirnov test is used for larger sample size where respondents are ≥ 50 (Mishra et al., 2019). Both tests were conducted for the study and applied in line with their standards.

The rule of thumb for normality test is that a P-value that is equal or greater than 0.05 ($P \geq 0.05$) suggests that's scores are normally distributed and the P-value that is less than 0.05 ($P < 0.05$) suggests that the distribution of scores is not normally distributed.

4.4.1 Gender and Corporate Entrepreneurship Antecedents

Table: 11 Normality tests: Gender

Gender		Kolmogorov-Smirnov ^a		
		Statistic	df	Sig.
Management Support	Male	0,059	67	0.200*
	Female	0,087	52	0.200*
Work Discretion	Male	0,114	67	0.032*
	Female	0,096	52	0.200*
Reward Reinforcement	Male	0,108	67	0.049
	Female	0,174	52	0.000
Time Availability	Male	0,114	67	0.032
	Female	0,135	52	0.019
Organisational Boundaries	Male	0,109	67	0.046
	Female	0,093	52	0.200*

The Kolmogorov–Smirnov test was used because the sample consisted of respondents greater than 50 on both categories. The above table 14 shows P-Value greater than 0.05 ($P > 0.05$) for management support on both male and female respondents. Reward/reinforcement and time availability revealed a P value less than 0.05 ($P \text{ value} < 0.05$). Males revealed a P value less than 0.05 ($P < 0.05$) on both work discretion and organisational boundaries and female revealed a P value greater than 0.05 ($P \text{ value} > 0.05$) on the same constructs.

4.4.2 Age and Corporate Entrepreneurship Antecedents

Table 12 Normality test: Age

Age (years)		Kolmogorov-Smirnov			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Management Support	25-34	0.080	45	0.200*	0.976	45	0.457
	35-44	0.072	63	0.200*	0.982	63	0.504
	45-55+	0.172	11	0.200*	0.940	11	0.523
Work Discretion	25-34	0.102	45	0.200*	0.961	45	0.128
	34-44	0.099	63	0.200*	0.974	63	0.193
	45-55+	0.177	11	0.200*	0.924	11	0.357
Reward/Reinforcement	25-34	0.127	45	0.068	0.930	45	0.010
	35-44	0.127	63	0.013	0.970	63	0.127
	45-55+	0.175	11	0.200*	0.937	11	0.487
Time Availability	25-35	0.132	45	0.047	0.948	45	0.042
	35-44	0.074	63	0.200*	0.986	63	0.704
	45-55+	0.245	11	0.067	0.858	11	0.054
Organisational Boundaries	25-34	0.152	45	0.010	0.930	45	0.009
	35-44	0.092	63	0.200*	0.965	63	0.069
	45-55+	0.172	11	0.200*	0.945	11	0.581

Both Kolmogorov-Smirnov and Shapiro-Wilk tests were used to assess normality in relation to respondents' age. Table 12 shows that the P-Value for management support and work discretion is greater than 0.05 ($P \text{ value} > 0.05$) whilst reward/reinforcement, time availability and organisational boundaries revealed a P-value less than 0.05 ($P \text{ value} < 0.05$).

4.4.3 Organisational level and Corporate Entrepreneurship Antecedents

Table 13 Normality test: organisational level

Organisational Level		Shapiro-Wilk		
		Statistic	df	Sig.
Management Support	Executive Management	0.904	14	0.127
	Senior Management	0.941	26	0.145
	Middle Management	0.942	26	0.150
	Junior Management	0.984	27	0.933
	Specialist	0.986	26	0.973
Work Discretion	Executive Management	0.911	14	0.166
	Senior Management	0.934	26	0.098
	Middle Management	0.981	26	0.895
	Junior Management	0.958	27	0.329
	Specialist	0.977	26	0.803
Reward/Reinforcement	Executive Management	0.937	14	0.380
	Senior Management	0.962	26	0.428
	Middle Management	0.951	26	0.240
	Junior Management	0.936	27	0.099
	Specialist	0.967	26	0.555
Time Availability	Executive Management	0.935	14	0.352
	Senior Management	0.935	26	0.100
	Middle Management	0.945	26	0.174
	Junior Management	0.943	27	0.141
	Specialist	0.952	26	0.261
Organisational Boundaries	Executive Management	0.922	14	0.238
	Senior Management	0.955	26	0.309
	Middle Management	0.913	26	0.031
	Junior Management	0.956	27	0.292
	Specialist	0.950	26	0.232

The Shapiro Wilk test was used because the sample size of respondents was less than 50 across all categories. Table 16 shows that P value for management support, work

discretion, reward/reinforcement and time availability is greater than 0.05 (P value >0.05) whilst organisational boundaries reveal a P value less than 0.05 (P value < 0.05).

4.4.4 Organisational tenure (in years) and Corporate Entrepreneurship Antecedent

Table 14 Normality test: organisational tenure

Tenure in organisation		Shapiro-Wilk		
		Statistic	df	Sig.
Management Support	1-2 years	0,931	13	0,355
	3-5 years	0,964	29	0,413
	6-10 years	0,975	32	0,636
	+10 years	0,959	45	0,107
Work Discretion	1-2 years	0,959	13	0,731
	3-5 years	0,965	29	0,423
	6-10 years	0,974	32	0,622
	+10 years	0,953	45	0,064
Reward/Reinforcement	1-2 years	0,971	13	0,905
	3-5 years	0,960	29	0,328
	6-10 years	0,981	32	0,820
	+10 years	0,920	45	0,004
Time Availability	1-2 years	0,961	13	0,763
	3-5 years	0,937	29	0,085
	6-10 years	0,944	32	0,095
	+10 years	0,955	45	0,077
Organisational Boundaries	1-2 years	0,904	13	0,152
	3-5 years	0,972	29	0,615
	6-10 years	0,934	32	0,050
	+10 years	0,918	45	0,004

The Shapiro Wilk test was used because the sample size of respondents was less than 50 across all categories. Table 13 shows that P value for management support, work discretion and time availability is greater than 0.05 (P value >0.05) whilst reward/reinforcement and organisational boundaries reveal a P value less than 0.05 (P value < 0.05).

The four above tables indicate that there is normal distribution of scores between respondents in relation to gender, age, organisational level and organisational tenure (number of years a respondent has spent in the organisation) on management support, work discretion and organisational boundaries. Reward/reinforcement and time availability respondents scores are not normally distributed as indicated by the P-Value <0.05. The study performed the T test and analysis of variance (ANOVA) to establish where there differences are.

4.5 Inferential statistics

4.5.1 T test

The T test was conducted to compare the means between males and females and to also assess if there is a significant difference in respondents scores.

Table 15 T-test on gender

CEAI construct		N	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
Management Support	Equal							
Male	variance	67	3,270	0,777	0,095	0,754	117	0,452
Female	assumed	52	3,149	0,979	0,136			
Work Discretion	Equal							
Male	variance	67	3,597	0,724	0,088	3,301	117	0,001
Female	assumed	52	3,106	0,900	0,125			
Reward/Reinforcement	Equal							
Male	variance	67	3,806	0,706	0,086	0,592	117	0,555
Female	assumed	52	3,724	0,793	0,110			
Time Availability	Equal							
Male	variance	67	3,236	0,632	0,077	1,046	117	0,298
Female	assumed	52	3,106	0,728	0,101			
Organisational boundaries	Equal							
Male	variance	67	3,684	0,730	0,089	-	117	0,169
Female	assumed	52	3,874	0,751	0,104	1,384		

Table 15 shows that the P-value for management support, reward/reinforcement, time availability and organisational boundaries are greater than 0.05 (P-Value >0.05). However, the P-value for work discretion is less than 0.05 (P-Value <0.05).

The t-test results in table 15 indicate that there is no statistical difference between males and female employees' perception towards management support, reward/reinforcement, time availability and organisational boundaries. The t-test results reveal that there is statistical difference between males and female employees on work discretion.

4.5.2 One-way analysis of variance (ANOVA) test

One-way analysis of variance (ANOVA) test was conducted on age, organisational tenure, and organisational level against the Corporate Entrepreneurship Assessment instrument (CEAI) construct namely management support, work discretion, reward/reinforcement, time availability and organisational boundaries. The ANOVA test was chosen for its ability to effectively determine whether there are statistically differences between three or more independent groups by measuring the means differences between these groups. The ANOVA tests only indicates that at least two groups are statistically different from each other, but it does not explicitly show which groups are statistically different (Johnson and Christensen, 2014). As a result, a post hoc test (multi-comparison) was conducted where the P value on the one-way ANOVA is less than 0.05 (P-Value < 0.05).

4.5.2.1 ANOVA test on organisational level

A one-way ANOVA test was conducted to determine whether there are statistical differences between the different organisational level categories namely (executive management, senior management, middle management, junior management, and specialists) perception on Corporate Entrepreneurship Assessment Instrument constructs.

The below table 16 reveals that management support, work discretion, time availability and organisational boundaries have a P-Value greater than 0.05 (P-Value > 0.05). Indicating that there is no significant difference between the different employees' levels. However, table 16 also reveals a P-Value less than 0.05 (P-Value < 0.05) for reward/reinforcement. This indicates that there is a significant statistical difference in

employee's perception about reward/reinforcement. A post hoc tests (multiple comparison test) will be provided to show where there differences amongst the different organisational level categories occurred.

Table 16 One-way ANOVA organisational level

ANOVA on Organisational level						
		Sum of Squares	df	Mean Square	F	Sig.
Management Support	Between Groups	3,663	4	0,916	1,221	0,306
	Within Groups	85,531	114	0,750		
	Total	89,194	118			
Work Discretion	Between Groups	2,368	4	0,592	0,838	0,504
	Within Groups	80,565	114	0,707		
	Total	82,933	118			
Reward/Reinforcement	Between Groups	11,326	4	2,831	5,989	0,000
	Within Groups	53,896	114	0,473		
	Total	65,222	118			
Time Availability	Between Groups	1,875	4	0,469	1,028	0,396
	Within Groups	51,967	114	0,456		
	Total	53,842	118			
Organisational Boundaries	Between Groups	0,592	4	0,148	0,262	0,902
	Within Groups	64,463	114	0,565		
	Total	65,056	118			

Table 17 Multiple comparison on rewards/reinforcement

Multiple Comparisons					
			Mean Difference (I-J)	Std. Error	Sig.
Reward/ Reinforcement	Executive Management	Senior Management	-0,24176	0,22793	0,826
		Middle Management	0,39286	0,22793	0,424
		Junior Management	-0,11332	0,22645	0,987
		Specialist	0,52747	0,22793	0,148
	Senior Management	Executive Management	0,24176	0,22793	0,826
		Middle Management	.63462*	0,19070	0,010
		Junior Management	0,12844	0,18893	0,960
		Specialist	.76923*	0,19070	0,001
	Middle Management	Executive Management	-0,39286	0,22793	0,424
		Senior Management	-.63462*	0,19070	0,010
		Junior Management	-0,50617	0,18893	0,063
		Specialist	0,13462	0,19070	0,955
	Junior Management	Executive Management	0,11332	0,22645	0,987
		Senior Management	-0,12844	0,18893	0,960
		Middle Management	0,50617	0,18893	0,063
		Specialist	.64079*	0,18893	0,008
	Specialist	Executive Management	-0,52747	0,22793	0,148

		Senior Management	-.76923*	0,19070	0,001
		Middle Management	-0,13462	0,19070	0,955
		Junior Management	-.64079*	0,18893	0,008

4.5.3 Factor analysis

An exploratory factors analysis was conducted to uncover the key dimensions in the Corporate Entrepreneurship Assessment instrument (CEAI). Principal component factor analysis was used with orthogonal rotations (varimax). The KMO test results of 0.845 with the Bartlett's test of Sphericity P-Value less than 0.001, commonalities extraction value of greater than 0.3 and component correlation matrix of less than 0.5 indicated that the data was suitable to continue with the factor analysis (Khoza et al., 2018). Items with a factor loading equal or greater than 0.40 were considered for each factor similar to studies conducted by previous researchers (Hornsby et al., 2002, Steyn and De Bruin, 2018).

Table 18 Management support factor loading

Management support	Item	Factor Loadings
Money is often available to get new project ideas off the ground.	10	0,789
Individuals with successful innovative projects receive additional rewards and compensation beyond the standard reward system for their ideas and efforts.	11	0,734
There are several options within the organization for individuals to get financial support for their innovative projects and ideas.	12	0,732
People are often encouraged to take calculated risks with ideas around here.	13	0,683
Individual risk takers are often recognized for their willingness to champion new projects, whether eventually successful or not.	14	0,659
The term "risk taker" is considered a positive attribute for people in my work area.	15	0,635

This organization supports many small and experimental projects, realizing that some will undoubtedly fail.	16	0,634
An employee with a good idea is often given free time to develop that idea.	17	0,625
There is considerable desire among people in the organization for generating new ideas without regard for crossing departmental or functional boundaries.	18	0,609
People are encouraged to talk to employees in other departments of this organization about ideas for new projects	19	0,607
The rewards I receive are dependent upon my innovation on the job.	31	0,497
Cronbach alpha	0,92	

Table 19 Innovation support factor loading

Innovation support	Item	Factor Loadings
My organization is quick to use improved work methods.	1	0,838
My organization is quick to use improved work methods that are developed by workers.	2	0,792
In my organization, developing one's own ideas is encouraged for the improvement of the corporation.	3	0,669
Upper management is aware and very receptive to my ideas and suggestions.	4	0,656
A promotion usually follows from the development of new and innovative ideas.	5	0,598
Those employees who come up with innovative ideas on their own often receive management encouragement for their activities.	6	0,554
This organization provides the chance to do something that makes use of my abilities.	24	0,551
Cronbach alpha	0,91	

Table 20 Work discretion factor loading

Work discretion		
	Item	Factor Loadings
Work discretion		
I feel that I am my own boss and do not have to double check all of my decisions with someone else.	20	0,869
This organization provides the chance to be creative and try my own methods of doing the job.	22	0,836
This organization provides the freedom to use my own judgment.	23	0,796
I have the freedom to decide what I do on my job.	25	0,743
It is basically my own responsibility to decide how my job gets done.	26	0,575
I almost always get to decide what I do on my job.	27	0,544
I have much autonomy on my job and am left on my own to do my own work.	28	0,498
Cronbach alpha	0,91	

Table 21 organisational boundaries factor loading

Organisational Boundaries		
	Item	Factor Loadings
On my job I have no doubt of what is expected of me.	44	0,771
There is little uncertainty in my job.	45	0,577
My job description clearly specifies the standards of performance on which my job is evaluated.	47	0,636
I clearly know what level of work performance is expected from me in terms of amount, quality, and timelines of output.	48	0,698
Cronbach alpha	0,73	

Table 22 Reward/Reinforcement factor loading

Rewards		
	Item	Factor Loadings
My manager helps me get my work done by removing obstacles and	30	0,484

roadblocks.		
My supervisor will increase my job responsibilities if I am performing well in my job.	32	0,636
There is a lot of challenge in my job.	35	0,740
During the past three months, my workload kept me from spending time on developing new ideas.	36	0,493
Cronbach alpha	0,68	

Table 23 Time availability factor loading

Time availability	Item	Factor Loadings
I always seem to have plenty of time to get everything done.	37	0,714
I have just the right amount of time and workload to do everything well.	38	0,785
My co-workers and I always find time for long-term problem solving.	41	0,436
Cronbach alpha	0,76	

Table 24 Organisational structure support

Organisational structure support	Item	Factor Loadings
Many top managers have been known for their experience with the innovation process.	9	0,406
In the past three months, I have always followed standard operating procedures or practices to do my major tasks.	42	0,821
There are many written rules and procedures that exist for doing my major tasks.	43	0,780
Cronbach alpha	0,67	

To improve the interpretation of the factors, items that loaded on more than one factor were deleted. A total of 11 factors loaded and these explained 70% of the variance. The first 7 factors explained over 61% of the variance see below table 31 for detailed results. A Cronbach's Alpha test was conducted to assess the internal consistency of loaded factors.

Table 25 Eigen value

Factor	Eigen values	% of Variance	Cumulative %
1	15.48	32,3	32,3
2	3.33	6,9	39,2
3	3.04	6,3	45,5
4	2.40	5,0	50,5
5	2.07	4,3	54,9
6	1.56	3,3	58,1
7	1.46	3,0	61,2

Extraction Method: Principal Component Analysis.

The outcome of the exploratory factor analysis showed 7 significant factors. These factors were classified based on the CEAI construct categories and two new constructs were created based on the common theme of the items. The output factors were namely: Management Support (11), Innovation support (7), Work discretion (7), Organisational boundaries (4), Rewards (4), Time Availability (3) and Organisational structure (3). Cronbach's Alpha reliability test followed to test the internal consistency of each factor. The results were 0.92, 0.91, 0.91, 0.73, 0.68, 0.67 and .76. for Management Support, Innovation support, Work discretion, Organisational boundaries, Rewards, Time Availability and Organisational structure, respectively.

5 DISCUSSION OF RESEARCH FINDINGS

5.1 Introduction

The aim of this chapter is to explain the results from chapter four. The survey was sent to over 300 participants who are employed in South African financial services organisations. 154 respondents to the questionnaire however only 119 fully completed the questionnaire. 35 respondents did not complete the questionnaire and resulted in a 23% exclusion rate. The demographic profile of the respondents was presented in chapter four, namely gender, age, ethnicity, organisational tenure, organisational level, educational level, and overall employment tenure.

5.2 Respondents Profile

Gender

More males completed the questionnaire than females. Males made up 56% of the respondents whilst females comprised the 44%. This is a fairly distribution and not significantly biased to either gender. This distribution is relatively similar to that of the South African labour with more males than females. Stats SA 2019 report indicated the women accounted for 43.8% of the labour force and men accounted for 56.2% (Statssa, 2019).

Age

Over 50% of respondents who completed the survey questionnaire were between 35-44 age category followed by age category between 25-34 at 38%. Respondents greater than 45 years made up 9% of the respondents.

Organisational tenure

About 89% of the respondent indicated that they have been with the organisation for at least 3 years with 38% having been with the organisation for over 10 years. About 11% of respondents have been with the organisation for 2 years or less.

Organisational level

Table 6 showed that just over 66% of respondents were between junior, middle and senior management with specialists comprising almost 22% and executive management with the least distribution of 11.8% of the respondents.

Educational level

Table 7 indicted that 80% of respondents had post matric qualification with postgraduate comprising the highest distribution percentage at 32% with other qualification comprising 4% of the respondents and 16% indicated that they only had matric.

Overall employment tenure

Table 8 showed that 92% of the respondents have been employed for 2 or more years with 50% indicating that they have been employed between 11-20 years with only 8% have been employed for less than 5 years.

5.3 Research results

In this section we seek to answer the research questions through hypothesis testing. The Corporate Entrepreneurship Assessment Instrument (CEAI) was used to assess the extent which corporate entrepreneurship is promoted in the South African financial services organisations. The Corporate Entrepreneurship Assessment Instrument (CEAI) was considered accurate and stable by various researchers of (Hornsby et al., 2002; Kuratko et al., 2005; Groenewald, 2010; Van Wyk and Adonisi, 2012).

Reliabilities

The reliability of the Corporate Entrepreneurship Assessment Instrument (CEAI) was assessed through the Cronbach alpha test. This test is popular for reliability testing in the corporate entrepreneurship space as many scholars have used it (Santos, 1998; Pleasant and Kuruvilla, 2008; Mogopodi, 2016; Steyn De Bruin, 2018).

Management support had 19 items to be tested and scored a Cronbach alpha of 0.964 which is deemed very good. Work discretion had 10 items to be assessed and scored a Cronbach alpha of 0.861 which is considered good. Reward/reinforcement had 6 items to be evaluated and scored a Cronbach alpha of 0.766 which is regarded as acceptable. Time availability had 6 items to be examined and scored a Cronbach alpha of 0.519 which is deemed adequate as per Steyn and De Bruin (2018). Organisational boundaries had 7 items to be assessed and scored a Cronbach alpha of 0.758 which is deemed as acceptable.

Normality test

Test for normality was conducted to examine the normal distribution of respondents' scores with regard to their demographic variables such as gender, age, ethnicity, organisational tenure, organisational level, and overall organisational tenure. The results from both Kolmogorov–Smirnov and the Shapiro-Wilk test proved that respondents scores were normally distributed as illustrated in the preceding chapter four.

5.3.1 Hypotheses test results

The previous section has indicated that that respondents scores are normally distributed. Therefore, this section deals with the interpretation of the findings in line with the inferential statistics tests that were used in the analysis namely, T-test and ANOVA on corporate entrepreneurship constructs.

5.3.1.1 Null Hypothesis 1: there is no management support for Corporate Entrepreneurship activities in the South African financial services organisations.

The t-test results in table 15 indicate that both males and female employees perceive management support the same way. They all do not agree that there is management support in South African financial services organisations. This is illustrated by the P-value greater than 0.05 ($P\text{-Value} > 0.05$), which is 0.452. The mean score for both males and female ranges from 3.1 to 3.2 which is an indication that the participants do not agree that there is management support for corporate entrepreneurship activities in South African financial services organisations.

The interpretation of the t-test rules suggests that if the P-Value is greater than 0.05 (P-Value >0.05) the null hypothesis should be accepted. The factor analysis results show that 11 items of management support loaded with a factor loading greater than 0.4 and a Cronbach alpha value of 0.92 confirming a very good reliability of the instrument.

The literature review in chapter 2 pointed out the significance of management support for the promotion of corporate entrepreneurship. Hornsby et al., (1993) cites that management support is about creating an inclusive culture where everyone promotes innovation as a critical work component. Batson and Yoder (2012) argued that managers amplify the perception subordinates have about their support for corporate entrepreneurship behaviour by providing necessary resources, creating clear objectives and provide frequent feedback. This suggests that senior management involvement in supporting the entrepreneurial strategy is of utmost importance to foster entrepreneurial activities (Ireland et al., 2009).

There is a need for management support in South African financial services organisations to promote corporate entrepreneurship activities. Corporate entrepreneurship has become a necessary attribute that organisations that wish to be innovative, gain competitive advantage and be market leaders should possess. Therefore, managers need to actively encourage corporate entrepreneurship activities in South African financial services organisations, as employees would find it difficult to promote corporate entrepreneurship activities without management support.

Therefore, it can be concluded that:

H01 is accepted: there is no management support for Corporate Entrepreneurship activities in the South African financial services organisations.

5.3.1.2 Null hypothesis 2: Work discretion is not used to promote corporate Entrepreneurship activities in the South African financial services organisations.

The t-test results in table 14 for males and females on work discretion reveal the P-Value less than 0.05 (P-Value <0.05). This shows that there is a significant difference between males and female perception on work discretion. The P-Value for gender on work discretion is 0.001. The mean score for both males and female ranges from 3.1 to

3.6. The males mean score of 3.6 suggests that they are unsure that Work discretion is not used to promote corporate entrepreneurship activities in the South African financial services organisations, whereas the mean score of female participants (3.1) suggests that they do not agree that Work discretion is not used to promote corporate entrepreneurship activities in the South African financial services organisations. The factor analysis results show that 7 items of work discretion loaded with a factor loading greater than 0.4 and a Cronbach alpha value of 0.91 confirming a very good reliability of the instrument.

Work discretion empowers subordinates to make decisions unsupervised and plays a significant role in generating ideas (Chienwattanasook et al., 2019). It motivates subordinates to learn and drive innovative behaviour (Hornsby et al., 2009). It heightens the positive effect of corporate entrepreneurship and organisational performance (Anyanwu et al., 2016). Therefore, managers should have appetite for failure, create an autonomous environment that encourages risk taking and decision making by subordinates.

Therefore, it can be concluded that:

Ho2 is rejected: Work discretion is not used to promote corporate Entrepreneurship activities in the South African financial services organisations.

The t-test results evidenced that work discretion is used to promote Corporate Entrepreneurship activities in the South African financial services organisations. 68% of respondents agreed with a statement: “I have much autonomy on my job and am left on my own to do my own work”.

5.3.1.3 Null hypothesis 3: Rewards/Reinforcements are not appropriately used to promote Corporate Entrepreneurship activities in the South African financial services organisations.

The t-test results in table 14 for males and female participants indicated a P-Value greater than 0.05 ($P > 0.05$) on reward/reinforcement factor. This suggests that there is no statistical difference between males and female respondents' perception about the use rewards/reinforcements to promote Corporate Entrepreneurship activities in the South African financial services organisations. The P-Value for gender on rewards/reinforcements is 0.555. The participants mean score ranges from 3.7 to 3.8.

The mean scores for both males and female participants do not agree nor disagree that Rewards/Reinforcements are not appropriately used to promote Corporate Entrepreneurship activities in the South African financial services organisations. The factor analysis results show that 3 items of rewards loaded with a factor loading greater than 0.4 and a Cronbach alpha value of 0.68 confirming an acceptable reliability of the instrument.

Hornsby et al., (2002) noted that management should drive initiatives and take necessary actions such as providing incentives for corporate entrepreneurship activities. Rewards promote corporate entrepreneurship activities. Rewards can drive performance and have the power to impact organisations' ways of work. Subordinates are more likely to participate in corporate entrepreneurship activities if they can clearly see the link between their input and output and output and reward (Kuratko et al. 2011).

Therefore, it can be concluded that: **Ho3 is accepted:** Rewards/Reinforcements are not appropriately used to promote Corporate Entrepreneurship activities in the South African financial services organisations

5.3.1.4 Null hypothesis 4: Time is not made available to promote corporate entrepreneurship activities in the South African financial services organisations.

The t-test results in table 14 for males and females on time availability revealed that there is no statistical difference between males and female respondents' perception. Both males and females scored a P-Value of 0.298 which is greater than 0.05 (P-Value >0.05). Indicating that both males and female share similar sentiments on time availability. The respondents' mean score on time availability ranges from 3.1 to 3.2. In line with the interpretation of the t-test rules, where P value > 0.05 we fail to reject the null hypothesis. The factor analysis results show that 3 items of time availability loaded with a factor loading greater than 0.4 and a Cronbach alpha value of 0.76 confirming an acceptable reliability of the instrument.

Piyachat (2017) cited that time Availability involves the assessment of workload to ensure sufficient coverage for individuals and groups that want to innovate with work structures that support the achievements of goals. It is important to note that employees

have different kinds of daily duties to complete, and others are kept busy and have to account for the daily workload (Hornsby et al., 2009). It is, therefore, critical to encourage management to create capacity for subordinates to engage in corporate entrepreneurship activities. As Slevin and Covin, (1997) suggested that management's ability to make available time and resources are critical components to drive entrepreneurial activities.

Therefore, it can be concluded that:

Ho4 is accepted: Time is not made available to promote corporate entrepreneurship activities in the South African financial services organisations.

5.3.1.5 Null hypothesis 5: Organisational boundaries impede the promotion of Corporate Entrepreneurship activities in the South African financial services organisations.

The t-test results in table 14 for males and female participants indicated a P-Value greater than 0.05 ($P > 0.05$) on organisational boundaries factor. This indicates that there is no statistical difference between males and female respondents' perception that organisational boundaries impede the promotion of Corporate Entrepreneurship activities in the South African financial services organisations. In fact, it suggests that participants share the same sentiments pertaining to organisational boundaries. The P-Value for both males and female on organisational boundaries is 0.169. The participants mean score ranges from 3.7 to 3.9. The mean scores for both males and female participants lean towards agreeing that organisational boundaries impede the promotion of Corporate Entrepreneurship activities in the South African financial services organisations. The factor analysis results show that 4 items of organisational boundaries loaded with a factor loading greater than 0.4 and a Cronbach alpha value of 0.73 confirming an acceptable reliability of the instrument.

Hornsby et al., (2009) posits that organizational boundaries are the bridges that allow departments to align and share information in an efficient way and enables an efficient decision-making process for subordinates. These boundaries act as an enabler for innovation and can almost guarantee high asset utilisation (Kuratko et al., 2014; Chienwattanasook et al., 2019). Urban (2017) cited that most entrepreneurial organisation have flexible structure, the greater flexibility supports federated decision

making, informal processes, increased locus of control and competence as compared to traditional management philosophies based on power.

The reason that organizational boundaries are perceived to impede the promotion of promotion of Corporate Entrepreneurship activities in the South African financial services organisations, could be because the industry is highly regulated. The organisations in this sector are “characterised by rigid policies and inflexibility which inhibit employee’s capacity to foster corporate entrepreneurship” (Kearney et al., 2009:36). The red tape and the high levels of rigidity clash with the advancement of entrepreneurial culture (Urban, 2017).

Therefore, it can be concluded that:

Ho5 is accepted: Organisational boundaries impede the promotion of Corporate Entrepreneurship activities in the South African financial services organisations.

5.3.1.6 Null hypothesis 6: There is no statistical difference in respect to time availability between different categories of managers in the organisations.

A one-way ANOVA test was conducted to determine whether there are statistical differences between the different organisational level categories namely (executive management, senior management, middle management, junior management, and specialists) perception on Corporate Entrepreneurship Assessment Instrument constructs.

Table 16 reveals that management support, work discretion, time availability and organisational boundaries have a P-Value greater than 0.05 ($P\text{-Value} > 0.05$). Indicating that there is no significant difference between the different employees’ levels. However, table 16 also reveals a P-Value less than 0.05 ($P\text{-Value} < 0.05$) for reward/reinforcement. This indicates that there is a significant statistical difference in employee’s perception about reward/reinforcement. A post hoc tests (multiple comparison test) will be provided to show where there differences amongst the different organisational level categories occurred.

Table 17 multiple comparison on reward/reinforcement shows that the four categories of organisational levels are statistically different from each other. Senior management, middle management, junior management, and specialist proved to be statistically different from one another in terms of their perceptions on reward/reinforcement towards Corporate Entrepreneurship in South African services organisations.

Table 17 revealed that senior managers, middle managers, junior manager and specialists' perceptions of reward/reinforcement are statistically different from each other. The P-Value between senior management and middle management is 0.001. The P-Value between senior management and specialists is 0.001 and the P-Value between junior management and specialists is 0.008.

The mean score for these categories' ranges from 3.4 to 4.1. senior management and junior management have a mean score greater than 4 with Executive management with a mean score of 3.9 leaning towards agreeing. This indicates that they agree that there is no statistical difference in respect to reward/reinforcement between different categories of managers in the organisations. whereas middle managers have a mean score of 3.5 and specialists have a mean score of 3.4. these results show that middle managers and specialists have the lower mean score, and they do not agree that there is no statistical difference in respect to reward/reinforcement between different categories of managers in the organisations.

Middle managers are instrumental in driving corporate entrepreneurship activities and are the glue between senior managers and the junior employees of the organisation (Hornsby et al., 1993). Kuratko et al. (2014) noted the availability of rewards is a key contributing factor to promote entrepreneurial behaviour in the organisation and is mostly driven by middle managers. It is therefore, rather concerning that middle managers score such a low mean score on reward/reinforcement construct.

Therefore, it can be concluded that:

Ho6 is accepted: There is no statistical difference in respect to time availability between different categories of managers in the organisations.

Conclusion

In this chapter we interpreted the results of the research findings through descriptive and inferential statistics. Pertinent data was presented through tables and figures. The Corporate Entrepreneurship Assessment Instrument proved to be reliable despite time availability construct with a score less than 0.7 but over 0.5 which is considered adequate. The reliability was further confirmed through exploratory factor analysis and the five key constructs loaded with a much more improved Cronbach alpha score range. Tests for normality also proved that the respondents scores were normally distributed. The T-test results showed that there was no gender bias in the respondents, in fact the gender distribution of the study reflected that of the South African labour market (Statssa, 2019).

The T-test was conducted to examine if there is a significance differences in respondents scores. There were no significant differences among the participants responses. Time availability had the lowest mean score of 3.18 these results indicate that time is not available to promote corporate entrepreneurship activities.

One way ANOVA was conducted to assess whether there were statistical differences between the different organisational level categories and investigate the difference with regards to the construct. There was no significant difference amongst respondents mean scores. The overall mean score was 3.18 with a standard deviation of 0.67. Executive management had the lowest score of 3.01, although they had the lowest count of respondents. Their score is concerning as management support is considered a key factor that drives the promotion of corporate entrepreneurship activities in the organisation (Hornsby., 2002; Kuratko et al., 2015).

Nayager and Van Vuuren (2005) emphasised that management support improves the perception employees have about the entrepreneurial mindset of the organisation. We, therefore, conclude that there is no statistical difference in respect to time availability between different categories of managers in the organisations. This result further confirm that time availability is a challenge even for managers. If managers do not make time available to support, encourage and promote corporate entrepreneurship activities. It makes it difficult for organisation to be entrepreneurial. Morris et al., (2008) notes that corporate entrepreneurship is everyone's responsibility, but top management

should be the “purveyors” of the entrepreneurial vision and therefore it should flow from top to bottom. Management should champion the corporate entrepreneurship behaviour and consistently lead by example.

6 SUMMARY, CONCLUSIONS, LIMITATIONS, AND RECOMMENDATIONS

6.1 Summary

The concept of corporate entrepreneurship has been on the rise in the last four decades. However there has been limited research in the South African context, particularly in the financial services sector. Previous research studies have evidenced the value of corporate entrepreneurship in organisations. Organisations that seek to gain and maintain competitive advantage need encourage and promote corporate entrepreneurship activities.

The study assessed the extent in which corporate entrepreneurship was encouraged and promoted in the South African financial services organisations. The study aimed at identifying the factors which affect the promotion of corporate entrepreneurship in South Africa's financial services organisations, namely management support, work discretion, reward/reinforcement, time availability and organisational boundaries.

The primary objective of the study was attained through the evaluation of the corporate entrepreneurship activities in the South Africa's financial services organisations by means of hypothesis testing.

The CEAI instrument was deployed to assess the extent in which corporate entrepreneurship was encouraged and promoted in the South African financial services organisations. The CEAI instrument was developed by Kuratko et al., (1990) and later improved by Hornsby et al., (2002) where the assessment items were reduced from 84 to 48. The questionnaire utilised a 5 Linkert-scale where 1 represented strongly disagree and 5 strongly agree. The validity and reliability of the instrument was tested, and the Cronbach alpha test scores confirmed that the CEAI is reliable similar to previous research studies (Hornsby et al., 2002; Kuratko et al., 2005; Groenewald, 2010; Van Wyk and Adonisi, 2012).

Normality tests conducted on gender, age, ethnicity, organisational tenure, organisational level, and overall organisational tenure against the corporate entrepreneurship constructs confirmed that the respondents scores were normally distributed as observed in tables 11,12,13 and 14.

Literature indicates that corporate entrepreneurship antecedents such as management support, work discretion, reward/reinforcement, time availability and organisational boundaries foster innovativeness and improved organisational performance (Zahra, 1991; Zahra and Covin, 1995; Antoncic and Hisrich, 2001; Hornsby et al., 2009; Umrani et al., 2016)

The T-test results on management support suggested that there is no statistically significant difference amongst participants, and they perceive management support the same way. The respondents' overall mean score for management support is 3.2 indicating that participants do not agree that there is management support for corporate entrepreneurship activities in South African financial services organisations. Therefore, Ho1 is accepted: there is no management support for Corporate Entrepreneurship activities in the South African financial services organisations.

The T-test results on work discretion showed that there is a significant difference between respondents' perception on work discretion. Females in particular scored a lower mean of 3.1 suggesting that they do not agree that Work discretion is not used to promote corporate entrepreneurship activities in the South African financial services organisations. Therefore, Ho2 is rejected: Work discretion is not used to promote corporate Entrepreneurship activities in the South African financial services organisations. In fact, respondents believe that they have more autonomy, and the organisations provides them with chance to do something that makes use of their abilities and the freedom to decide what they do on their jobs.

The t-test results on reward/reinforcement factor showed that there is no statistical difference between respondents' perception about the use rewards/reinforcements to promote Corporate Entrepreneurship activities in the South African financial services organisations. The participants mean score ranges of 3.7 suggests that participants do not agree nor disagree that Rewards/Reinforcements are not appropriately used to promote Corporate Entrepreneurship activities in the South African financial services organisations. Therefore, Ho3 is accepted: Rewards/Reinforcements are not appropriately used to promote Corporate Entrepreneurship activities in the South African financial services organisations. Literature in chapter two advised that rewards

are an important internal factor and drive the promotion of corporate entrepreneurship activity (Kuratko et al. 2011).

The t-test results on time availability revealed that there is no statistical difference between respondents' perception about time availability. The respondents' mean score on time availability is 3.1 indicating that respondents do not agree that time is made available to promote corporate entrepreneurship activities in the South African financial services organisations. over 60% of respondents disagreed with the statement "I always seem to have plenty of time to get everything done" which validates the respondents perception. Therefore, Ho4 is accepted: Time is not made available to promote corporate entrepreneurship activities in the South African financial services organisations.

The t-test results on organisational boundaries revealed that there is no statistical difference between respondents' perception about organisational boundaries. In fact, it suggests that participants share the same sentiments pertaining to organisational boundaries. The participants mean score ranges from 3.7 to 3.9 leaning towards agreeing that organisational boundaries impede the promotion of Corporate Entrepreneurship activities in the South African financial services organisations.

The results are concerning as organizational boundaries are the bridges that allow departments to align and share information in an efficient way and enables an efficient decision-making process for subordinates. They enable innovation and can almost guarantee high asset utilisation (Kuratko et al., 2014; Chienwattanasook et al., 2019).

The respondent's perception could be because the industry is highly regulated with rigid policies and inflexibility which inhibit employee's capacity to foster corporate entrepreneurship (Kearney et al., 2009). Therefore, Ho5 is accepted: Organisational boundaries impede the promotion of Corporate Entrepreneurship activities in the South African financial services organisations.

The one-way ANOVA test results conducted showed there were no statistical differences between the different employees' level in terms of time availability. The overall mean score is 3.1 indicating that respondent's do not agree that there is a

statistical difference in respect to time availability between different categories of managers in the organisations. Therefore, Ho6 is accepted: There is no statistical difference in respect to time availability between different categories of managers in the organisations.

6.2 Conclusions

The overall perception of the respondents suggests that corporate entrepreneurship behavior is not encouraged and promoted in the South African financial services organisations. The research results in chapter four indicated that work discretion was the only construct that respondents perceived to be encouraged and promoted. It was further confirmed by higher positive responses on items relating to autonomy and freedom. Respondents felt that “this organization provides the chance to do something that makes use of my abilities”. “I have the freedom to decide what I do on my job”. “It is basically my own responsibility to decide how my job gets done”. These three items scored the highest in the work discretion construct.

Time availability score the least mean in comparison to corporate entrepreneurship constructs. This indicates that participants perception is that time is not available to promote corporate entrepreneurship activities. This is evidenced by the below low scoring items. “I always seem to have plenty of time to get everything done”. I have just the right amount of time and workload to do everything well.

The Factor analysis results confirmed the reliability and validity of Corporate Entrepreneurship Assessment Instrument as shared by previous researchers (Santos, 1999; Pleasant and Kuruvilla, 2008; Mogopodi 2016)

In conclusion managers in South African financial services organisations need to consider actively engaging in the internal factors that encourage and promote corporate entrepreneurship. The lower scores are concerning from this industry as it is characterised by constant change due to globalization and innovation underpinned by technology advancement (Kuratko et al., 2015). To remain competitive and maintain competitive advantage managers in this industry need to invest in creating incentives that reward the entrepreneurial behavior (Schachtebeck and Nieuwenhuizen, 2015).

6.3 Limitations

The limitation of the study is that it focuses on the financial services organisation in South Africa and therefore the research findings cannot be generalised in other industries in South Africa and cannot be applied in other financial services industry outside South Africa. The cross sectional nature of this study is also a limitation and a longitudinal studies are required to test whether internal organisational factors promote corporate entrepreneurship activities (Urban, 2017).

The data collection period was short given the length of the instrument. The timing of data collection was also a challenge as data was collected between December and January which are seasonal months, and most employees are on leave. There is limited empirical research conducted in South African financial services organisation on corporate entrepreneurship and therefore limits the ability to make comparable analysis as observed in the (Hornsby et al., 2002) research study. The reliability scores for time availability were low compared to the widely accepted benchmark. Although Steyn and De Bruin (2018) cited that a reliability score greater than 0.5 is adequate and can be accepted as reliable.

6.4 Recommendations

Increasing the sample size of respondents to allow conclusions to be drawn that represent the industry. There was a large drop off in the number of people who participated in the study. Almost 50% of the sample population did not respond to the survey and 23% of the respondents did not fully complete the questionnaire. I would recommend that Corporate Entrepreneurship Assessment Instrument be shortened in line with Brief Corporate Entrepreneurship Assessment Instrument recommendation made by (Steyn and De Bruin 2018).

The Factor analysis results also confirmed that the same construct loaded with fewer items and can explain over 60% of the variance. This will increase the hit rate without losing the reliability of the instrument. The Corporate Entrepreneurship Assessment Instrument should be retested to establish the internal consistency as the Cronbach alpha score on time availability was considered adequate and not meeting the preferred

benchmark. Lastly a qualitative approach should be considered for future research to unpack the Corporate Entrepreneurship Assessment Instrument construct.

Future researchers should consider using social media platforms to increase the completion rate. The results from the survey showed that only 22% of respondents who fully completed the questionnaire used email channel and 78% used social media application channel (WhatsApp).

6.5 Reference list

- African Development Bank Group. (2019). South Africa Economic outlook. Retrieved from <https://www.afdb.org/en/countries/southern-africa/south-africa/south-africa-economic-outlook>.
- Afuah, A. (2003). Innovation management.
- Aguera, P., Berglund, N., Chinembiri, T., Comninou, A., Gillwald, A., & Govan-Vassen, N. (2020). Paving the way towards digitalising agriculture in South Africa.
- Ahmed, U., Shah, S. A., Qureshi, M. A., Shah, M. H., & Khuwaja, F. M. (2018). Nurturing innovation performance through corporate entrepreneurship: The moderation of employee engagement. *Studies in Business and Economics*, 13(2), 20-30.
- Ahuja, G., & Morris Lampert, C. (2001). Entrepreneurship in the large corporation: A longitudinal study of how established firms create breakthrough inventions. *Strategic management journal*, 22(6-7), 521-543.
- Amit, R., Glosten, L., & Muller, E. (1993). Challenges to theory development in entrepreneurship research. *Journal of Management studies*, 30(5), 815-834.
- Anigbogu, U. E., & Nduka, E. K. (2014). Stock market performance and economic growth: Evidence from Nigeria employing vector error correction model framework. *The Economics and Finance Letters*, 1(9), 90-103.
- Antoncic, B., & Hisrich, R. D. (2001). Intrapreneurship: Construct refinement and cross-cultural validation. *Journal of business venturing*, 16(5), 495-527.
- Antoncic, J. A., & Antoncic, B. (2011). Employee satisfaction, intrapreneurship and firm growth: a model. *Industrial Management & Data Systems*.
- Anyanwu, J. O., Okoroji, L. I., Ezewoko, O. F., & Nwaobilor, C. A. (2016). The impact of training and development on workers performance in Imo State. *Global Journal of Social Sciences Studies*, 2(2), 51-71.
- Batson, V. D., & Yoder, L. H. (2012). Managerial coaching: a concept analysis. *Journal of Advanced Nursing*, 68(7), 1658-1669.
- Bierwerth, M., Schwens, C., Isidor, R., & Kabst, R. (2015). Corporate entrepreneurship and performance: A meta-analysis. *Small business economics*, 45(2), 255-278.
- Block, Z., & Ornati, O. A. (1987). Compensating corporate venture managers. *Journal of Business Venturing*, 2(1), 41-51.
- Blomkvist, K., Kappen, P., & Zander, I. (2017). Gone are the creatures of yesteryear? On the diffusion of technological capabilities in the 'modern'MNC. *Journal of World Business*, 52(1), 1-16.

- Bloodgood, J. M., Hornsby, J. S., Burkemper, A. C., & Sarooghi, H. (2015). A system dynamics perspective of corporate entrepreneurship. *Small business economics*, 45(2), 383-402.
- Blumberg, B., Cooper, D., & Schindler, P. (2011). *Business Research Methods*. McGraw-Hill Education.
- Boone, C., Lokshin, B., Guenter, H., & Belderbos, R. (2019). Top management team nationality diversity, corporate entrepreneurship, and innovation in multinational firms. *Strategic management journal*, 40(2), 277-302.
- Bower, J. L., & Christensen, C. M. (1995). Disruptive technologies: catching the wave.
- Butterworth, B., & Malherbe, S. (1999, September). The South African financial sector: background research for the Seattle round. In *Trade and Industrial Policy Secretariat Annual Forum, Muldersdrift* (Accessed at: <http://www.tips.org.za/files/287.pdf> on 10th April, 2015).
- Chienwattanasook, K., Wattanapongphasuk, S., Prianto, A. L., & Jermisittiparsert, K. (2019). Corporate Entrepreneurship and Business Performance of Logistic Companies in Indonesia. *Industrial Engineering & Management Systems*, 18(3), 541-550.
- Christensen, L. B., Johnson, B., Turner, L. A., & Christensen, L. B. (2011). Research methods, design, and analysis.
- Corbett, A. C., & Hmieleski, K. M. (2007). The conflicting cognitions of corporate entrepreneurs. *Entrepreneurship Theory and Practice*, 31(1), 103-121.
- Corbett, A., Covin, J. G., O'Connor, G. C., & Tucci, C. L. (2013). Corporate entrepreneurship: State-of-the-art research and a future research agenda. *Journal of Product Innovation Management*, 30(ARTICLE), 812-820.
- Covin, J. G., & Miles, M. P. (1999). Corporate entrepreneurship and the pursuit of competitive advantage. *Entrepreneurship theory and practice*, 23(3), 47-63.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- de Lurdes Calisto, M., & Sarkar, S. (2017). Innovation and corporate entrepreneurship in service businesses. *Service Business*, 11(3), 581-600.
- Dess, G. G., & Lumpkin, G. T. (2005). The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship. *Academy of Management Perspectives*, 19(1), 147-156.
- Drucker, P. (2014). *Innovation and entrepreneurship*. Routledge.
- Dudovskiy, J. (2018). Research methodology: Purposive sampling. Retrieved from The Ultimate Guide to Writing a Dissertation. *Business Studies-A step-by-step assistance: 2018*.

- Garvin, D. A., & Levesque, L. C. (2006). Meeting the challenge of corporate entrepreneurship. *Harvard business review*, 84(10), 102.
- Goodale, J. C., Kuratko, D. F., Hornsby, J. S., & Covin, J. G. (2011). Operations management and corporate entrepreneurship: The moderating effect of operations control on the antecedents of corporate entrepreneurial activity in relation to innovation performance. *Journal of operations management*, 29(1-2), 116-127.
- Goosen, C. J., Smit, E. D. M., and De Coning, T. J. (2002). The development of a factor-based instrument to measure corporate entrepreneurship: A South African perspective. *South African Journal of Business Management*, 33(3), 39-51.
- Grawe, S. J., Chen, H., & Daugherty, P. J. (2009). The relationship between strategic orientation, service innovation, and performance. *International Journal of Physical Distribution & Logistics Management*.
- Guth, W. D., & Ginsberg, A. (1990). Guest editors' introduction: Corporate entrepreneurship. *Strategic management journal*, 5-15.
- Halme, M., Lindeman, S., & Linna, P. (2012). Innovation for inclusive business: Intrapreneurial bricolage in multinational corporations. *Journal of Management Studies*, 49(4), 743-784.
- Hayton, J. C. (2005). Promoting corporate entrepreneurship through human resource management practices: A review of empirical research. *Human resource management review*, 15(1), 21-41.
- Hirschfeld, G. & Von Brachel, R., 2014, 'Improving multiple-group confirmatory factor analysis in R: A tutorial in measurement invariance with continuous and ordinal indicators', *Practical Assessment, Research & Evaluation* 19(7), viewed 07 March 2017, from <http://pareonline.net/getvn.asp?v=19&n=7>.
- Hisrich, R. D., & Peters, M. P. (1986). Establishing a new business venture unit within a firm. *Journal of business venturing*, 1(3), 307-322.
- Hisrich, R. D., Peters, M. P., & Shepherd, D. A. (2010). *Entrepreneurship* (latest edition) McGraw-Hill.
- Hornsby, J. S., Naffziger, D. W., Kuratko, D. F., & Montagno, R. V. (1993). An interactive model of the corporate entrepreneurship process. *Entrepreneurship theory and practice*, 17(2), 29-37.
- Hornsby, J. S., Kuratko, D. F., & Zahra, S. A. (2002). Middle managers' perception of the internal environment for corporate entrepreneurship: assessing a measurement scale. *Journal of business Venturing*, 17(3), 253-273.

- Hornsby, J. S., Kuratko, D. F., Shepherd, D. A., & Bott, J. P. (2009). Managers' corporate entrepreneurial actions: Examining perception and position. *Journal of business venturing*, 24(3), 236-247.
- Hurley, R. F., & Hult, G. T. M. (1998). Innovation, market orientation, and organizational learning: an integration and empirical examination. *Journal of marketing*, 62(3), 42-54.
- Indrawati, N. K., Salim, U., & Djawahir, A. H. (2015). Moderation effects of entrepreneurial self-efficacy in relation between environmental dimensions and entrepreneurial alertness and the effect on entrepreneurial commitment. *Procedia-Social and Behavioral Sciences*, 169, 13-22.
- Jingnan, W., Yunus, N., & Kamal, Y. (2018). The relationship between corporate entrepreneurship and innovation in manufacturing companies in Perak. *International Journal of Business and Economic Affairs*, 3(1), 33-39.
- Jurado, K., Ludvigson, S. C., & Ng, S. (2015). Measuring uncertainty. *American Economic Review*, 105(3), 1177-1216.
- Kabir, S. M. S. (2016). Basic Guidelines for Research. *Chittagong: Book Zone Publication*.
- Kandemir, D., & Hult, G. T. M. (2005). A conceptualization of an organizational learning culture in international joint ventures. *Industrial marketing management*, 34(5), 430-439.
- Karimi, J., & Walter, Z. (2016). Corporate entrepreneurship, disruptive business model innovation adoption, and its performance: The case of the newspaper industry. *Long Range Planning*, 49(3), 342-360.
- Kearney, C., Hisrich, R. D., & Antoncic, B. (2013). The mediating role of corporate entrepreneurship for external environment effects on performance. *Journal of Business Economics and Management*, 14(sup1), S328-S357.
- Khoza, R., Groenewald, D., & Schachtebeck, C. (2018). Corporate entrepreneurial climate: an investigation of South African accounting small and medium-sized enterprises. *The Journal of Accounting and Management*, 7(3).
- Kraut, A. I., Pedigo, P. R., McKenna, D. D., & Dunnette, M. D. (2005). The role of the manager: What's really important in different management jobs. *Academy of Management Perspectives*, 19(4), 122-129.
- Kreiser, P. M., Kuratko, D. F., Covin, J. G., Ireland, R. D., & Hornsby, J. S. (2019). Corporate entrepreneurship strategy: extending our knowledge boundaries through configuration theory. *Small Business Economics*, 1-20.

- Kuratko, D. F., Montagno, R. V., & Hornsby, J. S. (1990). Developing an intrapreneurial assessment instrument for an effective corporate entrepreneurial environment. *Strategic management journal*, 49-58.
- Kuratko, D. F., Ireland, R. D., & Hornsby, J. S. (2001). Improving firm performance through entrepreneurial actions: Acordia's corporate entrepreneurship strategy. *Academy of Management Perspectives*, 15(4), 60-71.
- Kuratko, D. F., Ireland, R. D., Covin, J. G., & Hornsby, J. S. (2005). A model of middle-level managers' entrepreneurial behavior. *Entrepreneurship theory and practice*, 29(6), 699-716.
- Kuratko, D. F., & Audretsch, D. B. (2013). Clarifying the domains of corporate entrepreneurship. *International Entrepreneurship and Management Journal*, 9(3), 323-335.
- Kuratko, D. F., Hornsby, J. S., & Hayton, J. (2015). Corporate entrepreneurship: the innovative challenge for a new global economic reality. *Small Business Economics*, 45(2), 245-253.
- Kuratko, D. F. (2017). Corporate entrepreneurship 2.0: research development and future directions. *Foundations and Trends® in Entrepreneurship*, 13(6), 441-490.
- Lang, J. R., Calantone, R. J., & Gudmundson, D. (1997). Small firm information seeking as a response to environmental threats and opportunities. *Journal of small business Management*, 35(1), 11.
- Lassen, A. H., & Nielsen, S. L. (2009). Corporate entrepreneurship: innovation at the intersection between creative destruction and controlled adaptation. *Journal of Enterprising Culture*, 17(02), 181-199.
- Leavy, P. (2017). Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches.
- Lyon, D. W., Lumpkin, G. T., & Dess, G. G. (2000). Enhancing entrepreneurial orientation research: Operationalizing and measuring a key strategic decision making process. *Journal of management*, 26(5), 1055-1085.
- Malarvizhi, C. A., Nahar, R., & Manzoor, S. R. (2018). The strategic performance of Bangladeshi private commercial banks on post implementation relationship marketing. *International Journal of Emerging Trends in Social Sciences*, 2(1), 28-33.
- Mamabolo, M. A., & Ravjee, B. (2019). The impact of corporate entrepreneurship on service innovation: A case of a South African banking institution. *The Southern African Journal of Entrepreneurship and Small Business Management*, 11(1), 1-12.

- McFadzean, E., O'Loughlin, A., & Shaw, E. (2005). Corporate entrepreneurship and innovation part 1: the missing link. *European journal of innovation management*.
- McGrath, R. G. (1996, August). Options and the enterprise: toward a strategic theory of entrepreneurial wealth creation. In *Academy of Management Proceedings* (Vol. 1996, No. 1, pp. 101-105). Briarcliff Manor, NY 10510: Academy of Management.
- Miller, D., & Friesen, P. H. (1978). Archetypes of strategy formulation. *Management science*, 24(9), 921-933.
- Miller, D. J., Fern, M. J., & Cardinal, L. B. (2007). The use of knowledge for technological innovation within diversified firms. *Academy of Management journal*, 50(2), 307-325.
- Mogopodi, M. (2016). *Corporate entrepreneurship behaviour in a South African financial services organisation* (Doctoral dissertation).
- Mohamed, W. S., & Arafa, I. M. (2016). Investigating corporate social responsibility disclosure by banks from institutional theory perspective.
- Morris, M. H., Kuratko, D. F., and Covin, J. G. (2008). *Corporate entrepreneurship and innovation*. Thomson South-Western.
- Morris, M. H., Kuratko, D. F., & Covin, J. G. (2010). *Corporate entrepreneurship & innovation*. Cengage Learning.
- Mowlaei, M. (2017). The impact of AFT on export performance of selected Asian developing countries. *Asian Development Policy Review*, 5(4), 253-261.
- Musa, G. (2016). The role of accounting education towards the development of small and medium enterprises in Jigawa State. *International Journal of Business and Administrative Studies*, 2(4), 96-102.
- O'Reilly III, C. A., & Tushman, M. L. (2013). Organizational ambidexterity: Past, present, and future. *Academy of management Perspectives*, 27(4), 324-338.
- O'Sullivan, D., & Dooley, L. (2008). *Applying innovation*. Sage publications.
- Piyachat, B. (2017). The relationships among resources' commitment reverse logistics innovation reverse logistics performance and reverse logistics cost savings: Manufacturing vs service industry. *Journal of Administrative and Business Studies*, 3(3), 122-135.
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship theory and practice*, 33(3), 761-787.

- Resnik, D. B., & Elliott, K. C. (2015). Bisphenol A and risk management ethics. *Bioethics*, 29(3), 182-189.
- Russell, R. D. (1999). Developing a process model of intrapreneurial systems: A cognitive mapping approach. *Entrepreneurship theory and practice*, 23(3), 65-84.
- Sathe, V. (1989). Fostering entrepreneurship in the large, diversified firm. *Organizational Dynamics*, 18(1), 20-32.
- Schachtebeck, C., & Nieuwenhuizen, C. (2015). The role of management support in promoting corporate entrepreneurship within SME's in the seafreight transport industry. Southern African Transport Conference.
- Shumpeter, J. A. (1961). *The Theory of Economic Development: An Inquiry Into Profits, Capital, Credit, Interest, and the Business Cycle*. Transl. by Redvers Opie. Oxford University Press.
- Sharma, P., & Chrisman, S. J. J. (2007). Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship. In *Entrepreneurship* (pp. 83-103). Springer, Berlin, Heidelberg.
- Shepherd, D. A., McMullen, J. S., & Jennings, P. D. (2007). The formation of opportunity beliefs: Overcoming ignorance and reducing doubt. *Strategic Entrepreneurship Journal*, 1(1-2), 75-95.
- Simsek, Z., Veiga, J. F., & Lubatkin, M. H. (2007). The impact of managerial environmental perceptions on corporate entrepreneurship: Towards understanding discretionary slack's pivotal role. *Journal of Management Studies*, 44(8), 1398-1424.
- Sirmon, D. G., Hitt, M. A., & Ireland, R. D. (2007). Managing firm resources in dynamic environments to create value: Looking inside the black box. *Academy of management review*, 32(1), 273-292.
- Stevenson, H. H., & Jarillo, J. C. (2007). A paradigm of entrepreneurship: Entrepreneurial management. In *Entrepreneurship* (pp. 155-170). Springer, Berlin, Heidelberg.
- Stats, S. A. (2018). How do women fare in the South African Labour market? Retrieved from <http://www.statssa.gov.za/?p=11375>.
- Steyn, R., & De Bruin, G. P. (2018). The structural validity and measurement invariance across gender of the Brief Corporate Entrepreneurship Assessment Instrument. *South African Journal of Economic and Management Sciences*, 21(1), 1-8.
- Sykes, H. B. (1986). The anatomy of a corporate venturing program: Factors influencing success. *Journal of Business Venturing*, 1(3), 275-293.

- The World Bank. (2018). *South African Economic update: 11th edition*. Retrieved from <http://pubdocs.worldbank.org/en/798731523331698204/South-Africa-Economic-Update-April-2018.pdf>
- Tidd, J., & Bessant, J. R. (2020). *Managing innovation: integrating technological, market and organizational change*. John Wiley & Sons.
- Trochim, W. M., & Donnelly, J. P. (2001). *Research methods knowledge base* (Vol. 2). Atomic Dog Pub.
- Urban, B. (2017). Corporate entrepreneurship in South Africa: The role of organizational factors and entrepreneurial alertness in advancing innovativeness. *Journal of Developmental Entrepreneurship*, 22(03), 1750015.
- Van Wyk, R., & Adonisi, M. (2012). Antecedents of corporate entrepreneurship. *South African Journal of Business Management*, 43(3), 65-78.
- Wennekers, S. (2008). Intrapreneurship; conceptualizing entrepreneurial employee behaviour. *Scales Research Reports H*, 200802.