

“The relevance and challenges of business incubators that support survivalist entrepreneurs”

AUTHORS

Robertson K. Tengeh
Prominent Choto

ARTICLE INFO

Robertson K. Tengeh and Prominent Choto (2015). The relevance and challenges of business incubators that support survivalist entrepreneurs. *Investment Management and Financial Innovations*, 12(2-1), 150-161

RELEASED ON

Friday, 07 August 2015

JOURNAL

"Investment Management and Financial Innovations"

FOUNDER

LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

0



NUMBER OF FIGURES

0



NUMBER OF TABLES

0

© The author(s) 2025. This publication is an open access article.

Robertson K. Tengeh (South Africa), Prominent Choto (South Africa)

The relevance and challenges of business incubators that support survivalist entrepreneurs

Abstract

Noting that business incubation (BI) receives substantial attention in the entrepreneurship literature as programs that help entrepreneurs overcome business start-up and growth challenges, this paper investigates the relevance and challenges confronting the BIs in the context of South Africa. Mixed methods were utilized in this study; essentially interviews and questionnaires were used to collect data. Using the graduation rates and satisfaction (benefit) of the incubatees as a proxy for the relevance of BIs, the results indicated that, 55.1% of those survivalist entrepreneurs who enrolled in incubation programs benefited from attending the incubation program, whilst 44.9% indicated that they did not benefit from attending the program. Furthermore, lack of funding was found to be the major challenge confronting BIs. Other less significant challenges include lack of support from stakeholders, and uncommitted clients. The implication of these results are that just like their clients, BIs face a number of challenges which threaten their long-term survival, the quality and quantity of service that they render.

Keywords: entrepreneurship, business incubation, business challenges and business development.

JEL Classification: M21, O40.

Introduction

Rising poverty in a number of countries today, continue to be a cause of concern. With unemployment identified as the common culprit, the proactive citizens of the affected countries have traditionally turned to self-employment as a means of generating income and South Africa is no exception (Richards, 2006). The result is an upsurge in the number of micro-entrepreneurs, who could contribute positively to the economy if given the opportunity and support (Richards, 2006; Tengeh, 2013). It comes as no doubt, that researchers, industry experts, and government officials increasingly accentuate the role that Small, Medium and Micro-size Enterprises (SMMEs) can play in generating income and employment (Akcomak, 2009). The start-up process and early growth of new businesses have been the focus of considerable research efforts (Grimald & Grandi, 2005). Of particular concern has been the establishment of the characteristics, factors and conditions which foster entrepreneurial processes, new venture creation, and that lead to their success (Roberts, 1991). This comes against the backdrop that less than half of all new firms survive the fifth year and only a fraction develops in to high growth firms which make contributions to job creation (Willemse, 2010; OECD, nd).

In view of the pressing need to keep poverty under control, many governments deem it necessary to improve business start-ups, their survival and growth.

Like its counterparts, the South African government has made considerable efforts to promote and grow SMMEs (Masutha & Rogerson, 2014). This comes against the backdrop of the numerous challenges that confronting SMMEs, in particular, and the country, as a whole, post democracy. One of the vehicles utilized to promote and grow SMMEs has been the introduction of business incubators.

Azriel and Laric (2008) point out that many of today's leading companies trace their humble beginning to a business incubator. Business incubators (BIs) play a vital role in supporting entrepreneurs (Ratinho, 2011). Incubating organizations are part of a wide range of initiatives aimed at stimulating and supporting entrepreneurship (Autio & Klofsten, 1998; Koshy, 2010; Ratinho, 2011). BIs typically support new ventures in the hope they will later develop into self-sustaining, thriving companies (Koshy, 2010; Bruneel et al., 2012). This support encompasses several dimensions not limited to office space, shared resources, business support, and access to networks. Azriel and Laric (2008) point out that BIs offer peculiar business support services to boost the start-up and growth of small business enterprises into financially and operationally stable ventures. If entrepreneurs take advantage of such support, they stand a greater chance of survival, sustaining growth and fully contributing to the economy. The growth and survival of entrepreneurial ventures result in economic growth and development in the sense that employment opportunities are created, new products are developed as well as poverty reduction.

1. Background and problem

Unemployment affects at least one in every four people in South Africa. The current unemployment rate is 25.5% (Statistics South Africa, 2014) and it is believed that the most pragmatic way to overcome this challenge is via entrepreneurship.

© Robertson K. Tengeh, Prominent Choto, 2015.

Robertson K. Tengeh, Dr., Senior Lecturer, Department of Entrepreneurship and Business Management, Faculty of Business, Cape Peninsula University of Technology, South Africa.

Prominent Choto, Department of Entrepreneurship and Business Management, Faculty of Business, Cape Peninsula University of Technology, South Africa.

Notwithstanding the perceived opportunities that the South African SMME sector presents, the level of entrepreneurship in South Africa remains surprisingly low (InfoDev, 2010). In fact, a number of GEM studies have decried the comparatively low level of business start-up and growth in South Africa (GEM, 2001; Herrington, 2008). To further compound matters, a high rate of small business failure persists (Parsons, 2004). A failure rate ranging between fifty percent and ninety-five percent within five years of operations is clearly higher than most emerging countries (Willemse, 2010). The poor sustainability of start-up ventures in South Africa as compared to other countries, calls for policy intervention that supports and mentors entrepreneurs in the start-up phase (GEM, 2001).

No doubt, in an attempt to curb business failure and unemployment (GIBS, 2009), the South African government introduced and embarked on the promotion business incubators. It is believed that promoting incubators will foster the development of new businesses in the country, in general, and within the local community, in particular (Lesakova, 2012; Schiopu et al., 2015). Going beyond simply start-up, Koshy (2010) asserts that the greatest benefit of BIs is enhancing enterprise survival rate and there is considerable evidence that incubated firms have a higher chance of survival. Hackett and Dilts (2004), however, caution that the positive image presented of BIs incubators goes alongside contradictory evidence as to their efficacy.

The stimulation of SMMEs can, therefore, be seen as an attempt to drive South Africa's economy to the next level, one in which the country's entrepreneurship flourishes (Richards, 2006; Timm, 2013). The ability of incubators to support incubatees is dependent on a number of variables not limited to resources (funding and skills, for instance), which as Ratinho (2011) notes may be limited at times. It is essential to highlight here, that the survival and sustainability of BIs incubators have direct repercussions for the incubatees.

Notwithstanding the numerous incubator programs run by both government and private organizations, their impact on SMMEs, in general, and survivalist entrepreneurs, in particular, has not been well established, especially in the context of South Africa. Studies on incubator-incubatee challenges are quite limited. More significantly, the discourse on the relationship between the incubator and incubatee has often been one-sided with emphasis on the needs and challenges of incubatees (Masutha & Rogerson, 2014; Choto et al., 2014). Little or no attention has so far been given to the challenges that incubators face as they strive to support incubatees, yet we unconditionally expect the best results from the former.

This paper aims to close the apparent gap in the literature, by investigating the relevance and challenges confronting business incubators in the context of survivalist businesses. This paper, therefore, addresses two questions:

1. What is the relevance of incubators that support survivalist businesses? In other words, are they helpful?
2. What are the challenges faced by business incubators as they attempt to provide quality services to survivalist entrepreneurs?

2. Literature review

2.1. What is a business incubator? The National Business Incubation Association (NBIA) in Wilber and Dixon (2003) define a business incubator as an economic development tool which is designed to accelerate the growth and success of entrepreneurial ventures by providing a range of business resources and support services. Along the same lines, Schiopu et al. (2015) refer to BIs as agents that provide support to start-up firms with the aim of helping them overcome the numerous challenges inherent at this phase of their lifecycle. Hence, Buys and Mbewana (2007) see BIs as providers of protected environment for business during their start up stage.

Allen and Rahman (1985) are of the view that even if entrepreneurs have specialized knowledge they often lack a number of business skills which are provided by business incubators through their support network. Wilber and Dixon (2003) describe business incubators as providers of rental space, business consultancy services, shared offices, services, office equipment and a number of administrative services to small businesses at little or no cost.

Said et al. (2012) assert that business incubators evolved through three important stages, namely start up, business development and maturity. These stages are essential in determining the effectiveness of a business incubator. The challenges encountered at each stage in the life cycle tend to vary and serve as a learning curve. Hence, the services offered by a BI depend on the stage at which it finds itself, and performance improves as they approach the maturity stage (Allen & McCluskey, 1990 in Said et al., 2012, p. 71). Therefore, examining the impact of a business incubator should be measured based on the incubator's goals, addressing the stakeholders' needs and the stage in the life cycle of the business incubators (Said et al., 2012).

2.2. The history of and current business incubation in South Africa. A review of the incubation platform in South Africa today would attest to the fact that the industry has rapidly evolved over the past decade (Masutha & Rogerson,

2014). The history of business incubators dates back to 1959, when the first incubator was established in New York (Hackett & Dilts, 2004).

In South Africa, business incubation started in 1995 when the “hives of industry” was set up by the Small Business Development Corporation (InfoDev, 2010, p. 14). According to Mbewana (2006) in Meru and Struwig (2011, p. 113), the “hives of industry” were made up of independent workstations put together to constitute a cluster of workshops. The InfoDev (2010) reported that a number of business hives still exist. Amongst these are: Maxum at The Innovation Hub, Sedichem and Bandwidth Barn which are public sector supported incubation centres in the country.

As Masutha and Rogerson (2014) point out, the number of public incubators had grown from three in 2001 to four by 2004, and 37 by 2011 (GEM, 2012; Timm, 2013). By 2013, Masutha and Rogerson (2014) noted that the total number of incubators had escalated to 51. Of this national total, 42 or 82 percent of the incubators are public sector driven through the activities of SEDA.

2.3. Business incubator operational models. The Global forum (2013) highlighted that there is no one model for business incubation, the models vary depending on objectives, the business environment, their owners and the funders. Aranha (2003) identified four (4) broad incubator models which are bricks and mortar; virtual portal; the hub and eggubator.

2.3.1. Bricks and mortar. The brick and mortar is a historical model which focuses on physical facilities, office support and on site services; mainly administration support. They provide physical gathering place where entrepreneurs can work but not funding (Aranha, 2003). SEDA Construction Incubator in South Africa for instance, provides business support services and office infrastructure (Tambudze, 2012).

2.3.2. Virtual portal or without walls. These are a new model of business incubators in their start-up phase with no solid track record; they provide a range of services electronically, and they also give access to a limited amount of funding (Aranha, 2003). Bodibeng Technology Incubator and Soft-Start Business and Technology Incubator in South Africa offering support in information technology (Tambudze, 2012). Virtual models offer easy access to a range of services with no administrative costs associated with physical facilities (Aranha, 2003).

2.3.3. Hub or venture incubator. Aranha (2003) described the hub as a combination of the brick and mortar and the virtual incubators, they offer

specialized good range of services but provide a limited amount of funding to their clients; and their network with the outside is underdeveloped, informal and inconsistent. Shanduka Black Umbrellas is a good example of this model in South Africa (Tambudze, 2012).

2.3.4. Eggubator. The eggubator builds dedicated business alliances both internally and externally which offer good sources of funding, they offer total range of services providing high quality information and it acts as the parent company, the service provider, the source of networking and support, the cradle and the hatchery and it incorporates all the other models (Aranha, 2003). In South Africa, Raizcorp provides full business support services (Tambudze, 2012).

3. The relevance of business incubators

Following Ratinho (2011), this paper considers the relevance of BIs from two fronts, namely: the graduation rates and satisfaction of the incubatees. To understand the relevancy of BIs, it is important that we understand their mission and purpose.

3.1. Mission and purpose. Entrepreneurial firms pass through different phases in their life cycle. They can either be in start-up mode, business development mode or in maturity stage. Isabelle (2013) mentioned that incubators are most successful when their mission and goals are in line with the entrepreneur’s needs as well as sponsoring organizations. Naude (2010) concurs with Isabelle (2013) that incubator support is more appropriate in the early stages of an entrepreneurial venture. Grigorian et al. (2010) warn that a mismatch between BI’s offer and the tenant’s needs might lead to a failure of the incubators.

In order for entrepreneurs to gain fully from incubators’ programs, it is recommended by Isabelle (2013) that the former take into consideration the core activities of the latter before signing up for the program. Furthermore, entrepreneurs should look at performance measures of the incubators company like number of clients, the survival rate of clients, occupancy rate, management effectiveness, royalties, and investments raised (Isabelle, 2013). The reputation of the incubator organization is a critical factor for the entrepreneur in deciding the incubators to be involved with because it determines the visibility of the entrepreneurial firm and the ability to attract capital, resources and talent (Isabelle, 2013).

3.2. Incubator services. According to Lesáková (2012), the business incubators differ in the way they render services, in their organizational structure and in the type of clients that they service. Niammuad, Mapompech and Suwanmaneepong (2014)

acknowledge that incubators offer different types of resources, some incubators are technology based incubators whilst some are business development based. The OECD (2010) defines technology-business incubators as business incubation schemes that assist owners of technologically-oriented firms during start-up and early growth phases through the provision of workspace, shared facilities and a range of business support services.

According to Goldmark (1996) in Meru and Struwig (2011, p. 113), business development services which include training, transfer of technology, mentoring, business advice and information are aimed at small and micro entrepreneurs to improve the performance of their business.

Incubators provide services not limited to access to suitable rental space, flexible leases, equipment, business networks and finance (Van der Zee, 2007). Furthermore, incubators provide management guidance, technical assistance and consulting tailored to young and growing companies making business incubator programs unique (Koshy, 2010).

According to Carayannis and Von Zedtwitz (2005) in Isabelle (2013, p. 20), the identified services above are the most important activities that a business incubator can offer, if an incubator offers fewer than four of these services it means that they lack too many elements to be considered an incubator.

3.3. Incubators selection and graduation policies.

The Gordon Institute of Business Science (GIBS) and First National Bank (FNB) in their publication the State of Entrepreneurship in South Africa, mentioned that effective incubation requires the selection of the right entrepreneurs (GIBS, 2009). According to Dee et al. (2012) and Isabelle (2013), incubators recruit their clients based on predefined criteria. To ensure the right candidates are recruited, BIs may conduct a needs-assessment and evaluate each candidate's business based on their mission, industrial sector, location and coach ability of the entrepreneur.

3.4. Satisfaction of tenants. Attempts to improve Incubator Service Performance (ISP) and Tenant Customer Satisfaction (TCS) underlie the basic confrontation between the efficiency required of ISP and the effectiveness desired for TCS. In marketing, it is believed that increasing customer satisfaction leads to customer retention which can result in developing an on-going relationship with customers; these should be encouraged by management (Kotler, 2005 cited in Azriel & Laric, 2008).

Previous work on BIS recognizes that incubation is the most effective when a fit exists between the offered services, the service provision approach of the BI and the needs of incubatees (Grigorian et al., 2010).

4. Business incubators and their challenges

4.1. The relationship between incubation and entrepreneurship.

Drawing a close parallel between hospitals and business incubators, Triantafyllopoulou (2006) related the concept of business incubation to how hospitals nurture a premature born child, providing a simulated environment and monitor the life systems of the child until they reach a stage of being brought up like a normal child. In a similar manner, business incubators help companies to grow and survive when they are most susceptible in their start-up stage (Buys & Mbewana, 2007). Incubators being identified as support givers to entrepreneurs, their performance and success ultimately depend on the number of entrepreneurs or clients they have assisted and how they are performing in their business ventures (Anon, 2002).

4.2. Challenges faced by business incubators in servicing survivalist entrepreneurs.

To garner an informed view of the reasons behind the non-completion of BIs programmes, a balance perspective is deemed necessary. An approach, that drove this research into considering the challenges that BIs face. Like business incubatees, BIs face a number of challenges not limited to the following:

4.2.1. Geographic area. Entrepreneurs are located in different geographic areas, this has presented incubators with a challenge of being unable to reach some of the people in need of their services, and some of these survivalist entrepreneurs are located in remote and rural areas (InfoDev, 2010). In the same view Buys and Mbewana (2007) mentioned that a good location for business incubation is where there is access to scientific and technical knowledge and services as well as supporting infrastructure.

4.2.2. Skills. Some business incubators have a mindset of providing educational programs based on what they offer rather than what the entrepreneurs require, they lack the skills to adapt to the needs of entrepreneurs (Jordan, 1998 in InfoDev, 2010, p. 29). In the same notion, Wilber and Dixon (2003) mentioned that business incubators face the challenge of equipping small business owners and managers with the necessary skills in order to survive in a competitive market.

4.2.3. Lack of funding. The conventional approach to financing a BI model is that of State owned BI model, where the government funds and manages a BI. However, the trend is fast changing with the emergence of private and university funded BIs (Koshy, 2010). University incubators are mostly financed by the universities themselves and government/private agencies.

Business incubators also face a challenge of fund shortages when servicing survivalist entrepreneurs, most business incubators do not have in-house seed funds and most start-ups require about R500 000 (InfoDev, 2010).

4.2.4. Quality of entrepreneurs. Buy and Mbewana (2007) are of the view that the success of an incubation program is depended of the quality of entrepreneurs being incubated, entrepreneurs must have a desire to succeed, willingness to learn and be prepared to take calculated risks.

4.2.5. Inconsistent in stakeholder support. Consistency, clarity and cooperation from the stakeholders who necessitate the functionality of business incubators are very essential, the stakeholders like the government, the broader community, venture capital providers, local business and incubators management need to be consistent with the needs and capacities of the clients of the business incubators are aiming to serve and the support offered should be in line with the roles and objectives of the business incubator (Buys & Mbewana, 2007).

4.2.6. Supportive government policies. The success of business incubation services towards entrepreneurship is largely depended on favorable economic and industrial policies; the government policies in place should support incubator services and not limiting their operation in order to fully support entrepreneurs (Buys & Mbewana, 2007).

4.2.7. Competent and motivated management. According to Buys and Mbewana (2007), business incubators face a challenge of competency and motivation issues in servicing entrepreneurs, the quality of the management team appointed to operate with them, the appointed management team should have business background and skills in entrepreneurship, leadership, organizational skills and also have established networks in the community.

4.2.8. Lack of commitment. Survivalist entrepreneurs lack commitment in their business ventures, they view going into business as a way of generating minimal income whilst they wait for formal sector job opportunities, thus, only a selected group creates lasting businesses (Rolfe et al., 2010). Business incubators face the risk of investing their resources in uncommitted entrepreneurs.

4.2.9. Mentorship. Kirsty (2010) is of the view that the success or failure of entrepreneurs depends on them; mentorship guarantees a greater chance of survival in their business, therefore, the need to seek incubators support. Previous research suggests that there is need for further research regarding the selection of incubator business models appropriate in different and changing context, linking the

activities of business incubation with those of new ventures in emerging industries, to consider other bodies of knowledge relating to entrepreneurship and firm growth (Dee et al., 2012).

5. Research methodology

Zikmund (2003) defined research methodology as a framework which outlines the methods and procedures to be followed when collecting and analyzing information collected and a research design is a master plan which specifies the methods and procedures for collecting and analyzing information.

In line with Bruneel et al. (2012), we employed a two-stage research design that spans both a qualitative and a quantitative study of the incubators and their incubatees. According to Creswell (2003), mixed methods approach involves collecting data simultaneously or sequentially to best understand the research problems, employing both numerical and text information. The first stage of the research comprised interviews with pivotal people involved or related with the business incubation system and the second stage consisted of self-administered questionnaire survey. Following Grigorian et al. (2010) and Choto et al. (2014), such a two-stage approach enabled us to use the qualitative data gathered from the in-depth interviews for improving the quantitative data gathered through the survey. Interviews were aimed to help us develop a better understanding of the major issues concerned. These in-depth interviews were conducted with incubators and clients.

5.1. Research population. Haralambos and Holborn (2008) define a population as any group of individuals that has one or more characteristics in common that are of interest to the research. It is the number of the people or unit from which research information will be obtained (Parahoo, 1997). The subjects for this research comprised of BIs and survivalist entrepreneurs in the Cape Metropolitan Area. They were identified by the incubation firms from their records, clients' database and referrals.

The participants in this research were classified as follows:

- ◆ business incubators in the Cape Metropolitan area offering support to entrepreneurs;
- ◆ survivalist entrepreneurs who enrolled and completed incubation programs;
- ◆ survivalist entrepreneurs who enrolled but did not complete the incubation program;
- ◆ survivalist entrepreneurs who did not enrol in incubation programs at all.

Both publicly or privately funded BIs were considered for this study. Furthermore, emphasis was placed on BIs that supported survivalist entrepreneurs amongst others. The survivalist

entrepreneurs in this study focus on different types of businesses which included cleaning services, catering, tailor, hair dressing, plumbing and spas operators, to mention a few.

5.2. Research location. The research was undertaken in the Cape Metropolitan area of the Western Cape. The researchers found it convenient to conduct the study in locations that are in the same suburbs. And these included: Woodstock, Observatory, Mowbray, Rondebosch and Claremont.

5.3. Sampling technique. A sample is a subgroup of the population and a relatively true representative of the unit of analysis (Berinstein, 2003 in Latham, 2007). Hair et al. (2008) acknowledged two categories of sampling methods which are probability sampling and non-probability sampling. This study utilized non-probability sampling methods. As part of purposive sampling, the snowballing techniques entail that a respondent leads the researcher to the next pool of respondents (Mashaba, 2006). The snowball sampling method was well suited for the study given the lack of a comprehensive database of incubators and incubates to draw from. Drawing from a few known contacts, other participants who best matched the research objectives were recruited (MacNealy, 1999). Two of the most prominent incubators within the Cape Metropolitan Area, provided the referrals for the recruitment of the participants for the study.

Unlike the approach used in quantitative studies, Oppong (2013) notes that the selection of participants in qualitative studies does depend on numbers, but rather the richness of the information received. Thus, Marshall (1996) argues that the researcher should be practical and flexible in their approach to sampling given that an adequate sample size is one that satisfactorily answers the research questions. While noting that a number of sampling problems are associated with selecting the right sample size, Tuckett and Stewart (2004) advise they can be mitigated by applying different techniques.

Adopting a qualitative approach to report on the challenges of business incubators that serve survivalist entrepreneurs, a purposive sample of four (4) incubators was drawn. Owing to the inherent bias associated with qualitative approaches and small samples (Oppong, 2013), questionnaires were administered to 100 survivalist entrepreneurs. The aim of the survey questionnaire was to complement the personal interviews. To justify that the selected sample size for the questionnaire provided satisfactory results, the Raosoft sample calculator was utilized to arrive at a sample of 100 with a confidence level of 95%.

5.4. Data collection and analysis. Questionnaires and personal interviews were the preferred data collection tools. Remenyi (2011) defined an

interview as a formal way of getting verbal evidence from a knowledgeable informant by the researcher. Interviews are an effective way of obtaining the required information on the matter to be investigated; they give room for the researcher to access through word of mouth to an individual's accumulated reality and interpretation based on their own experience (Fontana & Frey, 2000).

Woods (2011) cited that interviews are used mainly to complement and elongate our understanding of individual's opinions, feelings, actions, values and interpretations by collecting detailed information through the use of face to face contact of using oral questions and they can be structured or semi structured.

This study utilized in depth semi-structured interviews. Although they are time intensive and prone to bias, they allowed the researcher to seek interviewee's standpoints of their experiences and situation through repetitive face to face encounters (Taylor & Bogdan, 1984).

The questionnaire and interview questions were pilot-tested on two incubation managers and 6 incubates. The feedback from the pilot test was utilized to modify the final questionnaire and interview questions. The interviews took about 20-30 minutes and a digital recorder was used to record the interview proceedings, while the researcher also took notes in the proceedings.

6. Results and discussion

The results are presented and discussed in this section.

6.1. Years in operation. The majority of the BIs indicated that they have been in operation for some time, 3 (75%) business incubators indicated that they have been in operation for more than five years and 1 (25%) indicated that they have been in operation for 4 to 5 years (Table 1). One may suggest that the longer incubation has been in operation the higher its impact and sustainability.

Table 1. Years in operation

		Frequency	Percent	Valid percent	Cumulative percent
Valid	4-5 years	1	25.0	25.0	25.0
	5+ years	3	75.0	75.0	100.0
	Total	4	100.0	100.0	

6.2. Number of businesses that graduated. Three (75%) incubators indicated that 1 to 10 incubates have graduated since the establishment of the incubation facility and 1 (25%) indicated that 20 to 30 graduates since its establishment. For the other categories of 10 to 20 and 30 to 40 no incubators selected those categories. The results are shown in the Figure 1 below.

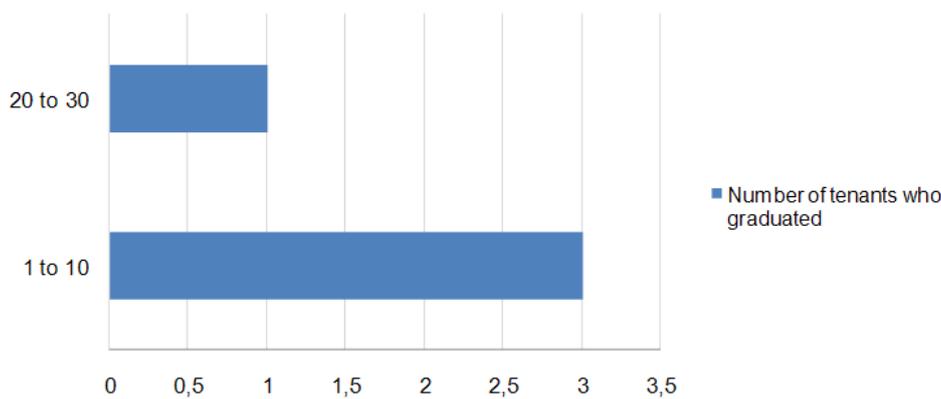


Fig. 1. Number of tenants who graduated

The number of businesses graduated may be seen as one of the indications of success and incubatee satisfaction. The results show a smaller number of tenants who graduated, this could be as a result of some of the tenants withdrawing from the programmes before graduating. This is in line with Azriel and Laric (2008) who observe that, although business incubators help to increase the survival rate of small businesses, many do not survive to the graduation stage.

From the result one can conclude that the impact of business incubators on incubates is not being fully realized due to fewer numbers of tenants graduating from the programs.

6.3. Did attending the incubation program benefit you or your business? Twenty seven (55.1%) of those survivalist entrepreneurs who enrolled

in incubation programs indicated that they benefited from attending the incubation program, whilst 22 (44.9%) indicated that they did not benefit from attending the program. Table 2 below illustrates the results.

The results imply that attending business incubation benefits business ventures with the largest percentage of respondents confirming. These findings are in line with Amezcua and McKelvie (2011) who found that women-owned incubated firms outperformed their non-incubated counterparts. More so from the interviews conducted with the tenants who graduated from the programs, enrolling in business incubation helped them to understand the business environment and to have access to business networks, access to financial, physical resources and office support.

Table 2. Benefit from attending incubation program

		Frequency	Percent	Valid percent	Cumulative percent
Valid	Yes	27	28.7	55.1	55.1
	No	22	23.4	44.9	100.0
	Total	49	52.1	100.0	
Missing	System	45	47.9		
Total		94	100.0		

Based on the results obtained above, in order to determine whether there are benefits to enrolling and completing an incubation program, cross tabulation was employed. The results (Table 3) indicate that the majority of those who did not complete the incubation program did not benefit from the programs. These results sound logical

because they did not complete the program and the benefits could, therefore, not be recognized.

A *p*-value < 0.001 was obtained from a chi-square test justifying the extent of the relationship of the results obtains above. The results of the test are depicted in Table 4.

Table 3. Cross tabs of the benefit of the program and attendance of the incubation programs

		Did you attend an incubation program and did you complete it?		Total
		Yes (completed)	Yes (did not complete)	
Did attending the incubation program benefit you or your business and in what way?	Yes	19	8	27
	No	1	21	22
Total		20	29	49

Table 4. Chi-square test on the benefit of the program and attendance of incubation programs

	Value	Df	Asymp. p-value (2-sided)	Exact p-value (2-sided)	Exact p-value (1-sided)	Point probability
Pearson chi-square	21.744 ^a	1	.000	.000	.000	
Continuity correction ^b	19.104	1	.000			
Likelihood ratio	25.315	1	.000	.000	.000	
Fisher's exact test				.000	.000	
Linear-by-linear association	21.300 ^c	1	.000	.000	.000	.000
N of valid cases	49					
a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.98.						
b. Computed only for a 2x2 table.						
c. The standardized statistic is 4.615.						

In support of the mixed position held by incubates with regards to the satisfaction derived from incubation programs, the following quotes were drawn from the personal interviews.

“Yes and no. When I joined the incubator program they promised that they would provide business networks and they would sell my business, but I haven't seen any of that happening. I am going to present my business to Eskom but they are not helping out on how I present myself and are not even accompanied me, it is their duty to sell me”.

“Yes, because seeing other businesses that are in incubation programs show me that I am not the only one facing problems in my business. I get to chat with them and share experience”.

6.4. Selection criteria. Hinging on the assumption that the selection criterion may impact on enrollment

into incubation programs, the business incubators were requested to indicate their selection criterion. Due to having more than one selection criterion, some of the business incubators made multiple selections. Six selections were made in total, out of the 6 selections, 33% noted that firms must be start-up, 17% indicated that firms must be above a certain size, 16.7% said that firms must be involved in certain types of activities and 33% highlighted that firms high impact to be considered for incubation. The results are presented in Figure 3 below. The implications of these results are twofold. On the one hand, a stringent criteria may exclude possible incubatees who have great ideas, but have the ability to pay, and the reverse will result in a big pull of incubates who may struggle to graduate (Ndede-Amadi, 2007).

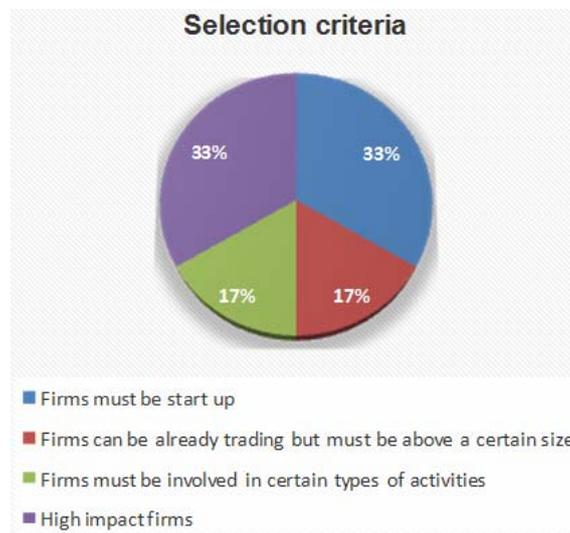


Fig. 3. Selection criterion

The results indicate limited support for survivalist entrepreneurial ventures. Hackett and Dilts (2004) are of the view that for business incubators to be successful, they must focus on enrolling businesses that have the potential to survive given access to the right resources. The exclusion of survivalist entrepreneurs from the program could mean that survivalist entrepreneurs are viewed as businesses that have no potential for survival.

6.5. Operating cost. With the understanding that all or part of the cost incurred by incubators is ultimately passed on to the clients, which may influence the enrollment of incubates, the former were asked to indicate how they funded their services. Allowing for multiple selections, the results (Table 5) indicate that, 40% of the respondents depended on government subsidy to cover the cost of their services, a sizable proportion

40%, relied on self-sustaining means such as consulting and the remainder payments from banks and the private sector organizations.

Table 5. How business incubators cover operating cost

		Responses	
		N	Percent
Operating cost ^a	Government subsidies	2	40.0%
	Payments from bank and other private sector organizations	1	20.0%
	Other	2	40.0%
Total		5	100.0%

With 40% indicating that the cost was covered through other means (self-sustaining through consulting) could mean that some of the operating costs of the incubators are passed on to their incubatees. This is in line with Lesokovas (2012) views that, although business incubators are supported by the governments, regional grants, academic institutions, universities and colleges, they charge for their services and resources.

This might also be the reason why most of the survivalist entrepreneurs did not enroll in their programs because they cannot afford paying for the services and resources. Even though one of the

goals of the incubators is to become financially self-sufficient, developing through rents and fees charged on tenants does not symbolize the incubator’s success (Azriel and Laric, 2008).

6.6. Challenges faced by business incubators. In the quest to understand the challenges faced by business incubators, relating question was included in the questionnaire with multiple sections permitted. Seven selections were made with lack of funding (57.1%) dominating the list of challenges selection and equal frequencies for the other challenges of 1 (14.2%). The results are shown in the figure. Although incubators face a number of challenges not limited to lack of finance, limited stakeholder support, lack of commitment from incubators and inappropriate geographical location, the need for financial support tend to dominate. Lack of public funding will mean that incubators have to generate their own funding which can be quite challenging (Ndede-Amadi, 2007). These results concur with InfoDev (2010) that maintains that most business incubators do not have enough in-house seed funds. As Meru and Struwig (2011) add, governments may need to bridge the funding gap to ensure the sustainability of these incubators.

Challenges faced by business incubators

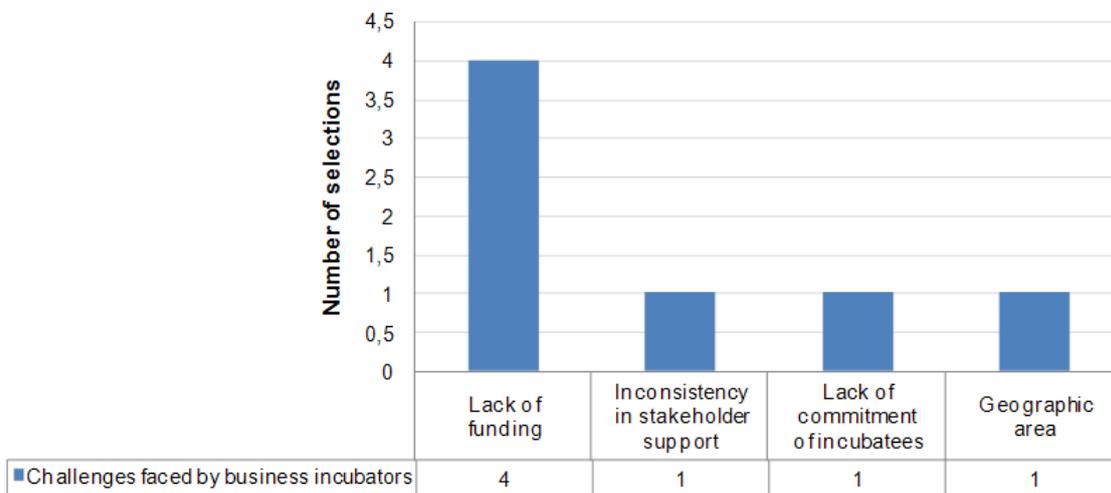


Fig. 2. Challenges face by business incubators in servicing entrepreneurs

From the business incubators’ point of view, entrepreneurs do not open up on their problems and areas where they need assistance, they act in isolation. The effectiveness of a business incubation program can only be realized if the mentors know what their clients want through communication. Apart from that, the incubatees also lack commitment in their business venture as well as in the incubation programs.

Conclusion

We looked at relevancy of BIs from two fronts: the graduation rates and satisfaction (benefit) of the tenants. The results indicated that 55.1% of those survivalist entrepreneurs who enrolled in incubation programs indicated that they benefited from attending the incubation program, whilst 44.9% indicated that they did not benefit from

attending the program. Some of the benefits included access to business networks, access to finance, physical resources and office support.

Furthermore, it was evident that incubators have to contend with many challenges which differ from one cohort to another. In terms of the challenges confronting BIs, the study revealed that lack of funding was the major challenge being faced by business incubators in servicing survivalist entrepreneurs. It was found that 57.1% of the incubators surveyed face financial challenges that hinder them from providing quality support to survivalist entrepreneurs. The implication of these results are that just like their clients, BIs face a number of challenges which threaten their long-term survival, the quality and quantity of service that they render. Without addressing the aforementioned challenges, business incubators will not be able to deliver on their perceived mandate.

Limitation and scope for further research

With research in business incubation only gaining traction in recent years in South Africa, the number of incubators and, particularly, those supporting survivalist entrepreneurs are limited regionally and nationally. This limitation placed a cap on the sample size and the results of this study. Thus, future studies could benefit from a more diverse and larger sample. By expanding the scope for future study, a more comprehensive view of the relevance and challenges faced by business incubators can be grasped.

Furthermore, the impact of business incubation programs on employment creation and economic development in South Africa could be explored. Even so, future research could focus on how business incubation programs can positively influence and create sustainable business venture.

References

1. Akcomak, I.S. (2009). Incubators as Tools for Entrepreneurship Promotion in Developing Countries. Helsinki, UNU-WIDER Working Papers 2009/52.
2. Allen, D.N. & Rahman, S. (1985). Small Business Incubators: A positive Environment for Entrepreneurship. *Journal of Small Business Management*, pp. 12-24.
3. Amezcua, A.S. & McKelvie, A. (2011). Incubation for all? Business incubation and gender Differences in new firm performance (summary) *Frontiers of Entrepreneurship Research*, 31 (8). Available online: <http://digitalknowledge.babson.edu/fer/vol31/iss8/3> (accessed on 3/04/2015).
4. Anon. (2002). Benchmarking of Business Incubators. European Commission Enterprise Directorate General. United Kingdom: Centre for Strategy and Evaluation Services.
5. Aranha, S.A. (2003). Incubators models. InfoDev Incubator Support Center. Pontificia University Calolica: Brazil.
6. Autio, E. & Klofsten, M. (1998). A comparative study of two European business incubators, *Journal of Small Business Management*, 36 (1), pp. 30-43.
7. Azriel, J.A. & Laric, M.V. (2008). Cracking open the black box of the business incubation process: creating mutually beneficial relationships between incubators and entrepreneurs. USASBE Proceedings. Available online: <http://www.sbaer.uca.edu/research/usasbe/2008/pdf/PaperID214.pdf#page=1&zoom=auto,-99,798> (accessed on 1/1/2015).
8. Bruneel, J., Ratinho, T., Clarysse, B. & Groen, A. (2012). The Evolution of Business Incubators: Comparing demand and supply of business incubation services across different incubator generations, *Technovation*, 32, pp. 110-121.
9. Buys, A.J. & Mbewana, P.N. (2007). Key Success Factors for Business Incubation in South Africa, *The Godisa Case Study, South African Journal of Science*, 103 (9), pp. 356-358.
10. Choto, P., Tengeh, R. & Iwu, C. (2014). Daring to survive or to grow? The growth aspirations and challenges of survivalist entrepreneurs in South Africa, *Environmental Economics*, 5 (4), pp. 93-101.
11. Creswell, J.W. (2003). Research design, *Qualitative, Quantitative and Mixed Methods Approaches*, 2nd ed. University of Nebraska Lincoln: Sage Publications.
12. Dee, N., Gill, D., Lacher, R., Livesey, F. & Minshall, T. (2012). A review of research on the role and effectiveness of business incubation for high-growth start-ups. Institute of Manufacturing. University of Cambridge.
13. Fontana, A. & Frey, J.H. (2000). *The interview: From structured questions to negotiated text*, In N.K. Denzin, & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (2nd Ed.), Thousand Oaks, CA: Sage, pp. 645-672.
14. Gordon Institute of Business Science (2009). The Entrepreneurial Dialogues. State of Entrepreneurship in South Africa, November, at the FNB Conference Centre. Available at: <http://www.gibs.co.za/SiteResources/documents/The%20Entrepreneurial%20Dialogues%20-%20State%20of%20Entrepreneurship%20in%20South%20Africa.pdf>.
15. GEM (2001). South Africa Report, University of Cape Town Graduate School of Business. Available online at: <http://www.gemconsortium.org/docs/download/597> (accessed on 04/05/14).
16. GEM (2012). South Africa Report. University of Cape Town Graduate School of Business. Available online at: <http://gemconsortium.org/docs/download/2801> (accessed on 07 September 2014).
17. Global Forum. (2013). Business Incubation Training Program. Available online at: http://www.globalforum2013.co.za/downloads/Training%20program%20overview_final.pdf (accessed on 16/12/2014).

18. Grimald, R. & Grandi, A. (2005). Business incubators and new venture creation: an assessment of incubating models, *Technovation*, 25, pp. 111-121.
19. Grigorian, A. Ratinho, T. & Harms, R. (2010). Business Incubators: Creation of a Fit in Armenia Nikos, School of Management and Governance, University of Twente.
20. Hackett, M.S. & Dilts, M.D. (2004). A Systematic Review of Business Incubation Research, *Journal of Technology Transfer*, Netherlands: Kluwer Academic Publishers, 29, pp. 55-82.
21. Hair, F.J., Wolfinbarger, M., Ortinau, D.J. & Bush, R.P. (2008). *Essentials of Marketing Research*, New York: McGraw-Hill/Irwin.
22. Herrington, M. & Maas, G. (2006). *Global Entrepreneurship Monitor South Africa 2006 Report*, Cape Town. University of Cape Town Graduate School of Business.
23. Herrington, M. (2008). *Global Entrepreneurship Monitor South Africa 2008 Report*, Cape Town University of Cape Town Graduate School of Business.
24. Herrington, M. & Turton, N. (2012). *Global Entrepreneurship Monitor South Africa 2012 Report*. Cape Town: University of Cape Town Graduate School of Business.
25. Haralambos, M. & Holborn, M. (2008). *Sociology: Themes and Perspectives*, London: Collin Unwin.
26. InfoDev (2010). Global Practice in Incubation Policy Development and Implementation. South Africa Incubation. Country Case Study. Washington. Available at: http://www.infodev.org/infodev-files/resource/Infodev_Documents_838.pdf (Accessed on 7 October 2013).
27. Isabelle, D.A. (2013). Key factors affecting a technology entrepreneur's choice of incubator or accelerator, *Technology Innovation Management Review*, pp. 16-22.
28. Kirsty, D. (2010). *The State of Entrepreneurship in South Africa*, Mount Nelson Hotel. White Paper Deliberation and Key Findings.
29. Koshy, P. (2010). Role and relevance of business incubators in ICT led global educational system: case for eco-enterprise village. Institute for Development Studies and Enterprise Research (IDSER). Available online at: <http://mpr.ub.uni-muenchen.de/27311/> (accessed on 2/03/15).
30. Latham, B. (2007). Sampling: What it is? Available at: [http://webpages.acs.ttu.edu/rlatham/Coursework/5377\(Quant\)/Sampling_Methodology_Paper.pdf](http://webpages.acs.ttu.edu/rlatham/Coursework/5377(Quant)/Sampling_Methodology_Paper.pdf) (Accessed on 16 July 2014).
31. Lesáková, L. (2012). The Role of Business Incubators in Supporting the SME Start-up, *Acta Polytechnica, Hungarica*, 9 (3), pp. 85-95.
32. Light, I.H. & Rosenstein, C.N. (1995). *Race, Ethnicity, and Entrepreneurship in Urban America*, New York: Transaction Publishers.
33. MacNealy, M.S. (1999). *Strategies for Empirical Research in Writing*, New York: Addison Wesley Longman.
34. Masutha, M. & Rogerson, C. (2014). Small enterprise development in South Africa: The role of business incubators. In: Rogerson, C.M. and Szymańska, D. editors, *Bulletin of Geography. Socio-economic Series*, 26, pp. 141-155.
35. Mashaba, E. (2006). Let Me Be: Disclosure Among a Group of Black South African Homosexuals, Department of Psychology in the Faculty of Humanities. University of the Witwatersrand: Johannesburg.
36. Marshall, M. (1996). Sampling for qualitative research, *Family Practice*, 13 (6), pp. 522-525.
37. Meru, A.K. & Struwig, B. (2011). An evaluation of the entrepreneur's perception of business incubation in Kenya, *International Journal of Business Administration*, 2 (4), pp. 112-121.
38. Naude, W. (2011). Entrepreneurship is not a binding constraint on growth and development in the poorest countries, *World Development*, 39 (1), pp. 33-44.
39. Niammuad, D., Mapompech, K. & Suwanmaneepong, S. (2014). Entrepreneurship Product Innovation. A second order factor analysis, *The Journal of Applied Business Research*, 30 (1), pp. 197-200.
40. Ndede-Amadi, A. (2007). Overcoming the challenges of business incubation, *The Financial Standard*, Tuesday, 27.
41. OECD, nd. Small businesses, job creation and growth: Facts, obstacles and best practices, available at: <http://www.oecd.org/cfe/smes/2090740.pdf> [2/04/2015].
42. OECD (2010). Working party on SMES and entrepreneurship (WPSMEE). Lessons from the global crisis and the way forward to job creation and growth.
43. Oppong SH. (2013). The problem of sampling in qualitative research, *Asian Journal of Management Sciences and Education*, 2 (2), pp. 202-210.
44. Parahoo, K. (1977). *Nursing Research: Principles, Process, and Issues*. New York: Palgrave.
45. Parsons, R. (2004). SA's Economy in 2004. Stronger, richer, more just. Economic Snapshot.
46. Ratinho, T. (2011). Are They Helping? An Examination of Business Incubators' Impact on Tenant. An Unpublished PHD dissertation, University of Twente, p. 216. Available at: <http://www.utwente.nl/bms/nikos/research/dissertations/Tiagoratinho.pdf> (Accessed on 12/01/2015).
47. Richards, A.D. (2006). Sustainable Micro-Entrepreneurship to ensure positive economic growth in the Western Cape. Unpublished Master's Thesis. Cape Peninsula University of Technology.
48. Remenyi, D. (2011). *Field Methods for Academic Research –Interviews, Focus Groups and Questionnaires in Business and Management Studies*. UK: Academic Publishing International.
49. Roberts, E.B. (1991). *Entrepreneurs in High Technology*, Oxford University Press.
50. Rolfe, R., Woodward, D., Ligthelm, A. & Guimaraes, P. (2010). *The viability of micro-enterprise in South Africa*, Darla Moore School of Business. University of South Carolina: Columbia.

51. Said, F.M., Adham, A.K., Abdullah, A.N., Hanninen, S. & Walsh, T.S. (2012). Incubators and government policy for developing industry and region in emerging economies, *Asian Academy of Management Journal*, 17 (1), pp. 65-96.
52. Scaramuzzi, E. (2002). Incubators in developing countries. Status and Development Perspectives. The World Bank. Washington DC: InfoDev.
53. Schiopu, A.F., Vasile, D.C. and Tuclea, CE. (2015) Principles and best practices in successful tourism business incubators, *Amfiteatru Economic*, 17 (38), pp. 474-487.
54. Statistics, S.A. (2014). *Key Indicators: Summary*. Available online at: <http://www.statssa.gov.za/keyindicators/keyindicators.asp> (accessed on 16 July 2014).
55. Tambudze, T. (2012). A guide to South African Business Incubators. The Column Index. Available online at: <http://www.sweech.co.za/article/a-guide-to-south-african-business-incubators-20121029> (Accessed on 2 September, 2013).
56. Taylor, J.S. & Bogdan, R. (1984). *Introduction to qualitative research methods. The research meanings*, University of Michigan: Wiley.
57. Tengeh, R. (2013). Advancing the Case for the Support and Promotion of African Immigrant-Owned Businesses in South Africa, *Mediterranean Journal of Social Sciences*, 4 (2), pp. 347-359.
58. Timm, S. (2013). Global entrepreneurship report puts SA below average. Available at: <http://mg.co.za/article/2013-04-26-00-report-puts-sa-below-average> [2 September 2013].
59. Triantafyllopoulou, C. (2006). Business Incubators. From Theory to Practice. University of Pireaus. Trochim, W. M.K. 2006. Ethics in Research. Available online: <http://www.socialresearchmethods.net/kb/ethics.php> [accessed on 23 June 2014].
60. Tuckett, A. (2004). Qualitative research sampling: the very real complexities, *Nurse Researcher*, 12 (1), pp. 47-61.
61. Turton, N., Kew, P. & Dyring Christensen, J. (2012). The ILO, Free State SME Development Initiative: The State of Youth Entrepreneurship in the Free State, Bloemfontein: The International Labour Organisation.
62. Van der Zee, P. (2007). Business incubators contribution to the development of businesses in the early stages of the business life cycle, *South Africa Journal of Economic and Management Science (SAJEMS)*. University of Pretoria.
63. Wilber, P.L. & Dixon, L. (2003). The impact of business incubators on small business survivability, Available online at: <http://www.sbaer.uca.edu/research/asbe/2003/pdfs/hub/07Wilber&.pdf> (accessed on 23 June 2014).
64. Woods, M. (2011). *Interviewing for research and analysing qualitative data: An overview*. School of Health & Social Services. Massey University. Available at: <http://owl.massey.ac.nz/pdf/interviewing-for-research-and-analysing-qualitative-data.pdf> [10 June 2014].
65. Willemse, J. (2010). The Forum SA. SME Failure Statistics. Available at: <http://www.theforumsa.co.za/forums/showthread.php/7808-SME-Failure-Statistics> [2 May 2014].
66. Zikmund, W.G. (2003). *Business Research Methods*. Ohio: South-West Publishers.