

The role of business incubators in facilitating the entrepreneurial skills requirements of small and medium size enterprises in the Cape metropolitan area, South Africa

By

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#### DECLARATION

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Date:

#### ABSTRACT

In both developed and developing countries, small and medium enterprises (SMEs) create employment opportunities and can therefore improve the standard of living. The South African Government have embarked on a number of initiatives in support of SMEs. The Department of Trade and Industry (DTI) and the SEDA Technology Programme (STP) have a number of assistance programmes that are being implemented in support of SMEs. Although there have been many varied studies on business incubators, there is still a need for research to determine the importance of entrepreneurial skills for the development of successful incubators.

Business incubators are essentially organisations that assist to increase survival rates of innovative start-up companies and support the entrepreneurial process. Incubators provide resources and services to entrepreneurs, including working space or physical offices, technical expertise, management mentoring, assistance in compiling an effective business plan, shared administrative services, technical support, business networking, advice on intellectual property and sources of financing, markets as well as strict admission and exit rules, which are designed to ensure that the incubator concentrates its efforts in helping innovative and fast-growth business start-ups that are likely to have a significant impact on the local economy. This therefore reduces the start-up capital and overhead costs, and allows the entrepreneur to focus on his/her core business whilst receiving operational support and hand-held coaching. The incubator concept supports the clients' development journey to ensure business sustainability and growth.

The main objective of the study is to determine the role that business incubators play in filling entrepreneurial-skills requirements for SMEs in the Cape metropolitan District. The population of this study comprised all the business incubators on the data base of one of the organisations that promotes SME development strategies and programmes in the Cape Metropolitan Area (CAM). All of the five business incubators that were registered on the database of a local organisation, known as Traction, during the course of the investigation, were deemed suitable for the study and therefore comprised the sample, which promotes SMEs' development.

The study utilises a mixed approach of quantitative and qualitative methods to collect data. From a quantitative point of view, questionnaires are utilised, while face-to-face interviews is used as a qualitative method. A maximum of seventy questionnaires is administered to incubated SMEs, 28 questionnaires were returned and all qualified for data analysis. This amounts to a 40% response rate. To complement the survey questionnaire, five face-to-face interviews were conducted with business incubators. The Statistical Package for the Social Sciences (SPSS) software was utilised to analyse the quantitative data, whereas qualitative data was analysed by means of content analysis and the results for both methods were presented in the format of figures, tables and charts.

The findings indicated that the entrepreneurial skills that affect the performance of business incubators includes not limited to lack of entrepreneurial skills namely business management; financial, human resource, interpersonal and people skills. With regard to the skills required by Business Incubators (BIs) to be efficient, it was revealed that administration, technical, financial management, marketing, human resource and interpersonal skills were essential entrepreneurial skills as they were required by SMEs. Lastly, access to advanced technology-based facilities, self-sustainability, support structures and funding were found to be the major challenges confronting BIs.

It was recommended that SMEs in South Africa should join the incubation programme in order to acquire entrepreneurial skills and increase survival rate. The South African Government should prioritise assistance for business incubators. The Small Enterprise Development Agency (SEDA) and the Department of Trade and Industry (DTI) should provide continuous support for business incubators. It is also recommended that incubation managers, who lack necessary entrepreneurial skills, enrol for business courses at local colleges or universities. Lastly, it also recommended that government agencies should make access to advanced technology-based facilities available.

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#### DEDICATION

This work is dedicated to:

my late parents and sister, Nonugget 'Shumikazi' Lose, Simon Mcinezeli 'Zava' Lose and Thabisa Lose.

May your kind and humble souls rest in peace. May you continue to protect, guide and direct your children and grandchildren.

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#### **CLARIFICATION OF ACRONYMS AND ABBREVIATIONS**

- BIs Business Incubators
- BICs Business Innovation Centres
- CAM Cape Metropolitan Area
- **CPIs Corporate Private Incubators**
- **CPUT Cape Peninsula University of Technology**
- **CIPC -** Companies and Intellectual Property Commission
- **EDCs Enterprises Development Centres**
- DTI Department of Trade and Industry
- **GDP Gross Domestic Product**
- **GEM -** Global Entrepreneurship Monitor
- **GM -** General Manager
- HDC Higher Degree Committee
- HR Human Resource
- ICs Incubation Centres
- **IPIs Independent Private Incubators**
- **IP** Intellectual Property
- **ISP Incubation Support Programme**
- MBA Masters in Business Administration
- **OBE -** Opportunity Based Entrepreneurship
- OECD Organization for Economic Cooperation and Development
- R&D Research and Development
- SA South Africa
- SABS South African Bureau of Standards
- SARS South African Revenue Services
- SEDA Small Enterprise Development Agency
- SPII Support Programme for Industrial Innovation
- SMEs Small and Medium Enterprises
- **SBDC Small Business Development Corporation**
- SPSS Statistical Package for the Social Sciences
- STP Small Enterprise Development Agency Technology Programme
- NBE Necessity-Based Entrepreneurship
- NPO Non Profit Organisation

THRIP - Technology and Human Resource for Industry Programme

- **TEA -** Total Entrepreneurial Activity
- VAT Value Added Tax
- **USA -** United States of America

## Keywords:

Business incubators, entrepreneurial skills, small and medium enterprises, entrepreneurship

#### **CHAPTER 1: INTRODUCTION**

#### 1.1. Introduction

Small and medium enterprises (SMEs) have been identified as engines of growth, as they contribute to substantial employment and economic welfare (Dey, 2012:1). A number of researchers have concluded that small and medium businesses make significant contributions to social development in promoting innovation and creativity, employment creation and economic development (Chetty, 2009; Mutambi, Byaruhanga, Trojer, & Buhwezi, 2010:190; Mmasi & Christine, 2012:2).

In acknowledging the contributions that SMEs make towards economic development, there is a need to promote and nurture these businesses in both local and external communities. The South African (SA) Government has embarked on a number of initiatives in support of SMEs, and a number of programmes are being implemented, such as the Small Enterprise Development Agency (SEDA); and amongst these are business incubators, including the Department of Trade and Industry (DTI) incubation support programme and the SEDA Technology Programme (STP) (Ndabeni, 2008:265-266; Neneh, 2012:3368). Business incubators (BIs) are organisations which are designed to grow and nurture small and medium sized businesses through the early stages to become self-sustainable (Schwartz & Hornych, 2008:437; Caleb, Olaopa & Siyanbola, 2012:173).

In order for business incubators to grow and nurture SMEs effectively, an entrepreneurial background and skills are required. The level of the business incubators' entrepreneurial ability and skills affects the contribution they make towards small and medium business development (Michelacci, 2003:207).

Entrepreneurship involves being creative, and coming up with new ways of managing resources whilst pursuing opportunities (Anderson, Dodd & Sarah, 2012:959-960). Hence, proper entrepreneurial skills determine the level of innovation, growth and success within a business (Shane, Locke & Collins, 2003:259).

These entrepreneurial and business skills are the engines for the success of the incubator. Amongst the most critical entrepreneurial skills required by business incubators are leadership skills, creativity and innovation. Hence, these skills should be taken seriously at all the stages of the entrepreneurial process in business incubators (Afolobi & Macheke, 2012).

#### 1.2. Background of the research problem

Berge and Norman (2008:854) noted that incubation has become a worldwide phenomenon and are viewed as a tool for promoting the development of technology-based growth firms and considerable amounts of money are invested in business incubators. Thus, business incubation is clearly a global initiative for the stimulation of SME creation, leading to entrepreneurship activities which drive economic growth.

Dba, Comm and Acc (2008:40) agree that the concept of business incubation originated in the United States of America (USA) in the 1960s as an initiative to support new SMEs in establishing and developing networks, management skills and markets for their products and services in a creative and innovative manner. Salem (2014:854) indicates that in both developed and developing countries research studies have shown that business incubation has achieved business policies which support economic development and sustainable economic growth. However, in developing countries, business incubators and small and medium enterprises (SMEs) still face barriers concerning innovation and creativity. This is further compounded by rising unemployment.

In the second quarter of 2013 the South African unemployment rate increased to 25.6% from 25.2% in the first quarter of 2013 (Ngidi & Hawes, 2013). According to Dey (2012), venturing into business is an important aspect in enhancing unemployment, and mostly entrepreneurs face two major obstacles when establishing start-ups: the lack of experience and a lack of motivation. In order to be successful, entrepreneurs need assistance from business incubators and other businesses within the same sector to allow for the transfer of knowledge and shared experience.

The aim of this study is to investigate the role business incubators play in facilitating the entrepreneurial skills requirements of SMEs that do not possess the necessary skills to sustain their entrepreneurial ventures.

#### 1.3. Statement of research problem

Previous researchers mention that business incubators in developing countries face a number of challenges concerning innovation and creativity. Notable challenges identified include: lack of venture capital; poor growth rate; lagging productivity; a lack of true entrepreneurship; and the public sector still looking for better governance (Stefanovic, Devedzic, & Eric, 2008; Hutabarat & Pandin, 2014). Business incubators often lack the necessary skills to fully contribute to SMEs' development (Akcomak, 2009:18). Concurring with this assertion, Lalkaka (2002:174) notes that the management staff of most business incubators do not come from an entrepreneurial background; this has resulted in business incubators failing to provide the adequate support required by SMEs.

Due to the lack of entrepreneurial skills, business incubators' role in entrepreneurial ventures is not being fully realised (Aernoudt, 2004:127; Peters, Rice & Sundararajan, 2004:84; Adegbite, 2001:164). This has resulted in most SMEs failing and being unable to sustain growth (Dba, et al. 2008).

The failure of SMEs impact negatively on their ability to contribute to economic growth and development. Consequently, many studies have been conducted to explore the impact of entrepreneurial and business skills in organisational success and development, with the focus on SMEs and not on business incubators (Pyysiainen, Anderson, McElwee & Vesala, 2006; Van Scheers & Radipere, 2007; Lesáková, 2012; Macheke & Smith, 2013; Salem, 2014). Although several studies have been done on BIs (Skaik, 2013; Patton, 2013), a research gap still exists in the area of the importance of entrepreneurial skills on the business incubator's success. In fact this study answers Mkala and Wanjau's (2013:25) call for research in this area. In the context of South Africa, although there has been a steady growth in the number of BI-related studies in recent years, the discourse is still one-sided with an emphasis on the needs and challenges of incubatees (Masutha & Rogerson, 2014.a; Choto et al., 2014). Specific attention is yet to be given to the entrepreneurial skills dynamics and challenges of business incubators, even though we unconditionally expect the best from them. The foregoing thus informs the research question that underpins this study.

#### 1.3.1. Research questions

The research questions investigated in this study are grouped into a main question and subquestions.

#### 1.3.1.1 Main question

• To what extent do business incubators facilitate the entrepreneurial skills requirements of SMEs in the CMA?

## 1.3.1.2 Sub-questions

- What are the entrepreneurial skills of business incubators?
- What are the entrepreneurial skills requirements of SMEs?
- What are the challenges faced by BIs in facilitating the entrepreneurial skills requirements of SMEs in the CMA?

## 1.4. Objectives of the research

The research objectives investigated in this study were grouped into primary and secondary objectives. The secondary objectives answer the primary objective of the study.

## 1.4.1. Primary objective

• To determine the extent to which business incubators facilitate the entrepreneurial skills requirements of SMEs in the CMA.

## 1.4.2. Secondary objectives

- To determine the entrepreneurial skills of business incubators.
- To determine the entrepreneurial skills required by SMEs in order to be successful.
- To determine the challenges that BIs face in providing entrepreneurial skills to SMEs in the CMA.

## 1.5. Delineation of the study

The main research focuses on the role of business incubators in nurturing SMEs in the CMA, South Africa.

The study was also based on SMEs at the exit stage for graduation and had completed the incubation programme offered by BIs in the CMA. This excluded SMEs outside the incubation programmes. Further studies should also focus on SMEs that are outside incubation programmes as they can also provide valuable information and interesting views regarding the incubation management expertise based on their previous experience and their role in nurturing SMEs. Unregistered businesses were not part of this study.

The research was further limited to business incubators in CMA that were registered on the database of an organisation called Traction. This organisation promotes and develops SMEs in the Western Cape. There were only five business incubators registered on this organisation's database during the course of the study. These business incubators included: Incubation Centres (ICs); Business Innovation Centres (BICs); Corporate Private Incubators (CPIs) and Independent Private Incubators (IPIs) within the CMA. The study was thus limited to the aforementioned, suggesting there is a need for further investigation in future to include all business incubators types as they might face a lack of entrepreneurial skills.

#### **1.6.** Significance of the research

The outcomes of this research suggest ways of improving business incubators skills in making a significant contribution towards SMEs growth that could minimise failure rate. Thus, the results may contribute towards economic growth and development.

The research may assist policy and decision makers in the following: To help decision makers to prioritise the benefits of entrepreneurship in a wide range of courses at academic institutions and to establish the entrepreneurial mind-set and skills required for starting new business startups. The study is important to SMEs and business incubators, given that it enforces the need to acquire entrepreneurial skills which in turn may improve the growth and survival rate of business ventures.

The outcomes of this research may also contribute to the relevant body of research knowledge on business incubation. Furthermore, the significance of the study lies in identifying specific entrepreneurial and business skills that are essential for the success of business incubators and in determining the effect of entrepreneurial skills on the performance of BIs and sustainability. Conducting this research will also be beneficial to BIs in overcoming the challenges faced by SMEs in the CMA. The importance of the study further lies in adopting a tool for the nurturing of SMEs and thereby achieving development in South Africa by enabling creativity and innovation as well as promoting entrepreneurship and reducing poverty.

#### 1.7. Research methodology

Research designed is a plan and structure of investigation to obtain answers to the research questions (Coopr & Schindler, 2011:147). This study utilised a mixed-method approach to collect data by way of interviews and questionnaires to gain in-depth knowledge and understanding of the role of business incubators in developing SMEs. A mixed-method uses both qualitative and quantitative approaches; this allows the use of interviews and questionnaires.

A qualitative research method entails discovering un-anticipated findings without depending on numerical measurements, and produces descriptive data obtained from interviews, questionnaires and participant observation in order to understand and describe specific social phenomena (Cooper & Schindler, 2011:151). Using a quantitative method, the researcher analyses data in numeric form and the required methods, which include surveys, preliminary investigations and questionnaires (Brynard & Hanekom, 2006:37).

#### 1.7.1. Population

The population is the total number of people that can be included in a study (Bertram & Christiansen, 2014:55). The population of this study was made up of all the business incubators and incubated SMEs that were identified from the database of Traction, with permission from the managing director.

#### 1.7.2. Sample

A sample is a sub-group of the population (2012:95). Burns & Burns (2008:181) define a sample as a portion of the population which represents the study objects (Burns & Burns, 2008:181). Singh, (2007:102) notes that there are two major methods of sampling, namely probability sampling and non-probability sampling methods. The sample for this study was drawn from the list of business incubators on Traction's database. Given there were only five business incubators on Traction's database, all business incubators were deemed suitable for interviews. A representative sample of SMEs on the incubation programmes offered by selected incubators were also drawn for participation; seventy questionnaires were distributed to incubatees. All 28 questionnaires returned qualified for data analysis and this amounts to a 40% response rate.

#### 1.7.3. Unit of analysis

Cooper and Schindler (2011:166) define a unit of analysis as the entity being studied and which the researcher decides how to analyses data of the study. For instance, people, groups or individuals could be a unit of analysis in a study. In this study, this unit of analysis comprised a group of individuals. These individuals included business incubation managers in the Cape metropolitan area and SMEs that were in the incubation programme during the timeframe of the research. Individual characteristics such as the number of years of SMEs in the incubation programme, education, gender, age etc were categorised in the research which outlines a picture of the groups of individuals that were being studied. Hence, this study was based on the business incubators operating in the Cape metropolitan area and SMEs on the exit stage of graduation.

#### 1.7.4. Data collection

The researcher utilised both qualitative and quantitative methods to collect data. The researcher employed structured and unstructured in-depth interviews which were carried out face-to-face with the respondents selected from both the BIs and incubated SMEs in the Cape metropolitan area. Thus the researcher made use of primary data and secondary data.

#### 1.7.4.1. Primary and Secondary data

When a researcher collects a first hand or new data collected for analysis is known as primary data (Burns & Burns, 2008:49; Brynard, Brynard & Hanekom, 2014:38). Secondary data refers to the data obtained from already published sources such as databases, any published information and dictionaries (Remenyi, Williams, Money & Swartz, 1998:289; Brynard, Hanekon and Brynard, 2014:38). In this study, the researcher utilised journals, previous theses, books and government reports, both online and in paper format, as sources of secondary data. And, questionnaires and interviews as sources of primary data. The researcher made use of original and existing sources of information in both primary and secondary data.

#### 1.7.5. Personal interviews

According to Zikmund, Babin, Carr & Griffin (2010:150) personal interview is a form of direct communication between two or more people in which an interviewer asks respondent questions face-to-face and a respondent answers questions. In-depth interviewing is considered to be an

excellent method of data collection, as personal discussion and a one-on-one interview discussion allows the researcher to get in-depth information that cannot be obtained in other ways. Personal interviews were conducted by the researcher with the business incubation managers in order to hear views from the parties involved.

#### 1.7.6. Questionnaires

The collection of data through questionnaires allows more participants than could be achieved through interviews in a similar time; it is not always dependent on the researcher to be present to get information, and respondents who complete the questionnaires can choose a suitable time to participate (Townsend, 2013:91). Given the list of business incubators and incubated SMEs with the contact details on the database of Traction, this study used a random sampling technique. For the purpose of this study, a survey questionnaire was used, which included both closed and open-ended questions. To complement data collection obtained from five (5) interviews, seventy (70) questionnaires were distributed to SMEs within the incubation programme on the exit stage of graduation in the CMA and 28 questionnaires were returned and all qualified for data analysis. This amounts to a 40% response rate.

#### 1.8. Prevention of bias

According to Rothstein (2006:3) bias happens when the research that has been done in an area differs from the results of all previous studies. In other words, bias occurs whenever the measurements tend to be systematically unrepresentative of the true population. To prevent bias, the researcher interviewed all the business incubators that were registered on the database of a local organisation called Traction. All incubated SMEs at the exist stage and those that had already graduated were deemed suitable to participate in the study.

#### 1.9. Data analysis

Mouton (2001:108) assert that data analysis is breaking up the data into manageable patterns, themes, connections and trends and to understand the various constitutive elements of the data through an inspection of the relationship between concepts and constructs to evaluate trends that can be identified or isolated.

The Statistical Package for the Social Sciences (SPSS) software was utilised to analyse the quantitative data, and qualitative data was analysed by means of content analysis. According to

Field (2009) SPSS software is a computer-based tool that can be used for analysing data and creating charts, graphs and the presentation of patterns.

## 1.10. Reliability and validity

Reliability is the test which produces similar results under constant conditions in all locations, and the measurement must be consistent (Bell, 2005:116). Validity refers to a design instrument with the potential of achieving and measuring what is supposed to be achieved when measuring (Brynard & Hanekom, 2006:47).

In order to ensure the reliability and viability of this study, a pilot study was conducted by the researcher to identify areas that could negatively impact on data collection and analysis. The pilot study provided feedback that allowed the researcher to adjust interview questions and questionnaires accordingly. Hence, this informed the designing of questionnaires to get maximum responses that were relevant to the research questions. After collecting data and analysing, the researcher reviewed the findings critically in order to detect any errors or bias.

## 1.11. Ethical considerations

According to Brynard & Hanekom (2006:6), ethical research requires that honesty and confidential information must be considered. The research was conducted in an ethically responsible manner. The writer sought permission from all parties, both the business incubators and the SMEs. Therefore, the participation of respondents was voluntary and they could opt out at any point during the study. Other conditions met included:

- The rules and regulations governing research at CPUT were adhered to and this further supports the ethical approach of the study. Satisfied that the relevant ethical considerations had been met, the Higher Degree Committee (HDC) at the Cape Peninsula University of Technology issued a certificate to that effect (see Appendix A).
- In addition, matters such as the anonymity of participants, confidentiality of data collected, and informed consent were followed in this research.

## 1.12. Organisation of the study

## Chapter One:

This chapter provides an introduction and background to the study, research problem statement, research questions, research objectives, delineation of the study, and the significance of the study as well as an overview of the research methodology.

#### Chapter Two:

Chapter Two addresses: the definition of entrepreneur and the concept of entrepreneurship; its importance; the incubator concept; the role of business incubators in South Africa; the challenges facing SMEs; entrepreneurial skills requirements; and the importance of entrepreneurial skills.

#### **Chapter Three:**

In this chapter the researcher deals with the research methodology that the study has utilised to collect and analyse data from respondents in the study.

#### **Chapter Four:**

Chapter Four presents and discusses the results of the quantitative data that was collected and analysed. The results are presented in the format of tables and charts.

#### **Chapter Five:**

Chapter five presents and discusses the results of the qualitative data that was collected and analysed. The results were presented in themes and sub-themes.

#### Chapter Six:

This chapter presents a conclusion to the study and recommendations for future research which are based on the research findings.

#### 1.13. Summary

This first chapter explains the key methods of the study. This includes: the introduction; the background to the problem followed by a statement of the research problem; lists of research questions; and the research objectives of the study; delineation; the research methodology employed; and the structure of the thesis. The next chapter provides a review of the literature on the concept of business incubators and SMEs, with relevant headings to the topic of the thesis.

#### **CHAPTER 2: LITERATURE REVIEW**

#### 2.1. Introduction

The foregoing chapter focused on the introduction to the study, the background to the research problem, the problem statement, research questions and the objectives of the study. The majority of the literature was examined in books, academic journals, and government online agencies via CPUT online academic articles and published thesis studies. Furthermore, the objectives of this research were to determine whether entrepreneurial skills, or the lack thereof, affect the performance of business incubators and determine the entrepreneurial skills required by SMEs in order to be successful. Furthermore, the challenges that BIs face in providing entrepreneurial skills to SMEs in CMA were investigated in order for the businesses to be successful.

Therefore, for this study, the literature will be reviewed under the following headings: definition of an entrepreneur and entrepreneurship; entrepreneurial skills; mind-set and the importance of entrepreneurial skills; incubator concept and background; the role of BIs; business incubation in South Africa and challenges faced by BIs; theoretical framework; SMEs in South Africa and challenges in South Africa.

#### 2.2. Entrepreneurs

Entrepreneurs are known as risk takers in offering products or services, implementers, identifying and developing new business ideas (Groenewald et al., 2006:2). An entrepreneur is defined as a person with the ability to identify business opportunities, who has the courage to utilise these opportunities for success and is able to manage these business opportunities to make a profit (Morrison, Rimmington & Williams, 1999:29).

Thus, in South Africa there is a need for creativity and innovation to develop new and improve existing products. Nieman and Nieuwenhuizen (2009:9) agree that an entrepreneur is a person who starts and manages a business for the purpose of gaining profits. Nieman and Nieuwenhuizen (2009) also point out that entrepreneurs have characteristics such as being innovators, having the ability to gather resources, taking risks, and striving for growth. In business development, for instance, the late Steve Jobs, a co-founder of Apple Computers in 1976, is an example of an entrepreneur as he built the company into a premier entrepreneurial firm (Barringer & Ireland, 2010:31).

For the purpose of this study, the selected definition is that of Venter, Urban & Rwigema (2009:6) who define an entrepreneur as someone who takes advantage of an opportunity and then gets together various resources to exploit these opportunities which will be able to produce a product or service. These authors also point out that an entrepreneur focuses on: recognising new business opportunities; starting their own businesses which practice creativity and innovation; organising and controlling resources to obtain profit; having a willingness to take calculated risks and gaining financial means.

In summary, an entrepreneur has various business characteristics, these being:

- A passion, love and commitment for business
- An internal locus of control
- o A risk taker
- A dedication to and belief in the business
- A strong desire to achieve access
- Known as an initiator and being responsible
- Asking for advice and recommendations
- o Having innovation and creativity, and
- Being willing to work hard and accept uncertainty (Co, Groenewald, Mitchell, Nayager, Zyl & Visser, 2007:47).

This study investigates the entrepreneurial skills requirements of an entrepreneur to develop his or her business. One can say an entrepreneur is a person who practises entrepreneurship.

#### 2.3. Entrepreneurship

There are many ways to define entrepreneurship, and definitions differ according to the interest and focus of the people providing them (Groenewald et al., 2006; Morrison, et al.1999:4). However, it is often said that in the field of entrepreneurship, definitions differ and entrepreneurship is a rare subject that attracts different researchers (Nieman, et al., 2003:9).

Goncalves (2003:13) defines entrepreneurship as the process and the ability of people to identify and to take advantage of opportunities in order to implement something tangible. According to Botha, Nieman and Vuuren (2006:2), entrepreneurship is the most important solution for poverty alleviating, low economic growth and unemployment in both developed and developing countries. The performance of entrepreneurs is based on starting a new business,

using a window of opportunity, and the development of a business idea into a realistic format (Ladzani & Vuuren, 2002:156). Entrepreneurship is more than just starting a business. "Although that is certainly an important fact, it is not the complete picture. The characteristics of seeking opportunities, taking risks beyond security, and having the tenacity to push an idea through to reality combine into a special perspective that permeates entrepreneurs" (Kuratko, 2004:3).

Furthermore, in the Organization for Economic Cooperation and Development (OECD) countries, network building, benchmarking and best practices are crucial for entrepreneurship development and sustainability (Aernoudt, 2004). However, the characteristics of sustainable entrepreneurship could be based on the following: investing in natural capital; a service business model; innovation and the increase of natural resource production with the knowledge, insight and capabilities to solve problems in the entrepreneurship process (Ravesteijn & Sjoer, 2012:1). In addition, traditionally entrepreneurship is highly considered as an economic function; ownership structure; size and the lifecycle of firms and the degree of entrepreneurship (Morrison et al., 1999:5). The researcher believes that innovation, spotting opportunities and contribution to economic growth is the common factor to all entrepreneurial activities. Therefore, one can say business incubators should promote entrepreneurial activities. The eexercising of entrepreneurial skills can enable incubated SMEs to develop and be sustainable. The figure below outlines the definition of entrepreneurship.

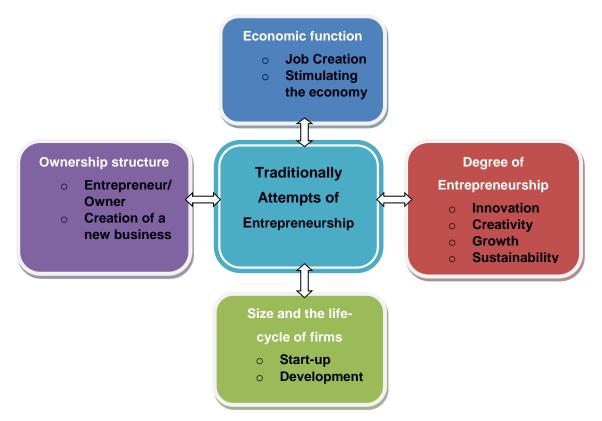


Figure 2.1. Definition of entrepreneurship (adapted and modified from Morrison, et al.1999:4-6)

#### 2.4. Entrepreneurial venture and small business venture definition

Entrepreneurial ventures are enterprises that have unlimited growth ambitions and are normally opportunity driven (Venter et al., 2009:8). Furthermore, the entrepreneurial venture has multiple and unique characteristics compared to small business ventures such as the potential for development, innovation and strategic objectives, where it involves market share development, sustainability, competitive advantage and positioning. Drawing from the foregoing characteristics, an entrepreneurial venture aims to operate on a bigger scale. The researcher believes that incubated entrepreneurs aim to develop their businesses on a big scale and are linked to entrepreneurial ventures due to creativity, innovation and growth.

Moreover, small-business ventures can be defined as businesses that have a limited scope of work operating within an established market and involve an establishing product or service (Venter, et al. 2009:9). The characteristics of small-business ventures that differentiate them from entrepreneurial ventures include annual turnover, full-time employees, they must be managed by the owner, and are characterised by gross asset values, excluding fixed property (Nieman & Nieuwenhuizen, 2009:10). Moreover, it is clear that small-business ventures operate

on a small scale compared to entrepreneurial ventured. Based on the distinction between an entrepreneurial venture and a small-business venture, the researcher believes there would be a difference in the skills requirement. Thus, the effect of these essential business management skills is determined by the potential for development and gaining a market share.

In addition, the benefits of both entrepreneurial and small-business ventures include the part that they play reducing unemployment and promoting entrepreneurship activities in South Africa (Venter et al., 2009:21). Lastly, the entrepreneurial skills required by these ventures should be fully realised by business incubators in order to reduce the failure rate, and stimulate poverty alleviation and the creation of employment. The entrepreneurial skills that are requirement for incubated entrepreneurs and business incubation managers are further discussed below.

#### 2.5. Entrepreneurial skills

Regardless of the size of the venture, entrepreneurs require a number of skills to make a success of these ventures. The skills that entrepreneurs require in developing and sustaining the business are technical skills, business management skills, entrepreneurship skills and personal entrepreneurial maturity skills (Chang & Rieple, 2013:227). Technical skills are defined as the ability to use knowledge with techniques such as the knowledge of accountancy, engineering and communication (Smit, Cronje, Brevis & Vrba, 2007:17). The researcher believes that business management skills also include management skills such as planning, organising, leading and controlling. Therefore, these notable skills have a common influence in facilitating entrepreneurial skills and activities. Hence, the general entrepreneurial skills that are likely to inhibit both business incubators and incubatees in South Africa are outlined below. Thus the role of a business incubator in nurturing SMEs is crucial for business development and sustainability.

#### 2.5.1. Process skills

Process skills consist of the ability to plan and organise, the ability to analyse tasks, evaluate and the ability to execute a plan. These skills are essential for both business incubators and incubated SMEs leading to business growth and economic development (Panikar & Washington, 2011:29). Moreover, continual processes and creative thinking form part of development and innovation in an organisation (Nieman & Nieuwenhuizen, 2009:32). Therefore, one can say that facilitating these required skills may lead to creativity and innovation in the

business. Thus, in achieving the business incubator's goal and objective, the above process skills are prioritised by management and directors.

#### 2.5.2. Personal skills

Personal skills include innovation, initiative, risk-taking, and the ability to deal with the unknown with ease, accepting challenges, taking responsibility and seeking opportunities in change. Smits et al. (20007:300) agree that people have different qualities and personalities, and it essential for managers to have knowledge and understanding of the different personalities of their employees. Kirby (2002) and Timmons and Spinelli (2007) in Ndedi (2009:468) also suggest that having a set of personal skills is characterised as an important factor for a successful entrepreneur; thus these are a notable quality and performance that go beyond chasing profit. These writers also concur that personal entrepreneurial skills are important attributes for the development of enterprises. One may say that the foregoing enforces the need for incubators to possess entrepreneurial skills that can be transferred to incubated SMEs.

#### 2.5.3. Interpersonal skills

Interpersonal skills entail interacting with others effectively; communicating effectively, negotiating, influencing and demonstrating leadership (Pyysiainen, et al. 2006:24). The ability and expertise in performing such skills in business incubation will result in delivering the service and performing entrepreneurship activities. In summary, interpersonal skills are mostly regarded as important for the following reasons:

- The ability to work as team
- Leading people
- Effective communication
- Understanding people's behaviour
- Motivating people
- Problem solving and
- Resolving conflicts (Smit et al., 2007:17).

Drawing from the above explanations, the researcher believes that the character of a successful manager may include flexibility, leadership and an entrepreneurial mindset.

#### 2.6. Entrepreneurial mind-set

An entrepreneurial mind-set is the ability to sense, act and mobilise under uncertain conditions (Haynie, Shepherd, Mosakowski & Earley, 2010:217). The entrepreneurial mindset is vital for business success, as relevant skills for the growth of a business are not enough. It requires an entrepreneurial mindset from leaders of an organisation to identify factors which are lacking or need improvement in order to accelerate entrepreneurial success (Neneh, 2012:3364). Depicting from the foregoing entrepreneurial mindset characteristics, one can say that aiming for a balance and a set of multiple skills in the business is vital for business development, imagination and achieving unique selling propositions.

Furthermore, as business ventures differ in size, type and structure, a large organisation usually has the following specialist roles within, and these are tabulated below.

Skills and roles needed for business development		
System Analyst Guru	Information Technology Consultant	
Facility Manager	Human Resource Manager	
Financial Administrator	Property and Estate Controller	
Supply Chain Practitioner	Sales and Marketing Administrator	
Publicity and Public Relations Officer	Quality Specialist	
Purchasing Administrator	Technical Engineer	
Training Officer	Operations Planning and Forecasting Manager	

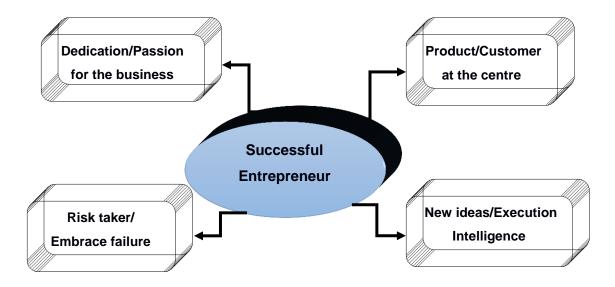
#### Table 2.1 Specialist roles found within larger organisations

Source: Morrison, et al. (1999:125)

#### 2.7. The importance of entrepreneurial skills

Venter, et al. (2009:21) claim that all small- and medium-sized enterprises are entrepreneurial ventures that seek growth and sustainability. Thus, SMEs contribute to the economic growth by creating jobs in South Africa. Macheke and Smith (2013:2003) acknowledge that a lack of business and entrepreneurial skills affects the growth and delivery of a company, with a lack of skills possibly resulting in a company's downfall. Therefore sustainability, delivery and expansion of the business incubator depend on entrepreneurial and management skills.

Afolabi and Macheke (2012:239) claim that to boost business performance and innovation, it is vital to have all the essential and entrepreneurial skills. Therefore the researcher believes that the common reason for having entrepreneurial skills in a business is to be able to grow and manage well. Thus, in order for the business incubator to be sustainable and to develop, entrepreneurial skills are a need. The figure and table below outline influences that result in entrepreneurial skills.



# Figure 2.2 Characteristics of successful entrepreneurs (adapted and modified from Barringer and Ireland (2010:33)).

The table below illustrates the qualities of a successful entrepreneur.

#### Table 2.2 The characteristics of a successful entrepreneur

Pragmatic			
<ul> <li>Dedication and passion for the business</li> </ul>	One of the characteristics of being a successful entrepreneur is doing something you love and enjoy. Successful entrepreneurs are go-getters and problem solvers.		
Product/service and customers at the centre	One of the important aspects of being an entrepreneur is they make the world a better		

	place. By focusing mostly on developing and improving new products, the entrepreneur turned to being successful thorough satisfying customers.
Commitments and Achievements	
Risk taker and embrace failure	An entrepreneur is creative and innovative, looks for efficiency and effectiveness in business. Entrepreneurs look for window opportunities and act on starting new ventures. Commonly known as go-getters.
New ideas and execution intelligence	One of the entrepreneurial philosophies is the need for independency and recognising the importance of networking. Planning, leading, controlling and managing good business relations are the key success factor in entrepreneurship.
Attributes of a successful entrepreneur	

Adopted from Nieman and Nieuwenhuizen (2009:32).

## 2.8. What are business incubators?

The historical view of the business incubation is outlined under the following sub-themes: the incubation concept and the role of business incubators.

## 2.8.1. The incubation concept

The concept of BIs has evolved over the last 50 years (Mutambi, et al. 2010:5). The first incubator was established in 1959 in Batavia, New York, in the United States, but until the 1970s the concept was unique and the aim was to support start-up companies that needed guidance and venture capital to get their ideas off the ground (Wiggins & Gibson, 2003; Hackett & Dolts, 2004; Lesakova, 2012). The term incubator was derived from the basic meaning of the term nurturing, particularly of a chicken's egg, in order to emerge faster in a protected environment

Adegbite (2001:157) defines the concept of business incubation as a method of creating new small business by providing and nurturing SMEs in the following range of services:

- Space in fully built-up factory buildings on flexible and affordable terms.
- The provision of a comprehensive range of common services, including enterprise counselling and training, shared secretarial support, start-up financing and assistance with product development and marketing.
- Strict admission and exit rules, which are designed to ensure that the incubator concentrates its efforts on helping innovative, fast-growth business start-ups that are likely to have a significant impact on the local economy. Exit rules generally limit tenancy to a period of between three to five years, thereby ensuring a reasonable turnover of tenants.
- Hands-on assistance, including research and development (R&D), advice and risk capital, usually through a network of external providers.
- Professional management, which involves monitoring tenant businesses closely against their business plans, and ensuring that the incubator itself operates in a business-like fashion with the prospect of becoming financially self-sustaining (Scaramuzzi, 2002:5; Mutambi et al., 2010:5; Ndabeni, 2008:262; Rice, 2002:170 Schwartz & Hornych, 2008:439). Therefore, the incubation concepts seek efficient and effective means to link entrepreneurial talent and to accelerate growth in new emerging businesses (Grimaldi & Grandi, 2005; SEDA:Imbadu, 2013:3).

#### 2.8.2. The role of business incubators

Lesakova (2012: 86) argues that the main aim of business incubators is to promote the creation and growth of enterprises, with the understanding that this will lead to job creation and economic development. Thus the drive behind the incubation process is to increase the standard of living for everyone who lives in the area and surrounding geographical areas.

Theoretically the business incubator can be seen as guidance to new organisations, the main aim of which is hatching (Bergek & Norman, 2008:20). Historically, business incubators originated in western countries in the twentieth century to minimise SMEs failure rate and unemployment. Therefore, the same 'hatching' idea is applied to the incubating of small companies to speed up new-venture establishments and increase their chances of success. In support of this view, Lalkaka and Shaffer (1999:4) identify the role and objective of incubators as helping to promote venture creation and developing the economy by nurturing entrepreneurs through providing various services. However, these studies also point out that incubator performance can be evaluated against objectives and goals.

In summary, the role of business incubators is mostly regarded as important to beneficiaries and incubators should include:

- Generating employment in the incubator measured at the end of three years.
- SMEs created by the incubator and improvement of survival failure rates for existing and new enterprises through the measurement of SMEs incubated.
- Encouraging private and public investment opportunities and young entrepreneurship with graduates to create new technologies, products/services and their own businesses in the incubation programmes.
- Research and commercialising ideas through universities by developing companies at the incubator, a measured acceleration of new industry sectors and the diversification of projects in relation to economic activity.
- Networking and the establishment of export and import opportunities.
- Entrepreneurial activities though creativity and innovation with both SMEs and business incubators (Lalkaka & Abetti, 1999:204; Ndabeni, 2008:262; and Mutambi et al., 2010:5).

Therefore, noting the significance played by business incubators, it is important to discuss their role in South Africa.

# 2.9. Business incubation in South Africa

According to Ndabeni (2008:263), the concept of business incubation is fairly recent in developing countries and is still developing in South Africa. Therefore, in the context of this research, a business incubator is described as an organisation that facilitates and provides a protected environment to new, early and exit stage businesses by providing a comprehensive range of shared services and enterprise-development assistance. However, this writer notes that the definition of business incubation as noted in the literature is still limited in South Africa and this shows that business incubation in the country is still developing.

Ndedi (2009:468) mentions that one of the elements needed for an effective and efficient business incubator is the involvement of other institutions in the effort to minimise SMEs' failure

rate and unemployment. Ndedi further explains that the development of business incubators within high-learning institutions with the objective of linking theoretical knowledge to practical experience has positive effects. The researcher believes that partnership and collaboration is the common factor that an incubator should have to fully contribute in developing incubated SMEs.

Mbewana (2005), in Cullen, Calitz & Chandler (2014:80), agree that the practice of business incubation in South Africa started in 1995 when the Small Business Development Corporation (SBDC) established a similar concept that was known as the hives of industry. These hives referred to a number of work stations that were gathered together to form a cluster of workshops that were created to bridge major economic obstacles in South Africa. However, although the hives played a key role in facilitating business skills and required resources between large and small companies, they were not known as incubators because there was no time period for a company to move out of the hive's programmes. There are numbers of factors that can drive an incubator to success and sustainability in South Africa (Ndadeni, 2014:263).

Ndabeni (2014) highlights four contributing factors to the success of business incubators in South Africa namely, financial sustainability; creativity with innovation; legal policy framework; and convenience or accessibility to incubated SMEs. The figure below summarises influences that result in the incubation sector.

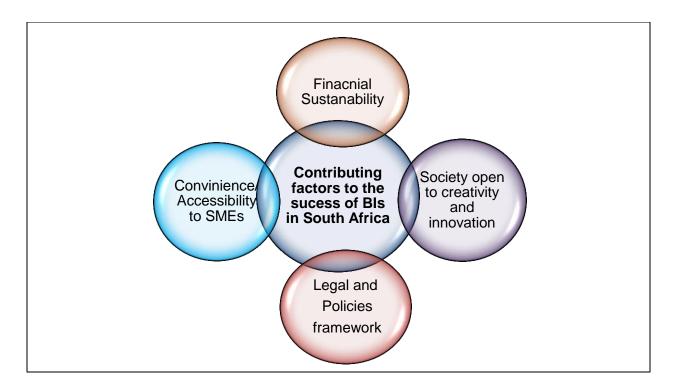


Figure 2.3. Factors contributing to the success of business incubators (adopted and modified from Ndabeni (2014:264)).

Currently the South African business landscape is characterised by two incubation drives, namely technology centres and business incubation. Both have been established with the main purpose of stimulating economic development, particularly in the high technology small- and medium-enterprise sector (Ndabeni, 2008: 264). Additionally, black-owned small and medium enterprises in South Africa are a high priority area for development, upgrade and growth due to post-apartheid reconstruction (Rogerson & Rogerson, 1996:33).

Furthermore, Cullen et al. (2014:81) agree that business incubators give support to small, micro and medium businesses through business-development stages and processes that are mainly to enhance technology, entrepreneurship innovation, the sustainability and the growth of entrepreneurial enterprises that will contribute to the social welfare of the country, economic growth and job creation. Therefore the South African Government, under the leadership of the Department of Trade and Industry's SEDA Technology Programme (STP), has approximately 42 business incubators operating nationally (SEDA:Imbadu, 2013:3; SEDA, 2014; and DTI: 2014). In addition, these government agencies have the mandate and objective to empower business incubators and incubation centres. Namely, sponsoring financial assistance and advanced technological facilities (prototype) to BIs; and encouraging private business

partnership with government to maintain the support of BIs (Baloyi, 2008, in Cullen et al., 2014:80). Therefore, the awareness of business-support initiatives among incubated entrepreneurs would likely improve their chances of making use of such entrepreneurial support.

#### 2.10. Awareness of entrepreneurial support initiative

According to Nieman and Nieuwenhuizen (2009:128) there are many sources for gaining knowledge and relevant information, as most cases receive assistance through government agencies and departments such as: SEDA; the DTI; the South African Bureau of Standards (SABS); the South African Revenue Service (SARS); local, provincial and national SME desks; educational and financial institutions; and venture capital fund organisations. With the use of technological advancement all these platforms are available online on the Internet.

Nieman and Nieuwenhuizen (2009) point out that such services are provided to formally register businesses that meet the minimum and legal requirements of South African Government agencies such as SARS to obtain value added tax (VAT) and tax clearance certificates; the Companies and Intellectual Property Commission (CIPC) to obtain intellectual property (IP); the Department of Labour for unemployment insurance and compensation for occupational injuries and Diseases Fund. Despite such support programmes from the South African Government, a lack of awareness and inaccessibility are still major barriers to entrepreneurship development in Western Cape communities (Gwija, Eke & Iwu, 2014:10).

### 2.11. Challenges of business incubators in South Africa

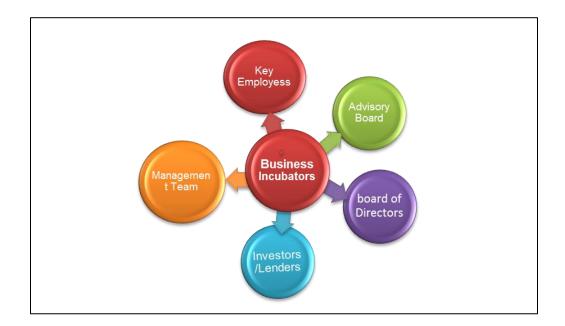
Peters, et al. (2004) and Adegbite (2007) argue in support of this study that business incubators, like any type of business, face numerous challenges. The current study illustrates the challenges of business incubators in South Africa under the following sub-headings: access to entrepreneurial management; lack of entrepreneurial skills; sustainability; access to advanced technology-based facilities; and access to funding and sponsors.

#### 2.11.1. Access to entrepreneurial management

According to Cullen et al. (2014:83), selection and attraction of adequately skilled professionals to manage business functions is a critical factor to the success of every business incubator.

These researchers also point out that, without qualified and experienced subordinates, the entrepreneurial venture will experience difficulties in being sustainable and delivering.

Nieman and Nieuwenhuizen (2009:37) agree that one of the greatest assets of any organisation to be productive and gain continuous growth is the human resource. Hence it is very important for the incubator manager to provide creativity and innovation within the business incubation functions (Rice, 2002:175). Thus the provision of management direction, technical support and a consulting style to a new developing enterprise is critical to the business incubator (Ndedi, 2009:468). In addition to the above discussion, one can say investing in human capital will enable business incubation to deliver and reach its target. The researcher believes that a business structure is common to all business incubators. Figure 2.2 below demonstrates the business incubator model.



#### Figure 2.4. Business incubator structure model (adapted and modified from Morrison, et al (1999).

Scaramuzzi (2002:27) suggests that in order for business incubators to gain long partnerships and sustainability the incubator should consider key strategic planning such as:

o Better governance; an incubator should create a board to govern incubator activities

- Experienced and knowledgeable staff members
- The management team of the incubator should consist of a director and few permanent staff, depending on the number of incubatees
- The attraction of investors and sponsors, and public and private stakeholders.

In summary, business incubators in South Africa have a structure model, similar to the above, to manage incubators effectively such as hiring entrepreneurial management and having access to funding and sponsors.

# 2.11.2. Lack of entrepreneurial skills

At times entrepreneurial ventures lack entrepreneurial skills and have limited technical skills, are inflexible and have insufficient experience as well as poor quality management; these are among the factors that could lead to business failure (Morrison et al., 1999:150). These intellectuals add that a lot of entrepreneurial ventures do not pay much attention to efficiency and financial education. Grimaldi and Grandi (2005:116) point out that very often the management team within the business incubator does not have the required financial and managerial skills to be able to run the incubator to achieve its mission.

Lalkaka (2002:174) argues that the inability of business incubators to deliver, because there is no managerial control owing to an absence of a managerial entrepreneurial background, has resulted in business incubators failing to deliver the adequate support required by small, micro and medium enterprises. Furthermore, they mention that business incubators in developing countries face a number of challenges concerning innovation and creativity, and South Africa is included. Thus, Sand rock (2011), in Gwija, et al. (2014:12), suggest that the South African education system, which includes high school learners and graduates from higher learning, should teach entrepreneurial skills in order to create more employment rather than more job seekers. Lastly, the researcher believes that with the use of entrepreneurial skills both business incubators and incubated entrepreneurs will gain development and sustainability.

# 2.11.3. Sustainability

The lack of growth and sustainability of business incubation managers are among the main challenges that could lead to business incubators not delivering and reaching their objectives (Scaramuzzi, 2002:28). This researcher adds that the ability of the business incubator manager

is measured based on his/her capability to rise funding, employ qualified people and the resource to run the incubator efficiently and effectively

Hence, this negatively affects the primary aim of the incubator because normally the rental and provision of space is not able to cover all the costs of the business incubator (Scaramuzi, 2002:28). Thus, for a business incubator to be sustainable it is very important for management to look for partnerships and shareholders that can provide financial support and enable the incubator to be sustainable. Hence, sustainability is the ability to achieve continual improvement and obtain a positive cash flow in the near future for partnerships and stakeholders (Lalkaka & Shaffer, 1999:11). Therefore, in gaining continued improvement and sustainability, incubated SMEs should also have access to advanced technology-based facilities.

### 2.11.4. Access to technology-based facilities

According to Caleb et al. (2012:172), businesses have limited access to technology-based facilities and have difficulty in gaining access to intangible and tangible resources. Ndedi, (2009:467) suggests that "these incubators must also provide to potential youth entrepreneurs information on appropriate space and flexible leases existing in the market, shared basic business services and equipment, technology support services and assistance in obtaining the financing necessary for company sustainable growth." Hence, the lack of technology-based incubators cannot meet SMEs' needs. However, although incubated SMEs will require advanced facilities for innovation, access to funding and sponsorship remains a challenge for business incubators in South Africa.

#### 2.11.5. Access to funding and sponsorship

The ability of good management in the business incubator is measured in relation to attracting sponsors, raising funds and mobilising resources that could be utilised to better the incubator business model in servicing incubatees (Scaramuzzi, 2002:28). This researcher concurs that in developing countries, in particular, business incubation still revolves around public support and international linkages are needed during the first year of operation. Grimaldi and Grandi (2005:115) mention that public business incubators are non-profit organisations; hence they normally get financial incubation through government agencies and receive standard fees from incubatees.

However, these researchers agree that private business incubators usually do not get sponsorships and funds from public funding. According to Lalkaka and Shaffer (1999:17) the main sponsor needs to buy into the business incubator's mission and objectives by analysing the incubator performance, purpose, idea behind the goal and overall incubator strategy. As business incubators increase both in developed and developing countries, the next generation of incubators is expected to be profit-driven organisations and specialise in a specific sector environment (Akcomak, 2009:7). This research also states that the idea of a profit-driven incubator is associated with the market failure perception and entrepreneurial ventures are facing challenges to obtain funding from sponsors.

Lastly, it is clear from the above sub-headings that, just like any other business, business incubators face a number of challenges and the understanding of why entrepreneurs enrol in the incubation process should not be ignored.

### 2.12. The theoretical framework that underpins the study

There are many theories that attempt to describe the reasons why people join incubation programmes to become entrepreneurs. Choto et al. (2014:95) identify two distinct reasons why people venture into entrepreneurial activities: mainly for the drive of sustaining family needs and employment. Nieman and Niewenhuizen (2009:34) also identify various key forces to evaluate what could drive an individual to become an entrepreneur. One can say lack of entrepreneurial skills may influence these forces. For the purpose of this study, the selected theoretical framework is that of Nieman and Niewenhuizen (2009) and these forces are outlined below as pull opportunity factors and push necessity factors.

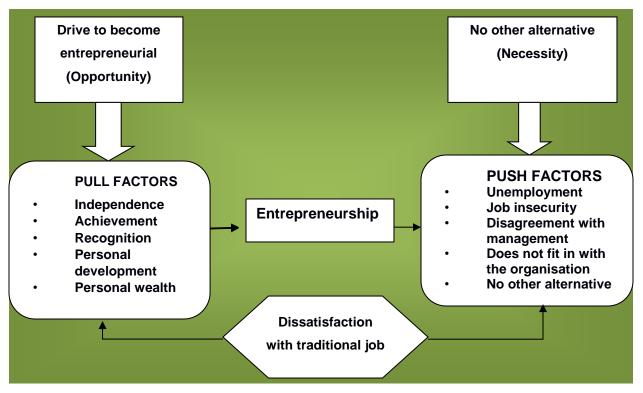


Figure: 2.5. The push and pull factors of entrepreneurship (adopted and modified from Nieman & Niewenhuizen, 2009:34).

### 2.12.1. Pull factors as opportunity

The pull factor in relation to opportunity-based entrepreneurship (OBE) relates to the independence of being your own boss; the financial freedom of entrepreneurship; the sense of achievement; the drive and desire to change the world through entrepreneurship; and freedom of creativity and innovation are factors that encourage individuals to become entrepreneurs according to Co, et al. (2007:23). Furthermore, Nieman and Niewenhuizen (2009:35) also agree that pull forces to become an entrepreneur are related to opportunities such as the following: independence of doing something they enjoy and the feeling of working for yourself; achievement in running and managing a sustainable enterprise; recognition in gaining social standards and poverty reduction within the community; personal development through practising innovative and creative ideas without limitation and personal wealth by gaining financial freedom through the practice of entrepreneurship. The researcher believes that independence, sense of achievement and innovation are the common factor to all entrepreneural activities. Therefore one can say that incubated entrepreneurs might be pulled to join the incubation programmes and others might be pushed.

#### 2.12.2. Push factor as necessity

The push factors refer to entrepreneurs with no options other than joining the incubator and start the business. The necessity-based entrepreneurship (NBE) is an entrepreneur that entered the market place due to the lack of employment and they had no other way to survive than to venture into entrepreneurial activity (Co et al., 2007:27). Moreover, Nieman and Niewenhuizen (2009:34) concur that, to become an entrepreneur, push factors are linked to necessities such as: unemployment with no job opportunities and being out of the working class within the established economy; job security being employed on a contractual basis with no work benefits; disagreement with directorates and management on the operation of the organisation which might be career limiting; not being able to fit within the organisation in striving for personal creativity and innovation; organisations may offer limited financial rewards and benefits and mainly having no other choice of work. According to the researcher, unemployment is the common characteristic in the push factor that incubatees start enrolling in the process of incubation and it is clear that some of the incubated are being pushed.

In summary Co et al. (2007:27) point out that total entrepreneurial activity (TEA) measurement is presented as an equation such as below:

TEA = OBE+NBE. However, some entrepreneurs are driven by opportunity push factors and necessity pull factors (Nieman & Niewenhuizen, 2009:42).

For the purpose of this study, it is important to explore SMEs in the South African context and the characteristics of SMEs.

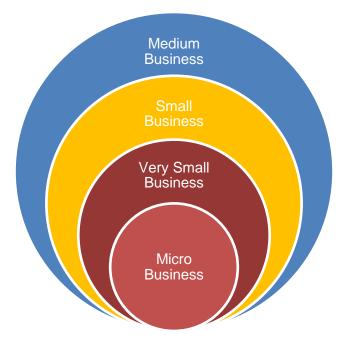
#### 2.13. SMEs in the South African context

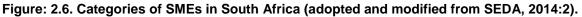
Sawers, Pretorius and Oerlemans (2008:171) claim that close to 50% of the country's Gross Domestic Product (GDP) is dominated by small and medium enterprises; however, large companies dominate the size of formal employment. The Gauteng Province contributes up to 38% of all small, micro and medium business in South Africa (Urban & Naido, 2012:147). In support of this notion, in both developed and developing countries small and medium businesses determine the growth rate of the country's economic activities through the practice of entrepreneurship (Nieman & Nieuwenhuizen, 2009:4). Both large and small companies are significant for uplifting GDP.

SMEs aid economic growth, the industrial development of nations, economic competitiveness, income-generation opportunities, the social welfare of the country, the promotion of entrepreneurship activities, and enhance international trade and exports (Mutambi, et al. 2010:1; Rootman & Kruger, 2010:107). Therefore, small and medium businesses are more significant and imperative for entrepreneurs, society at large and the country's economy (Barringer & Ireland, 2006). However, the SME failure rate in South Africa is still too high; small and medium enterprises fail during the first few years in business (Nieman & Nieuwenhuizen, 2009:35).

Rootman and Kruger (2010:109) add that "the difficult economic conditions pose an even larger challenge to SMEs, namely the struggle to survive among competitive business industries. Higher inflation rates accompanied by higher interest rates in a time of economic turmoil make it difficult for SMEs to meet their financial obligations. During such times, SMEs need to identify focus areas in their firms to improve business performance, such as their functions."

Scaramuzzi (2002:4) points out that one of the famous mechanisms employed to grow, nurture and develop small, micro and medium businesses for more than 20 years is business incubators; they assist entrepreneurs to start and develop firms by creating more job opportunities and increasing GDP. The researcher believes that incubating SMEs leads to the creation of employment and innovation, resulting in the growth of the South African economy. This writer further points out that SMEs' role in both developing and developed countries demonstrates development and growth, and private and public authorities have been playing a key role in SMEs programmes, incentives, policies and instruments which nurture and support small firms. In noting the classification of the SMEs' characteristics in South Africa, the figure below depicts the categories of SMEs in South Africa.





# 2.13.1. SMMEs definition categories

The sub-headings below outline the different categories of SMMEs in South Africa. These include micro enterprises; very small businesses, small businesses and medium businesses.

### 2.13.1.1. Micro enterprises

In South Africa, SMME definitions differ from industry to industry. Therefore, in the context of this research, micro enterprises are described as any firm that employs close to five people and has very limited entrepreneurial skills; it normally seeks start-up funding (SEDA, 2014). In addition, most of these entrepreneurial ventures lack formal registration and usually the owner is running the business. One can say that micro enterprises have a smaller labour force than any business and they are followed by very small enterprises.

### 2.13.1.2. Very small enterprises

Very small businesses are categorised as businesses employing fewer than ten people but are limited to twenty employees; they have constraints of technical skills and business kills (Cupido, 2002:32; SEDA, 2014). In South Africa, very small businesses mostly operate formally and are one of the types of business that are very common. The researcher believes that a limitation of twenty subordinates is the common number in this enterprise compared to small enterprises.

#### 2.13.1.3. Small enterprises

A small business is generally defined as having between 21 to fifty employees; they have developed entrepreneurial skills and have partnerships with networks (SEDA, 2014). Furthermore, small enterprises are normally managed and controlled by the owner. According to Cupido (2002:33), small enterprises in South Africa are very complex and they usually require financial injections and have developed new management structures to accumulate assets and credit. It is clear that small business employs more people than micro and very small enterprises, and employs fewer than medium business.

#### 2.13.1.4. Medium enterprises

These enterprises employ more than other businesses; medium business are defined as having between 51 to two-hundred employees, growth, financial expansion and developed business kills (SEDA, 2014). However, these businesses still have the power to access funding due to the accumulation of resources and turnover power.

Drawing from the above explanation, the common differentiation between these types of businesses is the number of people that the business can employ and state registration. However, they all face a number of challenges in fully contributing to the South African economy.

#### 2.14. Challenges of SMMEs in South Africa

The apartheid rules and regulations in South Africa have negatively divided the country's economy, with SMEs being the major victim, and have disadvantaged particular designated groups (Ponelis & Britz, no date). Hence, the new South African Government has introduced a number of programmes and technology centres such as the Support Programme for Industrial Innovation (SPII), Technology and Human Resource for Industry Programme (THRIP), SEDA Technology Programme (STP), Entrepreneurship in Schools Programmes, Enterprise Development Centres (EDCs) and Incubation Support Programme (ISP) in an attempt to address SMEs' challenges in South Africa (SEDA:Imbadu, 2013:2-5). Despite their critical contribution to job creation, poverty reduction and social welfare, most new small and medium enterprises fail to sustain growth; their failure rate in South Africa is up 75%, one of the highest in the world, and they are faced with many challenges (Barringer & Ireland, 2010; Olawale & Garwe (2010:729).

Urban and Naidoo (2012:147) identify the lack of managerial skills as the main obstacle faced by SMEs; managerial skills are critical for entrepreneurial success. Similarly, Abor and Quartey (2010) concur that the development of small and medium enterprises in South Africa is largely faced by a number of challenges, not limited to:

- Limited entrepreneurial skills to sustain the business
- Lack of access to appropriate technology
- Access to resources
- Limited access to international markets and the existence of laws, regulations and rules that impede the development of the sector; and
- Unsteady institutional capacity, lack of management skills and training, and most importantly finance.

According to Nieman (1999), in Nieman and Nieuwenhuizen (2009:35), in South Africa start-up businesses have a high rate of failing in their first and second year in operation due to a lack of proper skills requirements. However, research reveals that in South Africa the failure rate of small, micro and medium sized enterprises could be minimised by entrepreneurs and administrators through the adaptation of business functions within the company; these functions include managerial and entrepreneurial skills (Rootma & Kruger, 2010:107). Therefore, the main aim of business incubators is to provide and minimise SMEs' challenges listed in this research. Thus, it could be considered and regarded as a remedy for the advantage for small, micro and medium enterprises by providing large numbers of business-support services.

### 2.14.1. Crime

Crime and corruption in South African still remain high. The Global Entrepreneurship Monitor (GEM) report (2010:21) states that South Africa is ranked 137<sup>th</sup> out of 139 countries in terms of the high rate of crime faced by small, micro and medium businesses. The GEM report (2010) also mentions that crime statistics in 2009 reported more than 70% of business robbery icidents were targeted at SMEs; hence South Africa was ranked the third most unfavourable country to do business with. However, this could have a negative impact on entrepreneurs when spending more money and resources to prevent crime and increase security within business premises.

#### 2.15. Summary

This chapter reviewed the existing literature and determine the entrepreneurial skills of business incubators, or lack thereof, affect the performance of business incubators, and determined the entrepreneurial skills required by SMEs in order to be successful. In addition, the challenges that BIs face in providing entrepreneurial skills to SMEs worldwide was noted in the hope that this would provide valuable insights into the South African context in general and the Cape metropolitan area in particular.

The chapter was presented in main and sub-headings. The first main theme, entrepreneur and entrepreneurship, was discussed. The difference between entrepreneurial venture and business venture was also discussed. Moreover, the entrepreneurial skills required by both incubated SMEs and business incubators with entrepreneurial mind-sets were further examined. Further discussed was the importance of facilitating entrepreneurial skills for incubated businesses. The historical view of business incubation was scrutinised under the following sub-themes: the incubation concept and the role of business incubators. And the role of business incubators in South Africa was also discussed. Further examined was the awareness of entrepreneurial support activities. Challenges of business incubators in South Africa includes access to entrepreneurial management, lack of entrepreneurial skills, sustainability, access to advanced technology-based facilities, access to funding and sponsors. Pull and push theoretical framework factors were presented, and SME characteristics were discussed. Lastly, other challenges which were addressed were SMEs in South Africa; this included the lack of business management skills, access to resources and crime.

Overall, the role of business incubators and SMEs makes a valuable contribution to the economy and employment; thus these were described in the study. Hence, the South African Government has introduced a number of incubation programmes and appears to have established a small business ministry which resulted in the establishment of interventions to tackle SMEs' failure and encourages young people in high learning institutions to study entrepreneurship. The next chapter focuses on the research design and methodology employed in this study.

## **CHAPTER 3: RESEARCH METHODOLOGY**

#### 3.1. Introduction

The previous chapter discussed the literature of the study. This chapter explains the research methodology that was utilised to comprehend this study objective, including the research population, data collection techniques, data analysis and ethical consideration. The main aim of this chapter is to describe the methodology that was used in this study.

The objective of this study is to determine the extent to which business incubators facilitate the entrepreneurial skills requirements of SMEs in the CMA. As elaborated further, this study uses both qualitative and quantitative statistical methods. The population of the study consisted of business incubators operating in the Cape metropolitan area, both private and public incubators that were registered on the database of Traction during the course of the investigation and SMEs in the incubation programmes of these BIs that were on the graduation phase. The Statistical Package for the Social Sciences (SPSS) software was utilised to analyse the quantitative data and qualitative data was analysed by means of content analysis; the results were presented in the format of tables and charts.

### 3.2. Research design and methodology

Cooper and Schindler (2011:147) define research design as the plan and structure of investigation to obtain answers to the research questions. For the purpose of this research the study utilised a mixed-method approach to collect data by way of interviews and questionnaires to gain in-depth knowledge and understanding of the role of business incubators in developing SMEs. Moreover, a mixed-method uses both qualitative and quantitative approaches; this allows the use of interviews and questionnaires. Hence, these methods are the most common in research designs.

Using a quantitative method, the researcher analyses data in numeric form and the required methods, which include surveys, preliminary investigations and questionnaires (Brynard & Hanekom, 2006:37). A qualitative research method entails discovering un-anticipated findings without depending on numerical measurements, and produces descriptive data obtained from interviews, questionnaires and participant observation in order to understand and describe specific social phenomena (Cooper & Schindler, 2011:151).

### 3.2.1. Population

The population of this study was made up of all the business incubators and incubated SMEs that were identified from the database of Traction, with permission from the managing director.

## 3.2.2. Sample

A sub-group of the population is known as a sample (Salkind, 2012:95). In other words, a sample refers to a portion of the population which represents the study objects (Burns & Burns, 2008:181). Singh, (2007:102) notes that there are two major methods of sampling, namely probability sampling and non-probability sampling methods.

While probability sampling permits the researcher to estimate the expected error in the study and avoids bias in the selection process (Babbie & Maxfield, 2014:222), non-probability sampling ensures that the selection of participants is easy, although more prone to bias (Fozano & Gravetter, 2011:154). In avoiding the bias associated with sampling in the study, the whole population (five) was studied. The sample for this study was drawn from the list of business incubators on Traction's database.

Given there are only five business incubators on Traction's database, all business incubators were deemed suitable for interviews. A representative sample of SMEs on the incubation programmes offered by selected incubators was also drawn for participation; seventy questionnaires were distributed to incubatees. All 28 questionnaires returned qualified for data analysis and this amounts to a 40% response rate.

### 3.2.3. Unit of analysis

An important step in designing a research is the unit of analysis in the research project. Cooper and Schindler (2011:166) define a unit of analysis as the entity being studied and which the researcher decides how to analyses data of the study. For instance, people, groups or individuals could be a unit of analysis in a study. In this study, this unit of analysis comprised a group of individuals. These individuals included business incubation managers in CMA and SMEs that were in the incubation programme during the timeframe of the research. Individual characteristics such as the number of years of SMEs in the incubation programme, education, gender, age etc were categorised in the research which outlines a picture of the groups of individuals that were being studied. Hence, this study was based on the business incubators operating in CMA and SMEs on the exit stage of graduation.

## 3.2.4. Data collection

In this research qualitative and quantitative methods were used to collect data. The researcher employed structured and unstructured in-depth interviews which were carried out face-to-face with the respondents selected from both the BIs and incubated SMEs in the CMA. Thus the researcher made use of primary data and secondary data. According to Skaik (2013:8), primary sources consist of in-depth interviews and questionnaires; secondary sources make use of previous theses, online resources and newspaper articles.

### 3.2.5. Primary and Secondary

Burns and Burns (2008:49) define primary data as the data collected by the researcher for analysis and it is also new data. Secondary dataset refers to the data obtained from already published sources such as databases, any published information and dictionaries (Remenyi, Williams, Money & Swartz, 1998:289). In this study, journals, previous theses, books and government reports, both online and in paper format, were utilised as sources of secondary data. The researcher made use of original and existing sources of information in both primary and secondary data.

### 3.2.6. Personal interviews

According to Kayrooz and Tevitt (2005:189), interview methods which involve face-to-face discussions are very effective for obtaining data. Interviews enable the interviewer and interviewee to develop a relationship with one another through open-ended exploration of the investigated topic. This is a well-known method. Hence, personal interviews were conducted with five business incubation managers representing the business incubators. One of the reasons for conducting this research was to get detailed feedback and in-depth information about the role BIs play in nurturing SMEs.

A personal interview is a form of direct communication between two or more people in which an interviewer asks a respondent questions face-to-face and a respondent answers questions (Zikmund, Babin, Carr & Griffin. 2010:150). In-depth interviewing is considered to be an excellent method of data collection, as personal discussion and a one-on-one interview

discussion allows the researcher to get in-depth information that cannot be obtained in other ways. Additionally this allowed SMEs and BI staff members to provide their perspective on the role of business incubation in nurturing SMEs. In-depth interviews were conducted with business incubators within the selected incubators in the Cape Town metropolitan area. Therefore, this researcher conducted a maximum five interviews with business incubation managers.

#### 3.2.7. Questionnaires

The collection of data through questionnaires allows more participants than could be achieved through interviews in a similar time; it is not always dependent on the researcher to be present to get information, and respondents who complete the questionnaires can choose a suitable time to participate (Townsend, 2013:91). Given the list of business incubators and incubated SMEs with the contact details on the database of Traction, this study used a random sampling technique. The researcher in this study made use of questionnaires, and respondents were randomly selected using both closed and open-ended questionnaires. The researcher began by asking the permission of business incubation managers in the business premises.

The researcher utilised questionnaires in order to provide background information to support other findings from interviews, observations and questionnaires; it also allowed the researcher to obtain large amounts of information more rapidly than through interviews mostly useful for indepth information (Lapan & Quartaroli, 2009:191). Furthermore, in this study the researcher made appointments with all relevant parties, established a time for the collection of questionnaires, and all necessary explanations related to answering the questions was provided to both BIs and SMEs. To complement data collection obtained from five (5) interviews; seventy (70) questionnaires were distributed to SMEs within the incubation programme on the exit stage of graduation in the CMA.

#### 3.2.8. Prevention of bias

Bias happens when the research that has been done in an area differs from the results of all previous studies (Rothstein, et al. 2006:3). In other words, bias occurs whenever the measurements tend to be systematically unrepresentative of the true population.

To prevent bias the researcher interviewed all the business incubators that were registered on the database of a local organisation called Traction. All incubated SMEs at the exist stage and those that had already graduated were deemed suitable to participate in the study.

#### 3.2.9. Data analysis

Data analysis refers to breaking up the data into manageable patterns, themes, connections and trends and to understand the various constitutive elements of the data through an inspection of the relationship between concepts and constructs to evaluate trends that can be identified or isolated (Mouton, 2001:108). The data gathered in this study was both quantitative and qualitative in nature, resulting from the use of the survey of questionnaires and personal interviews.

The Statistical Package for the Social Sciences (SPSS) software was utilised to analyse the quantitative data, and qualitative data was analysed by means of content analysis. SPSS software is a computer-based tool that can be used for analysing data and creating charts, graphs and the presentation of patterns. The researcher also made use of the services of an experienced statistician to ensure the correct analysis and presentation of data. Data was presented in the form of graphs, tables and pie charts.

### 3.2.10. Reliability and validity

According to Bell (2005:116), reliability is the test which produces similar results under constant conditions in all locations, and the measurement must be consistent. Validity refers to a design instrument with the potential of achieving and measuring what is supposed to be achieved when measuring (Brynard & Hanekom, 2006:47).

In order to ensure the reliability and viability of this study, a pilot study was conducted by the researcher to identify areas that could negatively impact on data collection and analysis. The pilot study provided feedback that allowed the researcher to adjust interview questions and questionnaires accordingly. Hence, this informed the designing of questionnaires to get maximum responses that were relevant to the research questions. After collecting data and analysing, the researcher reviewed the findings critically in order to detect any errors or bias.

Moreover, the researcher also benefited from significant insights and comments from the supervisor at this stage of the study. Of particular importance at this stage of the study was the need to validate the research instrument vis-à-vis the intended objectives of the study.

### 3.2.11. Ethical considerations

The researcher in this study made concerted efforts to ensure that the research was conducted in an ethically responsible manner. According to Brynard & Hanekom (2006:6), ethical research requires honesty and confidential information must be considered. To achieve these aims, the writer sought permission from all parties, both the business incubators and the SMEs. Thus, the participation of respondents was voluntary and they could opt out at any point during the study.

The rules and regulations governing research at the institution were adhered to and this further supports the ethical approach of the study. Satisfied that the relevant ethical considerations had been met, the Higher Degree Committee (HDC) at the Cape Peninsula University of Technology issued a certificate to that effect (see Appendix A) In addition; matters such as the anonymity of participants, confidentiality of data collected, and informed consent were followed in this research.

### 3.3. Summary

This chapter presented and justified the research design and methodology used to conduct the study, which was to investigate the role of business incubators in facilitating entrepreneurial skills requirements for SMEs in the CMA. The research population for this study was limited to Cape metropolitan business incubators and SMEs within the incubation programme. The sample size for this study comprised five business incubators and only SMEs that were at the exit stage and those that had graduated from the programs were considered for participation. All five personal interviews with business incubation managers qualified for qualitative data analysis. Questionnaires were utilised to gather data from SMEs within the incubation programme. Thus, the study used a mixed-method approach to collect data, and out of a total of 70 questionnaires that were distributed to the respondents, 28 questionnaires were returned and all qualified for data analysis. This amounts to a 40% response rate. The personal interviews and questionnaires were conducted personally by the researcher with respondents who participated in the research. The next chapter presents and discusses the findings of the study.

# **CHAPTER 4: PRESENTATION AND DISCUSSION OF FINDINGS (QUNTITATIVE)**

## 4.1. Introduction

The foregoing chapter discussed the research design and methodology used in the study. The main objective of this study was to determine the extent to which business incubators facilitate the entrepreneurial skills requirements of SMEs in the CMA, to determine the entrepreneurial skills required by SMEs in order to be successful within the incubation programme; and to investigate particular challenges that business incubators face in providing entrepreneurial skills to SMEs in the CMA. The specific objective of this chapter is to present and discuss the research findings of the study.

Following the previous chapters that highlighted the use of mixed methods, particularly quantitative and qualitative, the presentation and analysis of the quantitative data was done under the following headings: demographic information; business profile; entrepreneurial skills required by incubated SMEs; objectives in joining the incubation programme; challenges that incubated SMEs face in running their businesses; incubator programme effectiveness; incubated entrepreneurs with managerial skills; reasons to attend the business incubation programme; and factors that describe the importance of entrepreneurial skills in growing incubated businesses.

### 4.2. Analysis of research results

The empirical results were based on twenty-eight (28) responses from SMEs who were at the exit level and those that had graduated from the incubation programmes who participated in this study. As a method within the qualitative research paradigm, the study embarked on personal interviews. It is believed that both methods complement each other. The study results were based on five personal interviews from business incubation managers that participated in this research. The results are illustrated in a frequency table, pie chart and bar. The SPSS software was utilised to analyse the quantitative data, and qualitative data was analysed by means of content analysis.

# 4.2.1. Age distribution of respondents (Incubatees)

Table 4.1 below indicates a variety of age groups for SMEs within the incubation programmes in various sectors in the Cape metropolitan district who participated in this study.

	Age	Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
	22 or Less	1	3.6	3.6	3.6
	22 to 30	9	32.1	32.1	35.7
Valid	30 to 39	10	35.7	35.7	71.4
	39+	8	28.6	28.6	100.0
	Total	28	100.0	100.0	

### Table 4.1: Age distribution of respondents

The majority of respondents (35.7%) were in the age category of 30 to 39 years, followed by those between 22 and 30 years (32.1%) and 28.6% for respondents who were 39+). Only 3.6% of the respondents were between the ages of 22 or less. The findings clearly show that young entrepreneurs are participating in the incubation programme. It is clear that various age disciplines are seeking assistance from business-support structures. These results could be related to Masutha and Rogerson's (2014:152) findings that the average age of entrepreneurs was 35 years and older. However, the main focus of the study was within the business incubation programme and were grouped in four age categories: 22 or less; 22 to 30; 30 to 39 and 39 up.

# 4.2.2. Gender of respondents

The figure that follows demonstrates the gender of respondents who participated in the study.

Figure 4.1: Gender of respondents

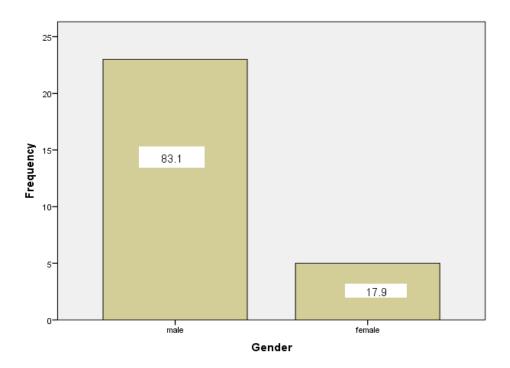
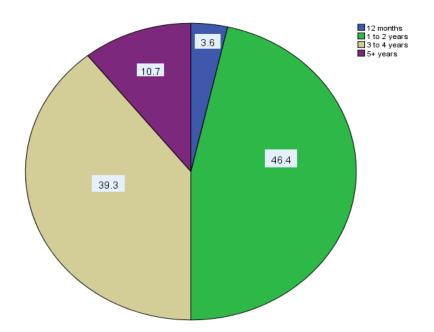


Figure 4.1 shows that the overwhelming majority (83.1%) of respondents surveyed were males, while females represented only 17.9%. In their study Botha et al. (2006:1) share similar views that previously disadvantaged designated groups, including women, in entrepreneurship activities are likely to negatively affect the involvement of females in entrepreneurial actions. Moreover, the fact that most females in South Africa nowadays go to highly paid jobs in the corporate sector may also be the case against venturing into small-business management. Hence, Gwija et al. (2014) advance the view that efforts should be made to narrow the gap between participation of males and females and the latter should be motivated to start small businesses.

### 4.2.3. Period of the business operation

Incubated SMEs generally have a limited number of years in the incubation programmes. The figure below illustrates the duration of operations.

#### 4.2.4. Figure 4.2: Period of the business operation



The results above indicate and categorise the duration in which the respondents' businesses have been in the incubation programme. A majority (46.4%) of SMEs in the incubation programme were between the ages of 1 to 2 years, followed by 39.3% of those who were between the ages of 3 to 4 years. Moreover, a few respondents (10.7%) represented SMEs that were more than five years in the incubation programme. Only 3.6% represented those that had been in the programme for 12 months. The study found that a majority of SMEs were indeed at the exit stage for graduation and those that had completed the programme 2 to 3 years. According to Scaramuzzi (2002:30), business incubators should seriously specify the time limits, and the cost, type and value of services that would be given to applicants during the incubation process. In South Africa SMEs are still faced with a high rate of failure in their first three years in operation (Choto, et al., 2014:94). Hence, business incubators provide a nurturing environment to increase SMEs' prospects for surviving in their first three years of operation (Al-Mubaraki & Busler, 2010:1; SEDA:Imbadu, 2013:3; SEDA, 2014). Thus, in both developed and developing countries, the public and private business incubation period generally lasts for three years (Masutha & Rogerson, 2014:60).

## 4.2.5. Objectives of enrolling in business incubation programmes

Businesses join incubation programmes for various reasons. The table below shows the objectives of respondents in joining the incubation programme.

Objective enrolment		Frequency	Percent	Valid Percent	Cumulative Percent
	Growth	5	17.9	17.9	17.9
	Skills	1	3.6	3.6	21.4
	Finance	1	3.6	3.6	25.0
Valid	Networking	3	10.7	10.7	35.7
	Other	1	3.6	3.6	39.3
	More than one of the above	17	60.7	60.7	100.0
	Total	28	100.0	100.0	

The objectives in attending business incubation programmes were categorised into growth; skills; finance; networking; other; or more than one of the above; this indicates that respondents' objectives were multiple, as mentioned. A majority of entrepreneurs in the incubation programme who participated in this research (60.7%) joined the incubation programme to obtain a multiple of skills, followed by 17.9% of those who attended the programme for grow their businesses. A total of 10.7% represented those who joined the programme for a place to network. Interestingly, the respondents who joined the incubation programme for finance and other reasons each made up 3.6% of the participants. The other respondents joined to have facilities to host their clients and hold meetings.

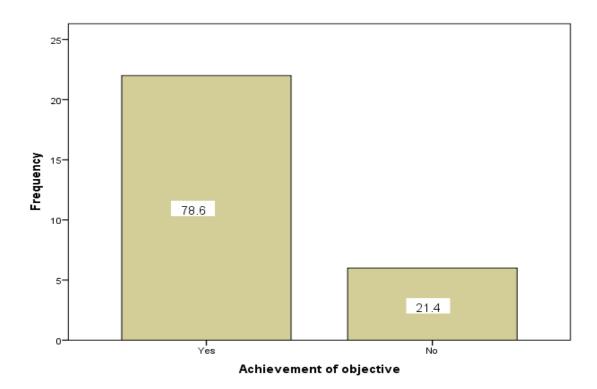
According to Al-Mubaraki and Busler's (2010:1) findings, incubator clients are seeking assistance with a wide range of business activities. This could be an indication that the business incubation concept is crucial to overcome SMEs challenges. Masutha and Rogerson (2014:49) explain that in both developed and developing countries business incubation has been

recognised as a strategic tool for helping entrepreneurial-based firms reduce the high failure rate of SMEs.

# 4.2.6. The achievement of incubation goals

The following chart illustrates the extent to which respondents agreed or disagreed that they have obtained their objectives in joining the incubation programme.





The result of the findings above show that a majority of respondents in this research (78.6%) indicated that they have achieved their objectives in participating in the incubation programme; joining the incubation would minimise the SMEs' failure rate for those who attend incubation, while the remainder (21.4%) indicated that they did not achieve their objective in joining the incubation programme.

Drawing on the results noted in this section, entrepreneurs in the incubation programme are happy and agree that being incubated minimises their chances of failing, especially during the early and volatile stages of businesses. These results could be related to the above illustration made in the literature that the concept of a business incubator is crucial to SMEs' survival at the early operational stages, and business incubators have been adopted in South Africa as a vehicle for accelerating the SME economy (Masutha & Rogerson, 2014:141). Therefore, the role of business incubators in facilitating the entrepreneurial skills requirements of small and medium sized enterprises should not be underestimated.

# 4.2.7. Entrepreneurial background and business success

A review of the literature on entrepreneurship suggests that there is a relationship between an entrepreneur's background and the chances of succeeding in a business venture. In view of the foregoing, this study interrogated the background of the respondents. The table below illustrates the extent to which the respondents agreed or disagreed that they come from entrepreneurial backgrounds.

Table 4.3: Influence of entrepreneurial	background
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Response on entrepreneurial background		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	10	35.7	35.7	35.7
Valid	No	18	64.3	64.3	100.0
	Total	28	100.0	100.0	

Table 4.3 illustrates that the majority of respondents (64.3%) who participated in this survey indicated that they agree that coming from entrepreneurial backgrounds can play a big role in developing a business, while 38.7% said they did not come from entrepreneurial backgrounds.

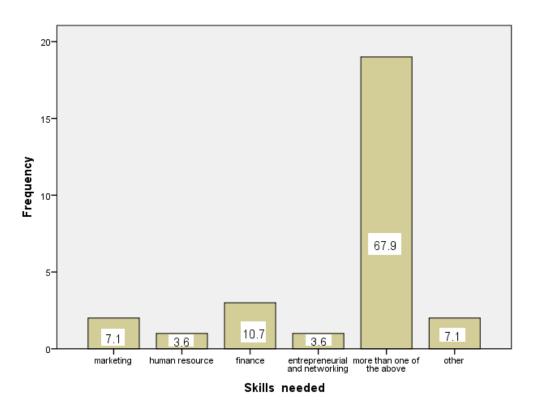
The results show that most of the participants felt that having an entrepreneurial background in the incubation programme can play a big role in the success of any business. It is important to note that Choto, Tengeh & Iwu (2014:95) hold the view that the education system has a vital influence on entrepreneurial success. Apartheid education has negatively influenced the mindset of South African entrepreneurs. It is encouraging to compare these findings with Stephen and Lydia (2014:29) who suggest that tertiary-level education and exposure is

generally equipping entrepreneurship activities and has a direct effect of proper entrepreneurial skills on graduates.

### 4.2.8. Entrepreneurial skills requirement of incubatees

A review of the current literature on BIs suggests that there is a need for incubators to facilitate the entrepreneurial skills needs of their clients in order to promote the growth of their businesses. In view of the foregoing, this study investigated the skills needed by SMEs. The chart below sets out with the aim of assessing the skills that the SMEs in the programme needed the most.





The above entrepreneurial skills were categorised into marketing, human resources, finance, entrepreneurial and networking, more than one of the above and other skills. Other skills mentioned by respondents were technical and process skills, as highlighted in the literature. The results indicate that a majority, as far as the skills of the entrepreneur respondents in this research are concerned, of 67.9% of incubated entrepreneurs were in need of various skills, as mentioned above, and followed by 10.7% of those who were lacking financial skills.

Interestingly, the respondents who needed marketing skills, and other, represented 7.1%, and those who were lacking human resources and entrepreneurial and networking skills represented 3.6% of the respondents. The literature of this study emphasises that entrepreneurs in the incubation programme lack the entrepreneurial skills required to develop their businesses. Gwija et al. (2014), demonstrate that entrepreneurs come from all walks of life and there are few entrepreneurs that acquire business education at high learning institutions. Hence, Stefanovic et al. (2008) concludes that in developing countries business incubators face numerous challenges namely, lack of sponsorship, advanced technological facilities (prototype) and expansion to different areas.

### 4.2.9. The services obtained from business incubators

The literature highlights business incubators essentially as organisations that assist to improve the survival rates of start-up businesses and support the entrepreneurial process. The foregoing literature of this study examined the services being obtained by incubated entrepreneurs. The table below illustrates services obtained by respondents in the incubation process.

	Services	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Networking services and entrepreneurial skills		3.6	3.6	3.6
	Coaching and mentorship facilitation	1	3.6	3.6	7.1
	Providing working place	2	7.1	7.1	14.3
	All of the above	2	7.1	7.1	21.4
	More than one of the above	22	78.6	78.6	100.0
	Total	28	100.0	100.0	

#### Table 4.4: Services obtained from business incubators

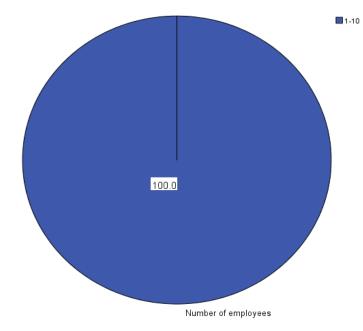
A strong relation between networking services and entrepreneurial skills, coaching and mentorship facilitation, providing working places, all of the above and more than one of the above have been reported in this study. Most respondents in study (78.6%) acquired more than one of the above services. Remarkably, 7.1% represents those who acquired office space and

those who have selected all of the above services, as mentioned. Only 3.6% represent entrepreneurs who obtained networking and entrepreneurial skills, coaching and mentorship facilitation.

The results of this study prove that business incubators provide a number of services to SMEs such as business support and technical support services to nurture and develop start-up firms (Ndabeni, 2008:260). The literature argues that for the past 15 years, South Africa has expanded its commitments to business incubation models as a strategic tool for ensuring the survival of SMEs (Masutha & Rogerson, 2014:141). Therefore, small business incubators as an emerging phenomenon in South Africa contribute positively to the development and sustainability within the entrepreneurial field.

### 4.2.10. Number of subordinates at start of the business

A review of the literature on SMEs suggests that they create employment. The chart below aims to show the number of employees that the respondents for this study employed when they started the incubation programme.



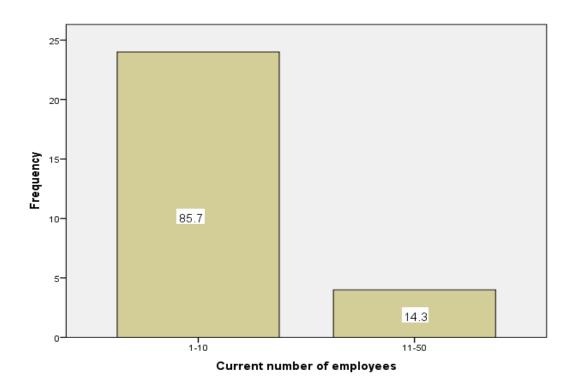


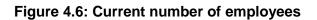
<sup>51</sup> 

The results demonstrate that all the respondents in this research (100%) started their businesses with only one to ten employees. The results of this research indicate that all the businesses that attended the incubation programme joined the incubation with only one to ten employees and this could mean SMEs, at early stages in the programme, create fewer job opportunities. According to Hutabarat and Pandin (2010:373), one way to develop the economy and improve standards of living in the country is to promote SMEs through business incubators. Buys and Mbewana (2007:357) assert that most SMEs exert a limited impact on job creation during the start-up; this could mean that entrepreneurs within the first few years in operation do not afford hiring employees.

### 4.2.11. Current number of employees

In view of the foregoing literature on job creation by incubated SMEs, this study questioned the impact of the respondents. The following chart shows the number of subordinates that respondents have in their businesses.





The chart above shows that most of the respondents (85.7%) had between 1 to 10 employees in the business, while those who had about 11 to 50 employees represented 14.3 %. The results further illustrate that a majority of respondents in this research had a number of subordinates of between 1 and 10 employees. Figure 4.6 shows a majority (67.9%) of respondents in this study, namely entrepreneurs, were in need of various skills, as mentioned above. Buys and Mbewana (2007:358) differ by stating that the quality of incubated entrepreneurs could be determined in the criteria of selection as the success of the incubator depends on the incubated SMEs. The results could also be due to a lack of business skills and resources which the incubated SMEs were looking for in order to gain independence and operate without nurturing from incubators (Grimaldi & Grandi, 2005).

### 4.2.12. The objectives of incubated business venture

A review of the literature on the expectation of incubated entrepreneurs suggests that there are many reasons why entrepreneurs partake in the incubation process. The following table highlights various business objectives that the incubated entrepreneurs had.

Objectives		Frequency	Percent	Valid Percent	Cumulative Percent
	Growth	12	42.9	42.9	42.9
	Job creation	3	10.7	10.7	53.6
	Sustaining your needs	1	3.6	3.6	57.1
Valid	Growth and job creation	4	14.3	14.3	71.4
	Growth and sustaining your needs	5	17.9	17.9	89.3
	All three	3	10.7	10.7	100.0
	Total	28	100.0	100.0	

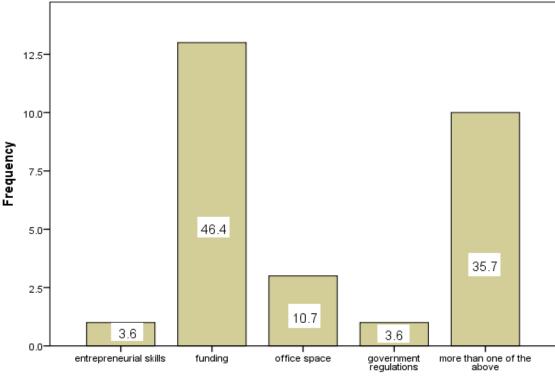
#### Table 4.5: Objectives of the incubated business venture

The objectives of incubated entrepreneurs were listed in seven categories: growth; job creation; sustaining their needs and wants; both growth and job creation; both growth and sustaining their needs and all three listed objectives. The results illustrate that a majority of the respondents in this study (42.9%) reported that their business venture objectives were business growth,

followed by 17.9% stating their business objectives were both growth and sustaining their needs. The objectives of the business venture representing both growth and job creation represents (14.3%) of their respondents. Interestingly, the respondents' business objectives represent all of the three objectives and those objectives were only driven by job creation represent 10.7%, and those whose objective was only to sustain their needs and wants represent 3.6%. In summary, the objectives of the incubated SMEs were mostly to obtain self-development and to be self-sustainable. Ndabeni (2014:261) proves that the importance of the strategic roots of incubation existence was to enhance entrepreneurship development.

# 4.2.13. The challenges that incubatees faced prior to joining incubation programmes

In reviewing the literature on the challenges that incubatees face prior to joining the incubation process, this research found that there are some key challenges that incubated SMEs face in running their businesses. The chart below shows such challenges.



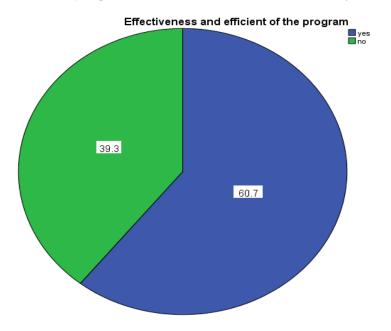
# Figure 4.7: Current challenges for incubated SMEs

Response on challenges

The type of challenges respondents experience were categorised into: entrepreneurial skills; funding; office space; government regulations; and more that one of the above. The results of this study illustrates that a majority (46.4%) of the participants indicated that funding is the major stumbling block, followed by 35.7% who indicated that their challenges were multiple, as illustrated above. This corresponds with the findings of Gwija et al. (2014:15) which prove that access to funding and business skills are the major challenges in running SMEs. Generally business incubators assist SMEs with office space; the findings of this study indicated that 10.7% of participants admitted to having office space challenges. Interestingly, the results specifically for both entrepreneurial skills and government regulations show that 3.6% of respondents indicated their concern over a lack of business skills. This is also consistent with the findings of other studies such as that of Masutha and Rogerson (2014:152) which indicates that incubated entrepreneurs lack the necessary business skills to fully contribute to SMEs' development.

# 4.2.14. The incubator programme effectiveness

In viewing the importance and effectiveness of the incubator programmes to SMEs, this study interrogated the effectiveness of the incubated businesses. The chart below illustrates the extent to which the participants agreed or disagreed that the incubator programme is the best strategic tool for SMEs' development compared to building the business on their own.





A large percentage (60.7%) of the participants indicated that the incubator programme is the best option for small business development and growth, while 36.9% of the respondents indicated that the programme of incubation appeared not to be effective and efficient. Based on the results of the research, the majority agree that the incubation programme should be taken seriously. Salem (2014:854) also mentions that the business incubator programme is one of the most important tools for helping start-up firms to survive during the early stages in business. These results are in accord with Scaramuzzi's (2002:24) findings, which conclude, concerning incubation effectiveness that approximately 80% to 85% of incubated firms survive. Rogerson and Rogerson (199:34) also outline that incubators are a most important and sound model in providing necessary skills and resources to start-up firms. To this end they suggest that incubators should be taken seriously.

### 4.2.15. Types of support incubated business need

In reviewing the literature on SMEs' needs in joining the incubation programmes, the following table illustrates the types of support required by SMEs.

	Support	Frequency	Percent	Valid Percent	Cumulative Percent
	Financial support	12	42.9	42.9	42.9
	entrepreneurial and development skills	1	3.6	3.6	46.4
Valid	Advice of developing new product and services	2	7.1	7.1	53.6
	Other	1	3.6	3.6	57.1
	More than one of the above	12	42.9	42.9	100.0
	Total	28	100.0	100.0	

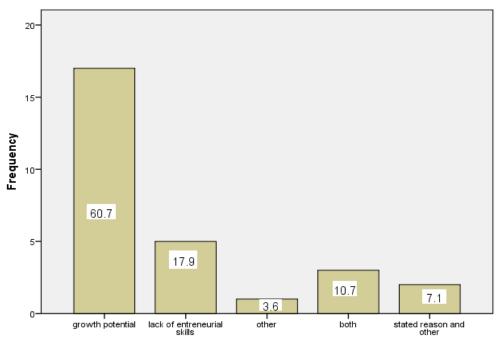
#### Table 4.6: Type of support incubated business needs

The types of support that respondents required were categorised into five kinds, namely: financial support; entrepreneurial and development skills; advice on developing new products and services; other; and more than one of the above. Interestingly, the results illustrate that a majority of respondents in this research (42.9%) indicated that they require both financial

support and more than one of the above, followed by 7.1% who need advice on developing new products or services. The findings also show that the respondents who needed entrepreneurial and development skills support and other were each represented by 3.6% of the respondents. The other participants indicated that facilities for sharing office services and attending to clients were the support required. This could be on the original view that incubators nurture firms through providing workplaces (Ndabeni, 2014:260). Business incubators provide a wide range of support services, which include: office equipment; entrepreneurial support; research and development support (Buys & Mbewana, 2007:356).

#### 4.2.16. Reasons to attend the incubation programme

In an attempt to understand the reasons why incubatees joined the programmes, a question was formulated accordingly. The chart below (Figure 4.9) further illustrates confirmation of congruence between the findings shown in Table 4.5 and those in Table 4.9. The charts show specific reasons to attend the business incubation programme.



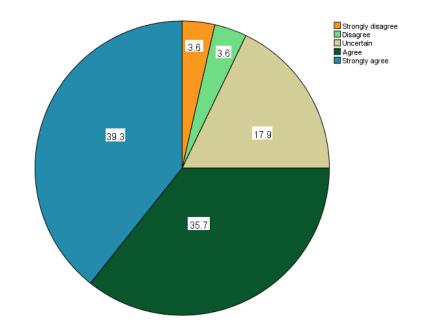
# Figure 4.9 Reasons to attend the programme

Reason to attend the program

The result of the findings above were categorised into: growth potential; lack of entrepreneurial skills; other reasons; both and stated reasons; and other. The results indicate that as far the reasons for the SME respondents of this study are concerned, a majority (60.7%) indicated that growth potential was the major reason, followed by 17.9% who started due to a lack of entrepreneurial skills. The respondents who started the incubation programme to attain both growth and entrepreneurial skills were represented by 10.7% of the respondents. A few respondents (7.1%) represented other reasons such as networking, renting office space facilities and administration assistance. Only 3.6% represented those that had other reasons, such as professional management mentorship. Adegbite (2001:1) mentions that some entrepreneurs will need professional assistance and business-plan services in the incubation programme.

# 4.2.17. Involvement in a business incubator at early stages

In view of the subsequent findings, this study interrogated the influence and results of joining the incubation programme at the early stages of the business start-up. The chart below illustrates the extent to which respondents in this study agree or disagree that involvement in a business incubator at the early stages provides an entrepreneurial foundation for those who want their SMEs to succeed.



# Figure 4.10: Involvement in business incubation as a good entrepreneurial foundation

The current study found that most respondents for this research (39.3%) strongly agreed that entrepreneurial foundation and training facilitation influence the management role in their businesses, followed by 35.7% who also agreed. Seventeen point nine (17.9) percent of the respondents were uncertain; interestingly only 3.6% of the respondents disagreed and strongly disagreed with the statement. The results illustrate that a majority of respondents indicated that an entrepreneurial foundation and training facilitation can play a key role in managing and developing the businesses. These results align with the literature of this study in that entrepreneurship foundation and mentorship facilitation influence business growth. Gwija et al. (2014:13) argue that an entrepreneurship foundation and education should not be undermined in strengthening SMEs' development and job creation. The results might be related to the view of Choto et al. (2014) that entrepreneurial foundation and training is the key to enable the practice of entrepreneurial culture within SMEs.

# 4.2.18. Entrepreneurial education and training in the SMEs success

The confirmation of correspondence on related issues to Figure 4.11 above was expanded to entrepreneurship success in this study. The table below indicates the extent to which participants agreed or disagreed that entrepreneurial education and training impact the success of the incubated SMEs.

Response categories		Frequency	Percent	Valid Percent	Cumulative Percent
	Disagree	2	7.1	7.1	7.1
	Uncertain	3	10.7	10.7	17.9
Valid	Agree	15	53.6	53.6	71.4
	Strongly agree	8	28.6	28.6	100.0
	Total	28	100.0	100.0	

# Table 4.7: Entrepreneurial education and training in the success of SMEs

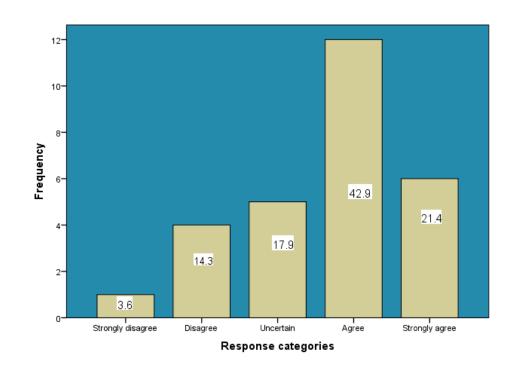
A majority of the respondents (53.6%) who participated in this study agreed that entrepreneurial education and training in the success of their SMEs is very crucial, followed by 28.6% who also

strongly agreed. Merely 10.7% were uncertain with the statement, while 7.1% of the respondents disagreed.

The study revealed that more participants felt that entrepreneurial education and training are vital in the success of the incubated SMEs. These findings are congruent with Bergek and Norman (2008:24) who propose that incubator support services generally embrace entrepreneurial education and training mentoring. Masutha and Rogerson (2014:49) suggest that entrepreneurial education and training should be the basic tool for helping SMEs to grow; hence they reduce the failure rate of SMEs.

# 4.2.19. Incubated SMEs access to business funding

In an attempt to understand whether incubated firms were able to quench their thirst for funding, a question was formulated accordingly. The chart below shows the extent to which respondents agreed or disagreed that it is easy for incubated SMEs to get funding from financial institutions that support incubated SMEs.

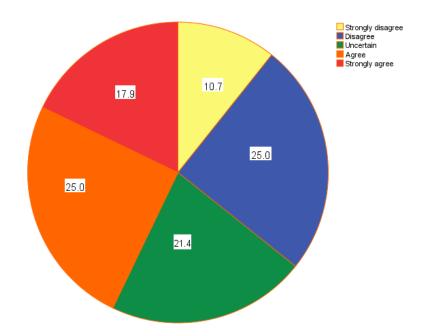


#### Figure 4.11: Access to funding in the incubation programme

A large proportion of respondents (42.9%) agreed that it is easy for businesses like theirs to receive funding from financial institutions that support SMEs, followed by 21.4% of respondents that strongly agreed, while some 17.9% were uncertain with this statement. Equally, 14.3% disagreed, while only 3.6% of the respondents strongly disagreed with this statement. The results illustrate that a majority of the respondents felt that it was easy for enterprises like theirs to obtain funding from financial institutions that support SMEs. However, the results are not in line with the argument above made in the literature (Masuka & Rogerson, 2014:152; Gwija et al., 2014:15; and Mmasi & Christine, 2012:1) that access to start-up capital is a major obstacle to newly established firms.

# 4.2.20. SMEs' registration process in the incubation programme

The following results interrogated the registration process of the respondents in the programme. The chart below illustrates the extent to which respondents agreed or disagreed that the process of registering a business in SA is faster within the incubation programme.





Interestingly, the respondents of this study who agreed or disagreed each made up twenty-five (25.0) percent of the participants that the process to register a business in SA under business

incubation is quick. The respondents who were uncertain with the speed process of registering a business in the incubation represented 21.4%, followed by 17.9% who strongly agreed. Only 10.7% of the respondents in this research strongly disagreed that the speed process is quick in the business incubation programme. The results show that it is not clear enough if it is quicker to register a business in the incubation programme. Apart from respondents of this study who said that the speed process is not convincing enough, this could be related to Gwija's (2014:57) findings that the business registration process in SA takes too long, while other respondents were opposed to this statement.

# 4.2.21. Entrepreneurial skills as a success influence on SMEs

In an attempt to further validate the findings noted earlier in Figure 4.4 above, the respondents were requested to indicate the extent to which entrepreneurial skills gained during incubation improved their businesses. The table below (Table 4.8) shows the extent to which participants agreed or disagreed that entrepreneurial skills play a big role in boosting success in their incubated SMEs.

					Cumulative
Response categories		Frequency	Percent	Valid Percent	Percent
	Disagree	1	3.6	3.6	3.6
Valid	Agree	16	57.1	57.1	60.7
	Strongly agree	11	39.3	39.3	100.0
	Total	28	100.0	100.0	

#### Table 4.8: Entrepreneurial skills as success aspects of a business

The results illustrate that a majority of the respondents (57.1%) in this study agreed that entrepreneurial skills would boost the success growth in their businesses, followed by 39.3% who strongly agreed.

Merely 3.6% of the participants disagreed with the statement. According to the results, a large proportion felt that entrepreneurial skills (such as processes, personal and interpersonal, and so on) would boost their SMEs' success. These results correspond with the previous literature that

entrepreneurial skills play a vital role in order for a SME to achieve sustainability and expansion. This could be related to the claim made by Chang and Rieple (2013:227) that entrepreneurial skills enable entrepreneurs to have good management techniques, a positive mindset and a good behaviour when running a business. Neneh (2013:3364) demonstrates that neglecting entrepreneurial skills and lacking an entrepreneur mindset make a large contribution to the high SME failure rate in South Africa. Furthermore, he deduces that entrepreneurial experience determines a firm's growth and survival as it is an important characteristic in entrepreneurial success. Therefore, it is clear that managing a business with limited entrepreneurial skills could affect the growth and development rate of small businesses in the incubation programme.

#### 4.2.22. Entrepreneurs with managerial skills

A review of the literature on the respondents with managerial skills suggests that there is a difference between entrepreneurs with managerial expertise and the chances of succeeding in a business venture. The chart below presents the extent to which respondents agreed or disagreed that those entrepreneurs with managerial skills in the incubation programme can manage their SMEs better than those who lack such skills.

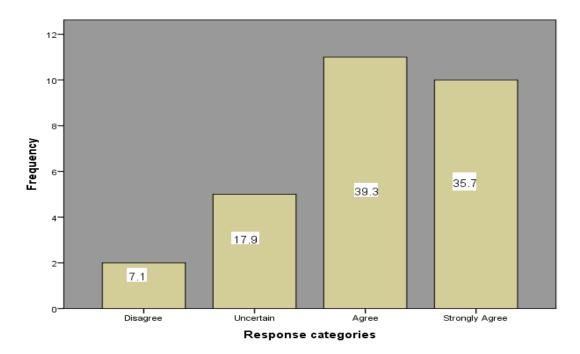


Figure 4.13: Importance of managerial skills in the incubated businesses

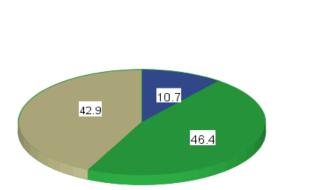
This study has been able to demonstrate that most respondents for this research (39.3%) agreed that entrepreneurs with managerial skills could manage a business better than one without such skills, followed by 35.7% who strongly agreed with the statement. Only 17.9% of the respondents were uncertain with the statement, while 7.1% of the participants disagreed.

The results indicate that a majority of respondents felt that managerial skills such as financial skills, human resources, marketing and general management skills and so on would improve their SMEs' success. This could be related to the argument made by Anderson et al. (2012:963) that for SMEs to be innovative, entrepreneurs should have sound entrepreneurial and management skills. Thus, entrepreneurship activities are crucial in making the world a better place. Akcomak (2009:8) concludes that the incubation concept, in offering managerial and administrative skills, should not be taken lightly as they serve a sound role.

# 4.2.23. Demand for products or services of incubated SMEs

The figure below shows the extent to which incubated respondents agreed or disagreed that their products or services in the market are expected to continue in the future.

#### Figure 4.14: Demand for products or services of SMEs in the programme





The results show that a majority (46.4%) of the respondents agreed that the demand for their products or services in the market shows greater potential for continuing in future, followed by 42.9% who strongly agreed with the statement, while only 10.7% of the respondents were uncertain about their products and services continuing in the future.

A large proportion of the respondents were confident that the demand for their products and services in the market was likely to continue in future. The results of this study could be in agreement with Gwija's (2014:61) findings which showed that the degree of entrepreneur confidence in the Western Cape promises more entrepreneurship activities which meet customer expectation. Therefore entrepreneur confidence and persistence lead to successful achievements.

# 4.2.24. Incubated SMEs have the potential to employ locals

The table below sets out to illustrate the extent to which the respondents agreed or disagreed that businesses like theirs have the potential to create more job opportunities for locals.

					Cumulative
Response categories		Frequency	Percent	Valid Percent	Percent
	Agree	13	46.4	46.4	46.4
Valid	Strongly agree	15	53.6	53.6	100.0
	Total	28	100.0	100.0	

# Table 4.9: SMEs in the incubation programme create more jobs

The current study found that a majority of the respondents (53.6%) who participated in the study strongly agreed that businesses in the incubation programme have a great potential to create more jobs opportunities, while 46.4% of participants agreed.

The results of this research show that all the respondents felt that SMEs in the incubation programme have the potential to employ more people. These results could be related to the previous argument made in the literature that the creation of SMEs and entrepreneurship practices contribute to job creation. Thus, SMEs in both developed and developing nations are

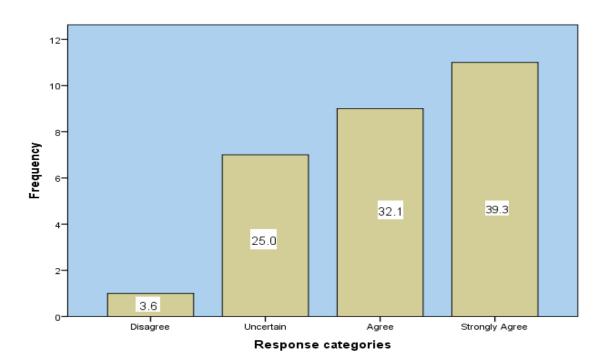
becoming a focus for economic development and entrepreneurship as a tool to accelerate job opportunities (Ndabeni, 2008:259; Lalkaka & Abetti, 1999:204; Mmasi & Chritine, 2012:4).

In reviewing the literature, the South African unemployment rate in the year 2014 increased by 25.2% in comparison to 24.9% in the year 2012 (Dodd & Nyabvudzi, 2014:117; Ngidi & Hawes, 2014:2). However, the SA Government has prioritised various policies in developing the SME sector for job creation; approximately 90% of new job opportunities are expected to be created by 2030 through SMEs (SEDA.Imbadu, 2013:3). As mentioned in the literature review, a strategic tool for unemployment reduction and poverty alleviation will be minimised in supporting entrepreneurship activities and SMEs. Therefore, the SA Government has to prioritise the role of SMEs in employment creation and social development.

# 4.2.25. Awareness about incubators to support SMEs

The chart below sets out to illustrate the extent to which respondents agreed or disagreed that support structures for entrepreneurs like business incubators play a big role in developing entrepreneurship in the Cape Metropole.

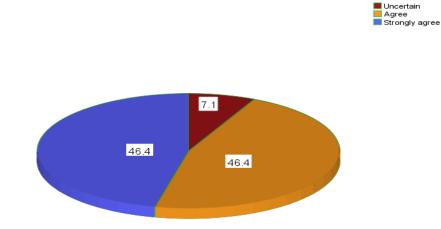




This study was designed to determine the incubators' role in developing SMEs; a majority (39.3%) of the respondents strongly agreed that structures for SMEs like business incubators have a huge impact on developing incubated entrepreneurs in the Cape, followed by 32.1% who agreed with the study question. The current study found that 25.0% of the respondents were uncertain about the incubator's role, while very little, 3.6%, and disagreed with this statement. As mentioned in the literature review, business incubators are a great tool for developing SMEs' potential for growth and reducing the high failure rate in their first three years in business (Grimaldi & Grandi, 2005:111). In reviewing the literature, incubators assist start-up firms to survive and play a vital role in the economy, according to Al-Mubaraki and Busler (2010:1). Therefore, this study produced results which correlate to the findings of a great deal of previous research in this field.

# 4.2.26. SMEs for economic participation

The chart below shows the extent to which the respondents agreed or disagreed that whether starting an entrepreneurial firm is better than seeking a job.



#### Figure 4.16: SMES for economic participation

The most interesting finding was that the respondents who strongly agreed, and strongly agreed in starting a business, believe that this is a better option than seeking a job; each were represented by 46.4% of the participants. A less significant proportion (7.1%) of the respondents were uncertain with regard to the statement.

These results confirm that a large percentage of the respondents felt that venturing into SMEs is a better option for economic independency than looking for a job. This finding corroborates with Masutha and Rogerson (2014:60) in that SMEs in SA are expected to create new employment and more people are venturing into entrepreneurship. A strong relationship between pull and push factors has been reported in the literature. In reviewing the literature, Nieman and Nieuwenhuizen (2009:49) illustrate that entrepreneurship and SMEs accelerate economic participation through entrepreneurial innovation. These findings concur with those of Schwartz and Hornych (2008:436) namely that the role of entrepreneurship in creating jobs has been a subject of intense discussion in recent years.

# 4.2.27. Incubator rate scale

The table below shows the degree to which respondents rated business incubators on a scale of 1 to 10.

		<b>F</b>	Democrat	Valid Demonst	Cumulative
5	cale	Frequency	Percent	Valid Percent	Percent
	1	2	7.1	7.1	7.1
	4	5	17.9	17.9	25.0
	5	6	21.4	21.4	46.4
\/ P	6	6	21.4	21.4	67.9
Valid	7	2	7.1	7.1	75.0
	8	5	17.9	17.9	92.9
	9	1	3.6	3.6	96.4
	10	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

#### Table 4.10: Business incubators scale of 1 to 10

The current study found that most respondents who rated business incubation at a scale of 5 to 10 and 6 to 10 were each represented by 21.4% of the participants, followed by the 4 to 10 and the 8 to 10 scale for respondents, each representing 17.9%. A less significant proportion (7.1%) of the respondents represented a scale of 1 to 10, while 3.6% of the participants represented a scale of 10 to 10.

The result of this study indicates that almost all the respondents felt that business incubators are a sound model for developing and helping SMEs. Prior studies have noted the importance of business incubators, as highlighted in the literature review (Buys & Mbewana, 2007:356; Masutha & Rogerson, 2014:148; Masutha & Rogerson, 2014:S61; Hutabarat & Pandin, 2014:375; Scaramuzzi, 2002:6; Ndabeni, 2008:261; Stefanovic, 2008). Therefore, this study produced results which correlate with the findings of previous work in this field.

# 4.3. Summary of quantitative findings

- A large percentage (83.1%) of respondents in the survey was male.
- Nearly half (46.4%) of SMEs were on the exist stage and 39.3% had passed the incubation period.
- 60.7% of SMEs joined the incubation programme to obtain multiple skills.
- A large percentage (78.6%) of entrepreneurs achieved their objectives in joining the incubation programme.
- 64.3% of participants indicated that coming from an entrepreneurial background can play a big role in developing the business.
- 78.6% of the participants acquired various services and skills in the incubation.
- All the respondents (100%) started the incubation with less than ten employees.
- A total of 85.7% of SMEs had the same number of employees in the business.
- A majority of the respondents (42.9%) stated their objective was business growth.
- The majority (46.4%) of the participants indicated that funding is the major stumbling block.
- 60.7% of the participants indicated that the incubator programme is the best option for small business development and growth.
- A majority (75%) strongly agreed that entrepreneurial foundation and training facilitation influence the management role in their businesses.

- A large proportion of respondents (64.3%) agreed that their business has a potential to get funding.
- Nearly half (42.9%) of the participants agreed that the process of registering a business in SA under the business incubation is quicker.
- A majority of the respondents (96.4%) agreed having entrepreneurial skills would boost the success growth of their SMEs.
- 75% of respondents agreed that entrepreneurs with managerial skills could manage the business better than one without such skills.
- A majority (89.3%) of respondents agreed that the demand for their products or services in the market shows a greater potential to continue in future.
- All of participants (100%) agreed that the incubation programme has a great potential to create more jobs opportunities.
- 71.4% of respondents agreed that structures for SMEs, like business incubators, have a huge impact on developing incubated entrepreneurs.
- 92.9% of respondents agreed that starting a business is better than seeking a job.
- Most respondents (75%) rated business incubation at a scale of 5 to 10.

# CHAPTER 5: PRESENTATION AND DISCUSSION OF FINDINGS (QUALITATIVE)

# 5.1. Introduction

The foregoing chapter focused on presentation and discussion of findings (quantitative method) of the study. Therefore, for this study, the presentation and analysis of the qualitative data was done under the following headings: role of entrepreneurial skills, entrepreneurial skills needed for SMEs and challenges of business incubators.

The qualitative data were presented and analysed under the following objectives:

- To determine the entrepreneurial skills of business incubators, or the performance of business incubators
- To determine the entrepreneurial skills required by SMEs in order to be successful
- To determine the challenges that BIs faces in providing entrepreneurial skills to SMEs in the CMA.

# 5.2. Analysis of interviews

The interview questions were designed to align with the three research questions of this study. The abovementioned questions were further simplified into sub-questions for discussion with interviews. The data analysis strategy used was based on the creation of themes and sub-themes from the main research questions and sub-questions. The coding of interview data into themes and sub-themes is discussed in the method of analysis applied (Bradley, Curry & Devers, 2007:1766). The purpose is to unify concepts by characterising them into general insights from the data analysis. The themes were derived from personal interviews. The table that follows illustrates the main themes, which are linked to the research question sub-themes.

# Table 5: Main research themes for this study.

Main theme Sub themes
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	1.1	Perce	eptions on the essence for entrepreneurial	
1. Role of entrepreneurial skills			phons on the essence for entrepreneurial	
		role of formal qualification in onbancing		
SKIIIS			role of formal qualification in enhancing	
			preneurial skills	
	1.3	Туре	pes of formal qualification	
	1.4	Туре	ypes of skills	
	1.5	Other	er skills	
	1.6	Perfo	rmance of the incubator	
	1.7	Incub	ator personnel	
	1.8	Criter	ia to monitor the performance	
	1.9	Facto	rs contributing to the success	
Main theme				
			Sub-themes	
2. Entrepreneurial skills ne	eeded	for		
0115			2.1 Skills requirements	
SMEs			2.1 Skills requirements 2.2 Entrepreneurial background	
SMEs				
SMEs			2.2 Entrepreneurial background	
SMEs			2.2 Entrepreneurial background 2.3 Challenges of skills reported	
			<ul><li>2.2 Entrepreneurial background</li><li>2.3 Challenges of skills reported</li><li>2.4 Qualities of a successful incubate</li><li>2.5 Other skills</li></ul>	
SMEs Main theme			<ul><li>2.2 Entrepreneurial background</li><li>2.3 Challenges of skills reported</li><li>2.4 Qualities of a successful incubate</li></ul>	
	bators	<u> </u>	2.2 Entrepreneurial background 2.3 Challenges of skills reported 2.4 Qualities of a successful incubate 2.5 Other skills <b>Sub-themes</b>	
Main theme	bators	5	<ul> <li>2.2 Entrepreneurial background</li> <li>2.3 Challenges of skills reported</li> <li>2.4 Qualities of a successful incubate</li> <li>2.5 Other skills</li> </ul> Sub-themes 3.1 Client acquisition and SMEs enrolled	
Main theme	bators	5	<ul> <li>2.2 Entrepreneurial background</li> <li>2.3 Challenges of skills reported</li> <li>2.4 Qualities of a successful incubate</li> <li>2.5 Other skills</li> </ul> Sub-themes 3.1 Client acquisition and SMEs enrolled	
Main theme	bators	5	<ul> <li>2.2 Entrepreneurial background</li> <li>2.3 Challenges of skills reported</li> <li>2.4 Qualities of a successful incubate</li> <li>2.5 Other skills</li> </ul> Sub-themes 3.1 Client acquisition and SMEs enrolled 3.2 Challenges faced in running the incubator	
Main theme	bators	5	<ul> <li>2.2 Entrepreneurial background</li> <li>2.3 Challenges of skills reported</li> <li>2.4 Qualities of a successful incubate</li> <li>2.5 Other skills</li> </ul> Sub-themes 3.1 Client acquisition and SMEs enrolled 3.2 Challenges faced in running the incubator 3.3 Support structures	
Main theme	bators	5	<ul> <li>2.2 Entrepreneurial background</li> <li>2.3 Challenges of skills reported</li> <li>2.4 Qualities of a successful incubate</li> <li>2.5 Other skills</li> </ul> Sub-themes 3.1 Client acquisition and SMEs enrolled 3.2 Challenges faced in running the incubator 3.3 Support structures 3.4 Technology	
Main theme	bators	5	<ul> <li>2.2 Entrepreneurial background</li> <li>2.3 Challenges of skills reported</li> <li>2.4 Qualities of a successful incubate</li> <li>2.5 Other skills</li> </ul> Sub-themes 3.1 Client acquisition and SMEs enrolled 3.2 Challenges faced in running the incubator 3.3 Support structures	

# 5.2.1. Level of education of incubation managers

The findings of this study indicate that all the incubation managers studied up to a tertiary education level and a significant proportion did entrepreneurial studies or business studies; four of the five managers noted this. Furthermore, this indicates the importance of entrepreneurship and business studies in managing the business incubator. It is encouraging to compare this figure with that found by Choto et al. (2014:95) who suggest that the education system has an impact on entrepreneurship development and success. Therefore, the interviewees of this study have gone through a formal education system to obtain recognised qualifications.

# 5.2.2. Duration of the business incubator operation

The results illustrate that, regarding the duration of the business incubator, a majority of three of the five participants indicated that their businesses had been in existence for more than five years, while two businesses had been in existence for two years. The study also found that a majority of the business incubators were not new, as they were in operation for more than five years. However, this result has been unable to demonstrate that business incubators have an absence of the necessary skills to fully contribute to SMEs' expansion (Akcomak, 2009).

# 5.2.3. Role of entrepreneurial skills in the business incubator

The sub-themes below are linked to the research question of how entrepreneurial skills affect the performance of business incubators.

# 5.2.3.1. Perceptions on the essence of entrepreneurial skills

A total of four of the five interviewees expressed that a lack of entrepreneurial skills affects the performance of the business incubator. This study produced results which support the findings of a great deal of the previous work in this field (Adegbite, 2007:164). This emphasises the need to have entrepreneurial skills, and this also accords with what incubator one had to say:

Yes, it does affect. Apart from knowing your business concepts you must know your market. You must know how to handle your finances; you must know how to approach and pitch your business. So, those sorts of skills are entrepreneurial apart from just having a business idea and knowing how to sell it or who needs your business... So, there is a lot of work that goes into marking sure your business is successful and if one does not have those skills then they won't be able to grow at a sustainable rate and at a rate that they can grow as a business and as an individual.

The incubator one went further by saying the following:

For us there has to be a balance, having entrepreneurial skills as well as having business concepts; it is what drives the business. So you always have to hit the balance; nothing is more important than the other but you have to have at least the knowledge about how to do what and when to do it, and when to go to the market as well as having an idea as an entrepreneur... So depending on whatever your idea is as a business venture, and having a set of entrepreneurial skills, will support the business. However, having entrepreneurial skills without an idea will not work as well, so you should have a balance of the two.

Scaramuzzi (2002:27) notes that the best practices for business incubators are to recruit good management team with entrepreneurial skills and experience. However, the findings of one of the respondents of the current study do not support the results. One of the interviewees reported the following: "You have to spot trends; without any entrepreneurial spirit you are bound to experience some challenges."

# 5.2.3.2. The role of formal qualifications in enhancing entrepreneurial skills

The results of the current study show that three out of five participants indicated that it is necessary to have formal qualifications to manage a business incubator successfully. As the participants mentioned, a business incubator will nearly have the necessary requirement in a business and technical-background person, with both technical and business skills. This finding is in agreement with the findings of Gwija et al. (2014:14) which showed that 72.2% of the respondents felt that entrepreneurial education and training enable the understanding of how the business works and have a positive impact on the success. Emphasising the role of formal qualifications or the lack thereof, incubator two had this to say:

If a teacher knows less than a school kid the teacher will not able to add value to that school kid.

In contrast, incubator three reported the following:

It helps, although it's not a determining factor... It is preferable that a person should have entrepreneurial spirit. Entrepreneurial spirit is more important than having a qualification... It's a yes and no answer.

Another interviewee (incubator four) said this:

Remember my views on qualifications? I myself have three degrees and two post-graduate diplomas. I have gone through the formal process of getting degrees but in my view degrees give you a basic grounding only and insights into a particular field or world. They can never fully prepare you for that world,

so one must also understand where qualifications come from and why qualifications were instituted in the world. It has never been like someone can become an entrepreneur, for instance. It is different in a world of becoming a professional, like engineers or a lawyer, where you become a functional person; in that field, by way of getting a formal qualification or an entrepreneurship is not going to work that way. In fact, studying entrepreneurship is not going to make you an entrepreneur. From a management perspective I will say if you have some formal qualifications it will assist you, maybe, with management but I would rather say, "Do you have any experience in managing and advising people?" because managing an incubator is about people management, so formal qualification might assist; it's going to be a determining factor although from our recruitment point of view it is important for someone to have these sort of qualifications.

Apart from the earlier results, the findings also revealed that getting a formal qualification and practical experience in business improves the marketing strategy as an incubator manager.

# 5.2.3.3. Types of formal qualification

A majority of the respondents in this research (four out of five) indicated some sort of formal qualification was required in order to be appointed as a business incubation manager; these include requirements such as business-management qualifications, a Master's in Business Administration (MBA), or have a project management or technical background. However, some respondents (including incubator five) said:

I don't think it really matters. If they have a tertiary qualification that means they know how to research, and know the high level of managing the business, and how it works and management skills.

Incubator five went further:

Business management qualifications, or some sort of qualification that covers the basics of the performance of the business, are what an incubator needs; assisting in the measurement and guidance of the business. On the other hand there is also advising, mentoring and coaching the business owner... There is the people's side and the business side. I always say the fact that someone studied to be a teacher will not make that person a good teacher. Because if he studied to be an engineer and qualified it does not mean he will become a good engineer. It just means he is an engineer. Why I say that is because engineering and teaching are different to each other. Teaching is more about people and engineering is more about technical aspects; it's a bigger part. The incubator people's part is a bigger part and how the business is performing and measurement etc ... that's a smaller part. It's about making decisions at the right time; it's about how you coach your customers; it's mostly about people skills; it's not about technical skills.

However, in line with existing literature, what makes an incubator successful is that it links qualifications and an educational background with business experience in the incubation programme (Akcomak & Taymaz, 2004:9). Drawing from the literature and findings, it is advisable to have a sort of formal qualification in managing a business incubator to gain insights and knowledge of the business model. Therefore, this sub-theme was derived from the requirements of the qualification.

# 5.2.3.4. Types of skills

Interestingly, all five respondents of this study indicated the types of skills that are most important and relevant to managing a business incubator, such as technical skills; business management skills; interpersonal and people skills; human resources (HR) and leadership skills; and marketing and process skills. Tamasy (2007:463) shows that founders of technology-based business incubators normally come from a technical background and lack other relevant skills such as marketing or business management. Emphasising the types of skills that are most important, incubator one had this to say:

It depends; if you need a human resource (HR) person, obviously HR skills are needed; in a finance role you will need a person with finance skills; for a general manager (GM) you will need a general understanding of the sector you are operating in and business management skills.

#### 5.2.3.5. Other skills

Regarding results as to other skills that are vital and relevant to the business incubator, all respondents indicated that creating a culture among incubated entrepreneurs and a brand, as well as social innovation and collaboration skills, was more important. One of the common skills respondents mentioned as being the most critical was financial education and financial skills. The findings of the current study are consistent with those of Macheke and Smith (2013:2001) who found that a shortage of necessary skills could cause a downfall to the success of any business incubator; thus success is mainly recognised as the ability of management to guide the business through success and expansion. Hence, incubation managers should acquire the necessary skills and resources to drive the business to obtain its objectives and goals.

Evaluating the foregoing findings in terms of the emphasis on other relevant skills, incubator four had this to say:

... Interpersonal skills, receptionist, front office administrator skills, people skills, telephonic skills etc., these skills are important for us and entrepreneurs. Then three people that work as bookkeepers, if entrepreneurs need bookkeepers for the business, financial skills for the enterprise development practitioner and enterprise development assistance between the two of them as they often work with entrepreneurs more than anyone else.

#### 5.2.3.6. Criteria to monitor the performance

The current sub-theme of this study was based on the criteria being used by management in order to monitor the performance of the business incubator in the Cape metropolitan district. Results with respect to this sub-theme indicated that the overwhelming majority (four out of five participants) indicated that they used similar criteria in monitoring the incubator performance. The performance criteria utilised relate to the directives of SEDA and DTI. Thus they are looking at the number of employees, turnover growth, the number of jobs created and SMEs enrolled in the programme, mostly what government requires. In contrast, incubator two had this to say:

There is a fundamental disconnect between the measurement matrix current used at SEDA and what should be used... You need to take an approach where you aim for a high volume of success and sustainability where you take few businesses and develop them. Or take a low volume and train hundreds of businesses where you will get more jobs being created but not sustainable and growth in their business. You need to understand the technical and industrial operational skills ability of each industry.

Macheke and Smith, (2013:2001) suggest that one of the key factors to maintain a high performance of the business incubator is to employ skilled labour and competitive managers in order to remain effective and attain a competitive advantage. Furthermore, regarding the previous finding stressing the criteria used to monitor the performance of the business incubator, incubator four noted:

We use universal criteria as a benchmark based on research, successful businesses, and how long it takes for an average small business to become self-sustainable; the research has shown it takes an average of three years. That is why our programme is also three years long... The criteria for us are mostly around job creation and internal growth. Our outline of the criteria is the following: is the business able to or does it have the potential to create jobs in three years? Which technically means, if the owner is employee number one then the owner needs to create three more jobs, and if there are two owners in the business then the owners need to create two more jobs because they are employees and they have to pay themselves? If they don't pay themselves a salary initially, by the end of the year they get to the point where they can actually pay themselves. The second criteria is revenue: can the business generate

enough revenue over the three years in order to support the business and employees, and at the same time make enough profit after only three years equal to the amount that the owner would have taken out as a salary? Other criteria are around sales and the business must have the potential to show a positive share of growth. And lastly the business must show the potential to meet an asset value after three years.

Therefore, drawing from the above findings, it is clear that monitoring the performance of the business incubator is of importance to determine development and growth.

# 5.2.3.7. Performance of the incubator

In confirmation of congruency on related subjects, this sub-theme of the study was based on performance satisfaction from the management perspective and the contribution to the performance. The results for respondents' satisfaction indicate that three of five managers were happy with the performance because they were achieving targets and contributing significantly to job creation and to the economic development of black people and black entrepreneurs, while the other two managers were not entirely satisfied due to the low numbers of SMEs that have graduated from the incubation programme. Afolabi and Macheke (2012:239) examined that SME success is mainly recognised by the ability and skills of the GMs or owners that this nurtures entrepreneurs to gain their success. In contrast, relating to the earlier findings highlighting the performance of the incubator, incubator three had this to say:

It could be better; not really happy, we are still very small. I will be happy when I see my entrepreneurs get success.

# Another one said:

It is very difficult to say because I have been in here for two months. However, to answer you now we have not graduated a single individual from the beginning till now. I personally don't think the business plan is suitable for the industry and it has to do with the questions you asked before... who were here before, their business background and skills to nurture business. Technical capacity, entrepreneurial skills and business was lacking in all spheres. That drives to poor decision-making in the incubation business and that will lead to a poor selection of entrepreneurs to the programme, which will lead to no graduation for them'.

Therefore, this finding confirms the current study research problem statement that in some business incubators management lacks an entrepreneurial background to fully contribute to the development of incubated SMEs.

# 5.2.3.8. Incubator personnel

Response category	Personnel	Experience	Skills	Role
Incubator One 25		Started their own	Business skills,	Different role
		business, experts	MBA, HR and	such as,
		and consulting	leadership	strategic
		experience		marketing and
				incubation
Incubator Two	6	Industry related	Technical,	Administration,
		experience,	management	technical and
		mentors and	skills, and	office
		management	leadership skills	assistance
Incubator Three	6	Entrepreneurial	Entrepreneurial	Incubator
		background and	skills, teaching	managers,
		business	and mentorship	administration
		management		and office
				assistance
Incubator Four	8	Management and	Technical skills	Managers, HR,
		sector technical	and business	GM and
		experience	management	administrator,
			skills	mentors
Incubator Five	4	Business	Project	Business
		administration and	management	administration,
		managerial	skills and	manager and
		experience	managerial skills	enterprise
				development
				practitioner

The following table illustrates business incubation personnel, their experience, skills and roles.

#### Table 5.12: Business incubator personnel

Table 4.12 indicates that incubator one had a large number (25 staff members); interestingly incubator two and three had six personnel, followed by eight personnel who were representing incubator four. Only four staff members represented business incubator five. The study found that a majority of the business incubators had less than ten personnel. Macheke and Smith (2013:2001) further support the idea of evaluating the personnel of business incubator and also recommend training those who are failing to manage the business. In addition, drawing from the interviewees, incubator three of the respondents reported the following:

The level or structure of an incubator will determine how many personnel it needs and the finance of an incubator. We have six staff members because it is limited due to the fact that we are an NPO; we can't be spending lots of the money that we raise on staff. It might not be ideal...we need more people that can assist the entrepreneurs. The staff we have is more about providing a support structure to entrepreneurs but the structure of working directly with the entrepreneurs should grow as entrepreneurs grow and making sure the environment is concussive for us and all the businesses.

# 5.2.3.9. Factors contributing to the success

A strong relationship between other contributing factors to the success of the business incubator in South Africa was reported. In reviewing the findings, data was found on the association between government and private support as a major contribution to the success of an incubator. Furthermore, all five respondents indicated that the socio-economic environment in which businesses operate, and the passion to support incubatees exerted by the personnel of incubators, is vital to attaining success. In support of the foregoing, incubator two said:

Other contributing factors would be industry-specific sector skills, entrepreneurial and technical skills... Industry analysis skills incubate high quality entrepreneurs to offer a product that is achievable and there is a need. For advice go and read Raymond Ackerman book 'Four legs of the table'. It's about having a product that people want; it means to get to that market, quality, basically the four Ps of marketing.

Therefore, the main aim of this theme was to determine whether entrepreneurial skills affect the performance of business incubators.

# 5.2.4. Entrepreneurial skills needed for SMEs

The sub-themes below are linked to address the research question of what the entrepreneurial skills requirements of SMEs are from the business incubation manager's point of view.

# 5.2.4.1. Skills requirements

A total of five of the interviewees indicated that incubated SMEs require a number of entrepreneurial skills. These included financial management, marketing, human resources management, interpersonal skills, and networking, administration and technical skills. The literature of this study highlighted skills incubated SMEs' requirements in order to be successful. The finding of the current study are consistent with those of Nafukho and Muyia (2010:96) who found the spirit to develop entrepreneurial skills and education should be a lifelong process in growing entrepreneurship and SMEs. Furthermore, based on the diagnoses and evaluation from the business incubator managers entrepreneurial skills are necessary for incubated SMEs. Emphasising the required skills, incubator two had this to say:

Finance, marketing, HR, management focus, and business-process skills are very important to our SMEs. If you cannot manage your finances you will not know where the money went, same as if you can't manage your business you will lose it. You really need put out for your business, like you have to learn how to sell your business, market it and get people to buy into your idea. HR is important to put measures in place for labour disputes; they can cost you a lot of money in all contract matters between you and your employer because if an employee goes to the Commission for Conciliation, Mediation and Arbitration (CCMA) someone can be liable.

Hence, Macheke and Smith (20013:2001) suggest that there is a need for training in business skills and other skills to keep the business competitive.

# 5.2.4.2. Entrepreneurial background

Four out of five respondents indicated that some of the entrepreneurs in the incubation programme come from entrepreneurial backgrounds and they have various types of formal qualifications. The promotion of entrepreneurial skills and entrepreneurship elevate SMEs to be more creative and innovative (Rezai, Mohamed & Shamsudin, 2011:124). It is encouraging to relate the previous sentence with what incubator five had to say:

Mostly our entrepreneurs do not have an entrepreneurial background, it is preserved that if you ever run a business before and you fail. The second time you will have a chance to succeed because you have

more experience in running a business than someone who did not. In SA there is a trend that if you fail once you will not make it the second time; unfortunately not everybody is born with all the answers. The answer is the higher the entrepreneurial exposure the more likelihood for entrepreneurs to be successful.

In contrast to this finding, incubator four had this to say:

You don't have to come from an entrepreneurial background to manage a business; however some entrepreneurs were pushed and others were pulled to join the programme.

Therefore, the results of this interviewee will now be compared to the theoretical background of this study.

# 5.2.4.3. Challenges of skills reported

This sub-theme aims to further address the skills that are mostly reported as major challenges. This study found that all the incubated entrepreneurs face a number of challenges in running their SMEs. In review, the SMEs face numerous challenges; among these obstacles were poor business management skills and isolation from markets (Choto et al., 2014:96). Furthermore, the current study found that interpersonal, process and people skills were among the identified challenges. Drawing from the interviewees, incubator four and five had this to say:

Challenges they face are normally the everyday challenges that entrepreneurs face everywhere, like access to markets and the supply chain into the organisation also convincing people to buy their services or product.

Another interviewee (incubator two) had this to say:

You will not like the answer; they don't have a clue what they are doing. They think running a business is something about making the government happy; 90% say because of a national development plan which wants to create jobs I am doing this to create jobs on behalf of government. Business has to make a profit. Most of them lack the above skills.

# 5.2.4.4. Qualities of a successful incubatee

According to the findings of Botha et al. (2006:2), successful entrepreneurs show knowledge and appropriate skills in running a business often measured by entrepreneurial ability, profit, sales turnover and improvement in the workforce. A strong relationship between the previous findings and the current research has been reported by the respondents. The qualities of a successful entrepreneur are measured by the growth and turnover of the business, the number of employees they have and the quality of their product or service. The findings produced results which corroborate the finding of a great deal of previous work in this field. Drawing from the interviewees on the qualities of a successful entrepreneur, incubator two had this to say:

Tenacity – but you get tenacity people chasing the wrong thing – the ability to understand and ability to accept good advice and have a listening skills; the willingness to learn and be humble yet proud.

Another interviewee (incubator four) had this to say:

Someone who believes in their idea, that is very important, and someone who has a learning attitude; if you are a person without a learning attitude you will not succeed. People who seek collaboration are tuned to being successful. Furthermore, a successful incubate is someone who has a clear understanding of the marketing positioning of the business and what they need to do in satisfying a customer's needs. Lastly, high growth rate, perseverance, a sustainable plan, and impacts.

#### 5.2.4.5. Other skills

The confirmation between congruency on related findings; this sub-theme aimed to further address the skills that are mostly reported as major challenges as this was linked to 4.3.4.3. A presentation skill, being able to close deals and conduct yourself in a good manner, was reported by incubation managers. Moreover, being friendly and communicating in a friendly manner with both people and corporates. The necessary skills for SMEs include personal and entrepreneurship skills, as well as personal entrepreneurial maturity skills and effective communication (Chang & Rieple, 2013:225). Drawing from the importance of the other skills, incubator one of the business incubation managers had this to say:

Business strategy; where the business is going, its legalities; and formalise the business, putting in the process for operations and selling their business ideas and they can't convince themselves... Basic skills; if they don't have it we develop it. Other skills they need are general skills and people skills: how do I read a situation and make a best decision based on that situation? They need common sense, which comes with a particular understanding of the world and interpersonal skills that one develops over the years. For instance, your business will always be tested when things are pressurised; how you read a situation and use strategy skills for different situations.

# 5.2.5. Challenges of business incubators

The sub-themes below are linked to address the research question: what are the challenges faced by business incubators in facilitating the entrepreneurial skills requirement of SMEs in the CMA?

# 5.2.5.1. Client acquisition and SMEs enrolled

The results regarding the number of SMEs enrolled in the incubation programme and those who have graduated, drawing from the respondents an average 25 of entrepreneurs both graduated and in the graduation phase were active. This study set out with the aim assessing the importance of graduating entrepreneurs in the incubation programme. Akcomak (2009:18) pointed out that clear selection and exit criteria is vital for the success of the incubator and recommended that business incubators should set out clear selection, entry, and exit criteria. The development of the business incubator depends on the quality of entrepreneurs enrolled in the programme hence it important to have quality of incubatees in the incubation programme and they should take calculated risk to succeed (Buys & Mbewana, 2007:358). The manager of incubator two had this to say:

We currently have 28 incubatees in the programme; some of them are not active, we have 18 active incubatees; and we are not paying much attention on graduates yet. We just give them office space and skills for now and we acceleration the programme that these entrepreneurs will go through. However, no one has left the incubation yet.

Another respondent (incubator three) had this to say:

Our goals are 50% of the SMEs coming to our programme; they must become sustainable, that's our aim. Our output rate is also slower, based on where the people stay. In the 19 months I have been here I have graduated one incubate out of the programme and that incubate is successful and sustainable. He is part of the seven that were here and one out of five who graduated; two of the original five are still here. And 50% is based on the world's average and at the moment the world's average is 38% who go into incubators and get support become sustainable. We are aiming at 50% which is above the world's average.

# 5.2.5.2. Challenges faced in running the incubator

In a review of the literature, data was found on the challenges facing incubators just like any other business (Rice, 2002). In both developed and developing sates incubators themselves

face obstacles to fully contributing to the success of the incubated SMEs (Grimaldi & Grandi, 2005:116). Drawing from the interviewees, one of the business incubators faced challenges of space to do production; funding; maintenance of the machine and technical and entrepreneurial skills. This research produced results which corroborate to the findings of a great deal of the previous work in this field. Emphasising the challenges facing incubators, incubator one had this to say:

Our major challenge is expansion into different areas; costs will be high in setting up a new site and people might not participate.

Another interviewee (incubator two) said:

Apart from getting entrepreneurs' mind-set right, the biggest challenge is opening doors and connecting entrepreneurs with corporates to get their first client. Gaining customers' trust and making sure a product or service has quality, and the problem is getting your foot in there – exposure. Lastly, the previous manager had never run a business before so it was entrepreneurial person... Operation systems that are not working such as quality processes, systems, procedures and getting the house in order.

The findings of this study will now be compared to the results of the previous work. Therefore, the aim of this sub-theme was to determine the challenges faced by business incubators in the Western Cape.

# 5.2.5.3. Support structures

Nowak and Grantham (2000) argue that 'for profit' compared to 'not for profit' incubators are expected to develop approximately half the overall number of all business incubators in the coming years. The main aim of this sub-theme was to investigate whether incubators receive any kind of support from private or public companies. Drawing from the literature, one of the challenges facing business incubators was funding and support systems. The results illustrate that all of the respondents in this do get some sort from government institutions, while two of the participants indicated that they have not received any support from private institutions. The findings of the current study are consistent with those of Akcomak (2009:7) who found that in developing countries business incubators are mostly supported by government agencies and there has been no transparency regarding the amount of funds that are allocated to business incubators. In relation to the aforegoing, incubator two had this to say:

Yes, we do receive funding from a government agency, 80% SEDA funding and 20% City of Cape Town. This is a very risky model; I am planning to change that model, to be funded up to 60-40% by government, 40-60% by private business.

Another participant (incubator four) said:

Yes, we have a number of private companies that support the incubator. Donations, finances to the incubation programme... For this incubator it cost R22, 000 per month to support a business; it will be impossible for them to pay such an amount of per the incubatee so we do get funding. We also get support items of mentorship, individual and private companies free of charge, and a whole lot of help from big to small business e.g. Sanlam, Sun International, Transnet and mining companies via various ways.

# 5.2.5.4. Advanced Technological facility

The results illustrate that a majority of the respondents in this research (three out of five interviewees) indicated that access to technology-based facilities is not a major challenge, while only two indicated that an advanced technology facility is a challenge in serving incubated SMEs. However, in developed countries technology-based business incubators are drivers of entrepreneurship, economic growth, innovation and research and development (Ozdemir & Sehitoglu, 2013:291). The results of this study will now be compared to the findings of Buys and Mbewana (2007:357) who found that access to technological facilities and technical knowledge lead to better environments for business incubators. Drawing from the interviews, incubator one said:

Not necessary, but yes to high-tech facilities. We have facilities but not upgraded facilities; we don't need a lot of technology, we need access to Internet platforms and we do have it and we buy it.

Another respondent (incubator two) had this to say:

'Not really a challenge; the challenge is that people don't know where to go. Hence, it is the role of the business incubator to know where SMEs should access these services. An incubator needs to have a credible knowledge of the industry.

# 5.2.5.5. Self-sustainability

The results indicated that a majority of business incubators in the CMA who participated in this research (three out of five) mentioned their business incubator was depending on government funding and was not self-sustainable, while two indicated that their incubator is not relying on

government funding to be sustainable. This finding confirms the association between Tamasy (2007:469) and Akcomak (2009:18) who concluded that business incubators should not depend on public funding and it must develop a model that will lead them to be self-sustainable and incubators are better run privately. Encouraging self-sustainability, incubator five noted:

We are an accredited training centre. Yes, we have a number of public companies that support the incubator and provide funding to the incubation programme.

Another interviewee (incubator three) had this to say:

I think it's a yes and no answer, our model allows us to be sustainable; it covers our basics and at the end of the day we have to pay our facilitators and employees. But we get support making life easy for us.

The aim of this sub-theme was to find out whether business incubation managers who participated had a model that will lead to self-sustainability.

# 5.2.5.6. Relevance of entrepreneurial skills

The results of this sub-theme will now be compared to the findings of previous work. There is a strong relationship between Akcomak (2009:18) and Lalkaka (2002:174) who argues that business incubators in developing still experiencing a lack of managerial and entrepreneurial skills to fully contribute in the SME's success. The majority of the respondents of this study (four out of five) indicated that a majority of business incubation managers agreed that a lack of entrepreneurial skills on the part of incubation managers has a negative effect on incubated SMEs. In contrast, two of the business incubation managers indicated that it is not a necessity to have entrepreneurial skills and formal qualifications to run an incubator; incubation managers need to have passion and persistence in developing incubated SMEs. These results corroborate the findings of a great deal of the previous work in this field. Drawing from the participants' emphasises on the relevance of entrepreneurial skills, incubator two related this:

As much as entrepreneurs should have entrepreneurial skills and an entrepreneurship background to develop their businesses, incubation management are required to at least have an understanding of what these entrepreneurs are going through.

Furthermore, the research problem of this study was that in developing countries business incubation managers lack the necessary skills to fully serve entrepreneurs in their incubation programme. This study found that the majority of interviewees had formal qualifications and

some came from an entrepreneurial background; both incubated SMEs and organisations that assist these entrepreneurs should have an entrepreneurial mind-set. 'It is therefore vital to promote a growth mind-set amongst entrepreneurs in the SME sector in South Africa as a means to foster SME success' (Neneh, 2012:3370. Another interviewee (incubator two) said:

I am currently rebuilding the model of a variety of skills to be mentored in the management department, like HR; finance, marketing, strategy, technology, operation, recruiting facilitators and mentors.

# 5.3. Summary of qualitative results

The objective of this study was to determine the extent to which business incubators facilitate the entrepreneurial skills requirements of SMEs in CMA. The sub-objectives were framed in order to achieve the main objectives of the research.

**Sub-objective one:** Determining the entrepreneurial skills of business incubators or lack thereof, affect the performance of business incubators. In view of this objective, the following can be noted:

- 1. From the above responses, all the incubation managers studied up to tertiary institutions and the majority did entrepreneurial or business studies.
- 2. A majority of interviewees noted that business incubators were not new as they were in operation for more than five years.
- 3. A total of four interviewees expressed that a lack of entrepreneurial skills affects the performance of the business incubator negatively.
- 4. Three participants indicated that it is necessary to have a formal qualification to manage a business incubator successfully.
- 5. Almost all respondents indicated that a business management qualification and a technical background help the growth and sustainability of the business.
- 6. All the respondents indicated that technical skills, business management skills, interpersonal and people skills, HR, leadership skills, and marketing and process skills are needed.
- 7. All respondents indicated that creating a culture among incubated entrepreneurs and a brand of social innovation and collaboration skills was more important.
- 8. One common skill respondents mentioned as being the most critical was financial education, which was a financial skill.
- 9. The criteria being used to monitor the performance of the incubator is the number of employees, turnover growth and jobs created.

10. The passion among incubation personnel in developing incubated SMEs plays a vital role.

**Sub-objective two:** Determining the entrepreneurial skills required by SMEs in order to be successful. With regard to this objective, the following can be drawn:

- 1. All respondent SMEs require multiple entrepreneurial skills such as financial, marketing, HRM, interpersonal, networking, administration and technical skills.
- 2. All respondents indicated that some incubated entrepreneurs come from entrepreneurial backgrounds and have various types of formal qualifications.
- 3. Respondents agreed that incubated SMEs face numerous challenges; among these skills were poor business management and process skills.
- 4. Most of the participants expressed that a high growth rate, perseverance, sustainability, and having an impact in society are qualities of a successful incubate.
- 5. Other necessary skills reported were personal, entrepreneurship, and entrepreneurial maturity skills, and effective communication.

**Sub-objective three:** To determine the challenges that BIs faces in providing entrepreneurial skills to SMEs in the CMA.

- 1. Averages of 25 of entrepreneurs were active on the graduation phase and graduated.
- 2. Respondents indicated that space for production, funding, maintenance of machines and technical skills were major obstacles facing business incubators.
- 3. All respondents were getting support from government agencies.
- 4. A majority of the respondents indicated access to technology-based facilities is not a major challenge.
- 5. A majority of the respondents agreed self-sustainability is the major challenge because the incubator was depending on government funding.
- 6. Business incubation managers agreed a lack of entrepreneurial skills on the part of incubation managers has a negative effect on incubated SMEs.

#### 5.4. Summary

The focus of this chapter was on data presentation and a discussion of findings, which involves a mixed-method approach and discussions were based on the research study's results. The results were presented and analysed with the help of content analysis for qualitative and SPSS software for quantitative methods. The results were illustrated in a frequency table, pie chart and bar. The discussion followed each presentation findings. The findings indicated that business incubators play a big role in facilitating entrepreneurial skills requirement for SMEs in the CMA. As mentioned in the results, these entrepreneurial skills included HR, financial management, marketing, strategy planning, technical, interpersonal, process and managerial skills. These results suggested that business incubation managers who lack the above skills should be taken to training workshops and skills-development courses to fully contribute to SMEs' success. Therefore, there is a need for skills and training to enhance entrepreneurial growth and sustainability in the SME sector. In conclusion, a recommendation and conclusion for the entire research was dealt with in the following and final Chapter Six.

# **CHAPTER 6: CONCLUSION AND RECOMMENDATIONS**

# 6.1. Introduction

In Chapters Four and Five, a presentation and discussion of findings were made. In this chapter, conclusions will be drawn and recommendations made. This chapter begins with a brief summary of all that has been covered in the earlier chapters. This is followed by the conclusion of the entire study and highlights of the results of the study, and the chapter ends with recommendations for this research.

# 6.2. A brief summary of the preceding chapters

A brief summary of all that has been covered in this study is highlighted.

# Chapter One:

This chapter laid the foundation for this study; specifically, an introduction and background of the study, research problem statement, research questions, research objectives, delineation of the study, and the significance of the study. These were followed by a justification and an overview of the research methodology.

# **Chapter Two:**

The focus of Chapter Two was to highlight the research objective or question, the role that business incubators play in facilitating entrepreneurial skills requirements. The chapter objectives were met in the literature reviewed and indicated that the role of business incubators in South Africa is important in minimising the failure rate of SMEs in the early stages; the challenges facing SMEs with entrepreneurial skills requirements are realised in the incubation programme; and the importance of entrepreneurial skill.

# **Chapter Three:**

Drawing from Chapter One where the research methods to be used were introduced, in this chapter the researcher detailed the processes that were followed with the research methodology that the study has utilised to collect and analyse data from respondents in the study. Specifically, the qualitative and quantitative approach adopted for the study was justified.

# Chapter Four:

Chapter four presented and discussed the results of the quantitative data that was collected from participants in the study. The results were presented in the format of tables and charts.

#### **Chapter Five:**

Chapter five presented and discussed the results of the qualitative data. The results were presented in themes and sub-themes.

#### Chapter Six:

This chapter presented a conclusion from the preceding chapters of the study and recommendations with future research which are based on the research findings.

#### 6.3. Conclusion

The research found that business incubation managers who were registered on the database of Traction do have the necessary skills to fully contribute to SMEs' development and growth. Therefore, these business incubators showed a potential in acceleration of SMEs' development and entrepreneurial skills within the incubated entrepreneurs; such skills were managerial and entrepreneurial skills (Akcomak, 2009:18; Lalkaka, 2002:174), as results of the study have shown business management and entrepreneurial skills are vital for business managers in running a business incubator. Akacomak and Lalkaka assessed that skills development in the incubation process favours entrepreneurship development as it encourages entrepreneurs to gain market share and business management skills play a key role in both business incubators and small businesses.

The current study found that business incubators play a role in facilitating entrepreneurial skills requirements for SMEs in CMA and these skills have an impact on the performance of the business (sub-theme 5.2.5.6). The role of business incubator managers in facilitating the entrepreneurial skills requirements of SMEs is important; however, the passion and people skills in developing entrepreneurs remain drivers of a successful business incubator (sub- theme 5.2.4.5). The role of formal qualifications in enhancing entrepreneurial skills was not perceived to be the determining factor. Furthermore, it appears that having a balance in both entrepreneurial skills and business concepts is what drives the business to success; and having knowledge about markets segmentation (sub-theme 5.2.3.1).

The types of skills that were reported as most important and relevant to managing a business incubator include: relevant technical and business management skills; interpersonal and people skills; human resources; leadership skills; and marketing and process skills (sub-theme 5.2.3.4). One of the other common skills mentioned as the most critical was financial skills, and it was found that a shortage of necessary skills could cause the downfall of the success of any business incubator (sub-theme 5.2.3.5). It was found that the criteria used to monitor the performance business incubators is the one that is stipulated by SEDA and DTI. Again, as they look at the number of employees employed in the business, turnover growth, the number of jobs created and SMEs enrolled in the programme, mostly is stipulated by government (sub-theme 5.2.3.6).

The role of entrepreneurial skills in the performance of business incubators is influenced by the number of qualified employees; the study found that averages of ten personnel were contributing to the incubator services (Table 5.12). The current study also revealed that the link between government and private support is a major contribution to the success of an incubator together with sector-specific skills (sub-theme 5.2.3.9). Therefore, it appears that skills alone do not fully contribute to the success of the business incubator as collaboration with industry stakeholders plays a key role.

The other main theme of the study was the critical entrepreneurial skills requirements of incubated entrepreneurs based on the diagnoses and evaluation from the business incubation managers. These critical skills included financial management, business marketing, human resources management, interpersonal, networking, administration and technical skills (sub-theme 5.2.4.1). It was found that these incubated entrepreneurs come from an entrepreneurial background and they have numerous types of formal qualifications (sub-them 5.2.4.2). Among the findings, poor business management skills and isolation from markets were reported as a major obstacle. Furthermore, business incubators measure the qualities of a successful entrepreneur by the growth and turnover of the business, the number of personnel they have and the quality of the product or service being offered. Therefore, the necessary skills for incubated entrepreneurs will include process and entrepreneurship skills, personal entrepreneurial maturity skills, effective communication and being able to network.

The last main theme of the study was to determine the challenges faced by business incubators in facilitating the entrepreneurial skills requirement of SMEs in the CMA. In the process regarding the number of entrepreneurs enrolled in the incubation programme and those who have graduated, it was found that an average of 25 entrepreneurs graduated during the course of the investigation (sub-theme 5.2.5.1). Hence, it is important to graduate incubated SMEs in the incubation programme. It was found that business incubators face challenges just like any another business. Therefore, in developed and developing countries business incubators are faced with a number of obstacles to fully contribute to the success of the incubated entrepreneurs, such as: space for production; funding; maintenance of the machine and technical and entrepreneurial skills (sub-theme 5.2.5.2).

This study also found that all the business incubators in this research do get funding from government institutions and other assistance from private organisations (sub-theme 5.2.5.3). Moreover, without government and private support, business incubation success and expansion would be compromised. The result suggests that business incubators should not depend on public funding and they must develop a model that could be self-sustainable and an incubator is better run privately (sub-theme 5.2.5.5). Another finding of the study was that access to advanced technology-based facilities was a challenge in providing services to the incubated SMEs to some incubators (sub-them 5.2.5.4). A conclusion that the relevance of entrepreneurial skills plays a key role as business incubation managers agreed that a lack of the above skills within the incubation managers has a negative effect on incubated SMEs (sub-theme 5.2.5.6).

The results found that incubated entrepreneurs were mostly male compared to females (Figure 4.1). Perhaps the lack of women entrepreneurs joining the incubation programme was due to cultural and gender discrimination, and beliefs about a woman's role in society. Findings revealed that their objectives in joining the incubation programme were to obtain multiple skills, as mentioned above, to gain growth (Table 4.2). Furthermore, the results of the current study found that incubated entrepreneurs achieved their objectives in participating in the incubation programme, as joining the incubation minimises business the failure rate for those who attend the incubation process (Figure 4.3).

Another recognised positive finding was that entrepreneurs in the incubation programme agreed that coming from an entrepreneurial background can play a big role in developing the business

in the early growth stages of the business cycle (Table 4.3). Stephen and Lydia (2014:29) mention that entrepreneurial education and exposure is equipping entrepreneurship activities and appropriate entrepreneurial skills on incubated business. SMEs who graduated in the programme agreed that they have obtained a number of skills in the incubation process such as: networking services and entrepreneurial skills; coaching and mentorship facilitation; providing a working place (Table 4.4). The process for registering a business while in the incubation programme (Figure 4.12) was perceived to be quicker. This result suggests that it is encouraging for SMEs to join the incubator programmes. Another finding of the study is that the incubator programme is the best option for small business development and growth in striving to be effective and efficient. Based on the findings of the research, the participants agreed that the incubation programme should be taken seriously (Figure 4.8).

However, the study also found that incubated SMEs still face (Figure 4.7) a number of challenges. The results of this study showed that a majority of the participants indicated that funding is the major stumbling block in their business and a lack of multiple skills. The study revealed that a majority of the SMEs in the programme were in need of financial support and other relevant skills (Table 4.6). Another finding was that in joining the incubation programme SMEs were inspired by growth potential and the lack of entrepreneurial skills (Figure 4.9). It was found that early involvement in business incubation by start-ups elevates a good entrepreneurial foundation and it positively influences the management role in their businesses (Figure 4.10). Moreover, respondents indicated that entrepreneurs with managerial skills might manage the business better than one without business management skills (Figure 4.13).

In summary, the main objectives and research questions of the current study were met. The current study provides an insight into the role of business incubators in facilitating the entrepreneurial skills requirements of small and medium size enterprises in the CMA, which seeks to promote small and medium business. Evident to this, the findings indicate that incubated SMEs play a key role in economic participation and job creation in the CMA. Therefore, recommendations to improve the current standard of incubated entrepreneurs in the study setting were made. Overall, the importance of business incubators in facilitating necessary and entrepreneurial skills requirements of SMEs should be taken seriously by entrepreneurs in developing the economic sphere in South Africa.

#### 6.4. Recommendations

It is recommended that SMEs in South Africa should join business incubation programmes in order to accelerate economic growth, social welfare in the country, the industrial development of nations, economic competitiveness, income generation, the promotion of entrepreneurship activities and enhancing international trade. Furthermore, the South African Government and its agencies should also prioritise assistance in business incubation activities, particularly in the designated districts. The new business ministry should identify SMEs as engines of growth, as they contribute to substantial employment and economic welfare.

SEDA and DTL should provide continued support for business incubators, particular financial support and facilitation of entrepreneurial skills. This support may assist entrepreneurship as it is the most important solution for poverty alleviation, low economic growth and unemployment in the country. Incubated entrepreneurs create job opportunities; as the study indicated a number of one to ten locals were employed in each incubator. The study recommends the establishment of new business incubators within the universities in the Western Cape Province to assist in inspiring graduates to start entrepreneurship activities.

Recruiting high quality entrepreneurs into the incubation process should be taken seriously by management, and a proper evaluation of the personnel of the business incubator. Furthermore, training was also recommended to those who are failing to manage the business. However, a large proportion of the respondents were confident that their products and services demand in the market was likely to continue in future (Figure 4.15). Business incubation managers should encourage expansion and maintain the success of the incubated SMEs.

Entrepreneurship education has been a subject of intense discussion in the literature and academic circles as it should be introduced in high school subjects to develop a culture of entrepreneurial philosophy. Furthermore, incubation managers should study up to tertiary college level and they should come from entrepreneurial backgrounds or business management experience. It is also recommended that incubation managers who lack necessary entrepreneurial skills should enrol in business courses at local colleges or universities. Lastly, it also recommended that government agencies should provide access to advanced technology-based facilities.

#### 6.5. Limitations of the research and recommendations for future researchers

The current study was limited only to business incubators in the CMA which were registered on the database of an organisation called Traction during the investigation that promotes and develops SMEs in the Western Cape Province (see Chapter One of the study). They were only five business incubators registered on this organisation's database during the course of the study. Another limitation of the study was SMEs in the incubation programme. This is a research limitation because it is not inclusive of other SMEs outside the incubation programme.

The current study recommends that further studies should also focus on the impact of SMEs that are outside incubation programmes and have completed the programme. It could not be a sound idea to generalise the role business incubators play in facilitating entrepreneurial skills requirements of SMEs as they may differ from that of the CMA. Lastly, it is also recommended to future studies to look at:

- 1. The characteristics of a successful business incubator and incubated SMEs;
- 2. Challenges faced by business incubators in South Africa;
- 3. A comparative study between private and public business incubator; and
- 4. A business framework for effective start-up and operation of business incubators in South Africa.

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#### APPENCES

Appendix A: Letters of permission



Cnr Neil Hare & John Dryer Road Atlantis Industrial ATLANTIS 7349 Cape Town, Western Cape, South Africa Telephone number:(+27) 21 577 2719/ 1034

> Fax: (+27) 21 577 1005 info@sarebi.co.za www.sarebi.co.za

27 August 2014

I, Ntombozuko Mphambani, in my capacity as Acting Centre Manager at SAREBI give consent in principle to allow Thobekani Lose a student at the Cape Peninsula University of Technology (CPUT), to collect data in this company as part of his MTech (Business Administration) research. The student has explained to me the nature of his research and the nature of the data to be collected.

We wish you a successful study as you undertake your thesis.

Yours sincerely

Ntombozuko Mphambani Acting Centre Manager Telephone number: (+27) 21 577 2719/ 1034 Fax: (+27) 21 577 1005 info@sarebi.co.za www.sarebi.co.za



To whom it may concern,

I Wayne Mongie, in my capacity as Director at Growth Space (Pty) Ltd give consent in principle to allow Thobekani Lose, a student at the Cape Peninsula University of Technology, to collect data in this company as part of his/her M Tech (IT) research. The student has explained to me the nature of his/her research and the nature of the data to be collected.

This consent in no way commits any individual staff member to participate in the research, and it is expected that the student will get explicit consent from any participants. I reserve the right to withdraw this permission at some future time.

In addition, the company's name may or may not be used as indicated below. (Tick as appropriate.)

	Thesis	Conference paper	Journal article	Research poster
Yes				
No				
Wayne Mg	ngie		_ 28 Augu	st 2014
			-	

1|Page

Cnr Neil Hare & John Dryer Road Atlantis Industrial ATLANTIS 7349 Cape Town, Western Cape, South Africa Telephone number: (+27) 21 577 2719 TS LED Lighting Solution

#### 2 February 2015

I, Trevor Stander, in my capacity as (owner manager) at TS LED Lighting Solution give consent in principle to allow Thobekani Lose a student at the Cape Peninsula University of Technology (CPUT), to collect data in this company as part of his MTech (Business Administration) research. The student has explained to me the nature of his research and the nature of the data to be collected.

In addition, the company name may be used in conference paper, thesis, and journal article and research post.

Yours Sincerely

Mr. Trevor Stander Owner Manager Telephone number: (+27) 76 148 7797 Fax: (+27) 21 577 1005 <u>TSLED@outlook.com</u> or tsledlighting@gmail.com



P.O. Box 1906 • Bellville 7535 South Africa •Tel: +27 21 6801680 • Email: saliefa@cput.ac.za Symphony Road Bellville 7535

Office of the Chairperson Research Ethics Committee	Faculty:	BUSINESS	
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At a meeting of the Research Ethics Committee on 04 February 2015, Provisional Ethics

Approval was granted to LOSE, Thobekani (210249803) for research activities Related

to the MTech/DTech: MTech: BUSINESS ADMINISTRATION at the

Cape Peninsula University of Technology

Title of dissertation/thesis:	The role of business incubators in facilitating the entrepreneurial skills requirements of small and medium size enterprises in the Cape Metropolitan area, South Africa	
	Supervisor: Dr R Tengeh	

Comments:

Decision: APPROVED

جاتی مرحدی	04 February 2015
Signed: Chairperson: Research Ethics Committee	Date
Signed: Chairperson: Faculty Research Committee	Date

Clearance Certificate No | 2015FBREC240

#### **APPENDIX B: Business Incubators Interview Guide**

Dear Sir/Madam,

The purpose of this survey is to gain your views regarding the topic "The role of business incubators in facilitating the entrepreneurial skills requirements of small and medium size enterprises in the Cape metropolitan area, South Africa".

Please note that your views/responses will be dealt with respect, honesty and confidentiality. Furthermore, you can withdraw at any time during this interview, should you feel so. Your responses and the name of your organisation will be kept anonymous. You are also kindly asked to give your consent that the information captured during the interview would be used for the purposes of the research topic.

I would like also to indicate that your views are important and would be a real contribution towards the role of business incubators in developing SMEs, especially in the Cape metropolitan area. Moreover, on the basis of this is an academic research being undertaken by a University student and other research ethical code of conduct will apply.

Thank you for your time and participation.

Mr.Thobekani Lose Masters in BA Candidate Contacts: +27 21 460 3450 Skype: thobs2012 E-mail: <u>thobekanilose@gmail.com</u> Supervisor: Dr. Robertson K. Tengeh Faculty of Business & Management Sciences Contacts: +27 21 460 3450 E-mail: <u>Tengehr@cput.ac.za</u>

# Section A. Demographics Information

# 1. Highest level of education

□ Tertiary level	□ Matri	culated	□ High school level		
□ Primary school level	🗆 No fo	$\Box$ No formal education			
2. When was the business established?					
(Select only one.)					
$\Box$ 12 months or	□1-2 years	$\Box$ 3-4 years	$\Box$ 5+ years		

# Section B. Business related Information

<ul> <li>Question.3</li> <li>What are the entrepreneurial skills of business incubators and how do they affect the performance of business</li> </ul>	3.1 Do you believe lack of entrepreneurial skills affect the performance of business incubators? If yes could you please elaborate why?
incubators?	3.2 Do you think having entrepreneurial skills are important for your business incubator? If yes, why?
	3.3 Do you think it is necessary to have a formal qualification to manage an incubator successful? If yes.
	3.3.1 What sort of formal qualifications are required in order to be appointed as an incubator manager?
	3.4 How many personnel does the incubator have? What sort of experience and skills does the incubator staffs have?
	3.5 Which of these skills are mostly important and relevant to your business incubator?
	3.6 What sort of criteria does management use

	to monitor the performance of your incubator?
	3.7 In relation to 4.6 are you happy with the performance of your business incubator and which skills are mostly contributing to the performance? If not, why?
	3.8 What are the entrepreneurial skills of business incubators?
	3.9 Do you think personal, process and interpersonal skills are importance for your business growth?
	3.10 What are the contributing factors to the success of Business Incubator in South Africa
<ul> <li>Question. 4</li> <li>What are the entrepreneurial skills requirements of SMEs?</li> </ul>	4.1 In your experience or opinion what are the critical skills does your client need to be successful?
	4.2 Base on your diagnoses and evaluation, what skills are necessary for incubatees to be successful?
	4.3 Do you think entrepreneurial skills are important for incubatees? If yes why?
	4.4 Do your SMEs owners come from entrepreneurial background? If yes what sort of experience or qualifications do they have?
	4.5 What are the challenges of skills are mostly reported by your clients and do they attend the incubation programme? If no, why?
	4.6 What do SMEs in your programme need the most?
	4.7 What are the qualities of a successful incubate?

	4.8 Do you think personal, process and interpersonal skills are necessary for your SMEs?
<ul> <li>Question. 5</li> <li>What are the challenges faced by business incubators in facilitating the entrepreneurial skills requirements of SMEs in the Cape metropolitan area?</li> </ul>	5.1 Since you started the operation how many SMEs have enrolled in your programme? How many are still on the programme and how many have graduated?
	5.2 What type of challenges do you face in running your business incubator?
	5.3 What are the most critical challenges for your business incubator?
	5.4 What challenges do you face in facilitating services for SMEs?
	5.5 Do you receive any kind of support from public and private interties? If yes could you please specify?
	5.5.1 Is the access to technology-based facilities a challenge? And why.
	5.6 Do you think lack of entrepreneurial skills is a problem?
	5.7 Is your business incubator self-sustainable?

**6.** Do you have mentors, coaches to assist your incubatees? Do you look for any specific skills requirements or entrepreneurial mindset?

APPENDIX C: Inc. Could You Please				mple: X]
Section A. Demog	graphics Inforn	nation		
1. Age				
$\Box$ 22 or less	□23-30	□ 30-39	□ 39+	
2. Gender				
(Select only one.)	□ Male		Female	
SMEs Developme	nt and sustain	ability		
3. When was the I	ousiness estab	lished?		
(Select only one.)				
□12 months	□1-2 years	□3-4 ye	ears $\Box$ 5+ years	S
4. What was your	objective in at	tending busine	ess incubation pr	ogramme?
□Growth	□Skil	ls	Finance	
□Network		Business plan		Other, please
specify				
5. Did you achieve	e the objective	?		
□Yes	□No			
If no, please Explai	in			
6. Do you come fr	rom entreprene	eurial backgrou	und?	
□Yes	□No			
7. What skills do y	you need?			
□Marketing	□Human	resources	Finance	
Entrepreneurial a	and Network	□Busines	s plan	

□ Other, pleas	se specify			
8. What kind o	of services di	d you obtain fr	om Business	ncubators?
	services & Er	ntrepreneurial	Skills □Tec	hnical and business training
services				
□ Coaching a	nd mentorship	facilitation	□Fu	nding or financing
	orking place			l of the above
$\Box$ Other, pleas	se specify			
9. How many	employees di	d you have at	the time that y	ou started your business?
□1-10	□11-50	□ 51 – 500	□ 50	0+
10 How many	<i>i</i> employees (	do you current	ly employ?	
(Select only o	•••	io you ourrent	iy chipicy.	
( <b>)</b> -	- /			
□1-10	□11-50	□ 51 – 500	□ 50	0+
Business ope	rations			
•		your busines	s venture?	
(Select only o	ne.)			
□Growth	🗆 Job	o Creation	□sustainir	ng your needs
□other –speci	fy			
12. What type	of challenge	s do you face i	in running you	r business?
(Select only o	ne.)			
	irial skills	Funding	□Office space	e □Government regulations
		mme effective	and efficient to	o your Business?
(Select only o	•			
□Yes	□No			

□\*Reason.....

# 14. What type of support do you require?

# (Select only one.)

□financial support	Entrepreneurial and development Skills		
□Advice of developing new	r products and services		
Business Planning and forming a company			
□other please specify			

# 15. What motivated you to attend business incubation programme?

# (Select only one.)

□Growth potential □Lack of entrepreneurial skills

□other –specify .....

16. Kindly indicate the extent to which you agree and disagree with the following statement related to the role business incubators in facilitating services to SMEs by placing an X in the appropriate box.

manage his/her business better than one without such			
skills.			
16.7 The demand for my product and services in the			
market is likely to continue in the future.			
16.8 A business like mine has a potential to employ more			
people.			
16.9 Support structures for entrepreneurs like Incubators			
play a big role in developing entrepreneurship in the Cape.			
16.10 Owning a business is the best option for economic			
participation rather than seeking a job.			

### 17. How would you rate the Business Incubator on a scale of 1-10?

□1	□2	□ 3	□ 4	□ 5
□6	□7	□ 8	□ 9	□ 10

# 18. In your own words do you think the Business Incubators have an impact on SMEs?

#### **Comments and recommendations**

Thanks you for your response

# APPENDIX D: Statistical Analysis (Frequency Table)

 Age group								
		Frequency	Percent	Valid Percent	Cumulative Percent			
	22 or less	1	3.6	3.6	3.6			
	22 to 30	9	32.1	32.1	35.7			
Valid	30 to 39	10	35.7	35.7	71.4			
	39+	8	28.6	28.6	100.0			
	Total	28	100.0	100.0				

Gender

Cender								
					Cumulative			
		Frequency	Percent	Valid Percent	Percent			
	male	23	82.1	82.1	82.1			
Valid	female	5	17.9	17.9	100.0			
	Total	28	100.0	100.0				

When was the pushiess established :								
					Cumulative			
		Frequency	Percent	Valid Percent	Percent			
	12 months	1	3.6	3.6	3.6			
Valid	1 to 2 years	13	46.4	46.4	50.0			
	3 to 4 years	11	39.3	39.3	89.3			
	5+ years	3	10.7	10.7	100.0			
	Total	28	100.0	100.0				

		Frequency	Percent	Valid Percent	Cumulative Percent
	growth	5	17.9	17.9	17.9
	skills	1	3.6	3.6	21.4
	finance	1	3.6	3.6	25.0
	networking	3	10.7	10.7	35.7
Valid	other	1	3.6	3.6	39.3
	more than one of the above	17	60.7	60.7	100.0
	Total	28	100.0	100.0	

What was your objective in attending business incubation programme?

Did you achieve your objective?

					Cumulative
		Frequency	Percent	Valid Percent	Percent
_	yes	22	78.6	78.6	78.6
Valid	no	6	21.4	21.4	100.0
	Total	28	100.0	100.0	

Do you come from entrepreneurial background?

					Cumulative
		Frequency	Percent	Valid Percent	Percent
_	yes	10	35.7	35.7	35.7
Valid	no	18	64.3	64.3	100.0
	Total	28	100.0	100.0	

-								
		Frequenc		Valid	Cumulative			
		У	Percent	Percent	Percent			
	marketing	2	7.1	7.1	7.1			
	human resource	1	3.6	3.6	10.7			
.,	Finance	3	10.7	10.7	21.4			
Valid	entrepreneurial and networking	1	3.6	3.6	25.0			
	more than one of the above	19	67.9	67.9	92.9			
	Other	2	7.1	7.1	100.0			
	Total	28	100.0	100.0				

#### What skills do you need?

#### Cumulative Frequency Percent Percent Valid Percent networking services and entrepreneurial 1 3.6 3.6 3.6 skills coaching and 7.1 1 3.6 3.6 Valid mentorship facilitation providing working place 7.1 7.1 14.3 2 all of the above 2 7.1 7.1 21.4 more than one of the 78.6 100.0 22 78.6 above Total 28 100.0 100.0

#### What kind of service did you obtain from business incubator?

#### How many employees did you have at the time you started your business?

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	1-10	28	100.0	100.0	100.0

		Frequency	Percent	Valid Percent	Cumulative Percent
	1-10	24	85.7	85.7	85.7
Valid	11-50	4	14.3	14.3	100.0
	Total	28	100.0	100.0	

# How many employees do you currently employ?

# What is the objective of your business venture?

		<b>F</b>	Deveent	Valid Danaant	Cumulative
		Frequency	Percent	Valid Percent	Percent
	Growth	12	42.9	42.9	42.9
	Job creation	3	10.7	10.7	53.6
	Sustaining your needs	1	3.6	3.6	57.1
Valid	Growth and Job creation	4	14.3	14.3	71.4
	Growth and Sustaining your Needs	5	17.9	17.9	89.3
	All three	3	10.7	10.7	100.0
	Total	28	100.0	100.0	

What type of challenges do you face in running your business?							
		_			Cumulative		
		Frequency	Percent	Valid Percent	Percent		
	Entrepreneurial skills	1	3.6	3.6	3.6		
	Funding	13	46.4	46.4	50.0		
	Office space	3	10.7	10.7	60.7		
Valid	Government regulations	1	3.6	3.6	64.3		
	More than one of the above	10	35.7	35.7	100.0		
	Total	28	100.0	100.0			

#### What type of challenges do you face in running your business?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	17	60.7	60.7	60.7
Valid	No	11	39.3	39.3	100.0
	Total	28	100.0	100.0	

#### Is the incubator programme effective and efficient to your business?

What type of support do you require?

		Frequency	Percent	Valid Percent	Cumulative Percent
	Financial support	12	42.9	42.9	42.9
Entrepreneurial and Development skills	1	3.6	3.6	46.4	
Valid	Advice of developing new product and services	2	7.1	7.1	53.6
Ν	Other	1	3.6	3.6	57.1
	More than one of the above	12	42.9	42.9	100.0
	Total	28	100.0	100.0	

	What motivated you to attend the business incubation programme?								
-					Cumulative				
		Frequency	Percent	Valid Percent	Percent				
_	Growth potential	17	60.7	60.7	60.7				
Valid	Lack of entrepreneurial skills	5	17.9	17.9	78.6				
	Other	1	3.6	3.6	82.1				
	Both	3	10.7	10.7	92.9				
	Stated reason and other	2	7.1	7.1	100.0				
	Total	28	100.0	100.0					

		Frequency	Percent	Valid Percent	Cumulative Percent			
di	strongly disagree	1	3.6	3.6	3.6			
	Disagree	1	3.6	3.6	7.1			
Valid	Uncertain	5	17.9	17.9	25.0			
	Agree	10	35.7	35.7	60.7			
:	strongly agree	11	39.3	39.3	100.0			
	Total	28	100.0	100.0				

Involvement in a business incubator at early stages provides a good entrepreneurial foundation for those who want to succeed.

Entrepreneurship education and training enabled me to survive managing my business.

		Frequenc	Doroont	Valid Percent	Cumulative
L		у	Percent	valid Percent	Percent
	Disagree	2	7.1	7.1	7.1
	Uncertain	3	10.7	10.7	17.9
Valid	Agree	15	53.6	53.6	71.4
	strongly agree	8	28.6	28.6	100.0
	Total	28	100.0	100.0	

It is for a business like mine to obtain funding from financial institutions that support entrepreneurs.

		Frequenc		Valid	
		У	Percent	Percent	Cumulative Percent
	strongly disagree	1	3.6	3.6	3.6
	Disagree	4	14.3	14.3	17.9
Valid	Uncertain	5	17.9	17.9	35.7
	Agree	12	42.9	42.9	78.6
	strongly agree	6	21.4	21.4	100.0
	Total	28	100.0	100.0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly disagree	3	10.7	10.7	10.7
	disagree	7	25.0	25.0	35.7
	uncertain	6	21.4	21.4	57.1
	agree	7	25.0	25.0	82.1
	strongly agree	5	17.9	17.9	100.0
	Total	28	100.0	100.0	

The process of registering a business in south Africa is quick within the incubation programme?

Entrepreneurial skills would boost the chances of obtaining success in my business.

		Fraguaday	Doroont	Valid Percent	Cumulative
		Frequency	Percent	valiu Percent	Percent
	disagree	1	3.6	3.6	3.6
	agree	16	57.1	57.1	60.7
Valid	strongly agree	11	39.3	39.3	100.0
	Total	28	100.0	100.0	

A business owner with managerial skills could manage his or her business better than one

	without such skills.									
					Cumulative					
		Frequency	Percent	Valid Percent	Percent					
	disagree	2	7.1	7.1	7.1					
	uncertain	5	17.9	17.9	25.0					
Valid	agree	11	39.3	39.3	64.3					
	strongly agree	10	35.7	35.7	100.0					
	Total	28	100.0	100.0						

					Cumulative
		Frequency	Percent	Valid Percent	Percent
	uncertain	3	10.7	10.7	10.7
	agree	13	46.4	46.4	57.1
Valid	strongly agree	12	42.9	42.9	100.0
	Total	28	100.0	100.0	

The demand for my product or services in the market is likely to continue in the future.

A business like mine has a potential to employ more people.

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	Agree	13	46.4	46.4	46.4
	strongly agree	15	53.6	53.6	100.0
	Total	28	100.0	100.0	

Support structures for entrepreneurs like incubators play a big role in developing

entrepreneurship in the Cape.					
					Cumulative
		Frequency	Percent	Valid Percent	Percent
	Disagree	1	3.6	3.6	3.6
Valid	Uncertain	7	25.0	25.0	28.6
	Agree	9	32.1	32.1	60.7
	strongly agree	11	39.3	39.3	100.0
	Total	28	100.0	100.0	

					Cumulative
		Frequency	Percent	Valid Percent	Percent
	Uncertain	2	7.1	7.1	7.1
	Agree	13	46.4	46.4	53.6
Valid	strongly agree	13	46.4	46.4	100.0
	Total	28	100.0	100.0	

Owning a business is the best option for economic participation rather than seeking a job.

How would you rate the business incubator on a scale of 1 to 10?

					Cumulative
		Frequency	Percent	Valid Percent	Percent
	1	2	7.1	7.1	7.1
	4	5	17.9	17.9	25.0
	5	6	21.4	21.4	46.4
	6	6	21.4	21.4	67.9
Valid	7	2	7.1	7.1	75.0
valiu	8	5	17.9	17.9	92.9
	9	1	3.6	3.6	96.4
	10	1	3.6	3.6	100.0
	Total	28	100.0	100.0	

#### **APPENDIX E: Grammarian Certificate**



#### Editing, Proofreading, Copywriting & Historical Research

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#### TO WHOM IT MAY CONCERN

27 August 2015

MASTER'S THESIS: MR THOBEKANI LOSE

Dear Sir or Madam,

This is to confirm that I have edited Mr Thobekani Lose'smaster's thesis.

My contribution to his dissertation was merely for the purpose of editing his writing style and grammar, as English is not his firstlanguage.

In no way did I assist him in the subject matter of his dissertation, which remains his work and his alone.

Sincerely,

John Dorrington.