

Incubate-Based Challenges and Deficiencies to Successful Business Incubation in Northern Cape, South Africa

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Abstract

Background: Incubates are individuals who are start-up entrepreneurs and have deficiencies vested in their own personal capabilities. These personal deficiencies or shortcomings originate from a lack of entrepreneurial experience; a lack of entrepreneurial orientation; and a lack of entrepreneurial and management skills. It is unclear which personal deficiencies are applicable or unique to incubates within the Northern Cape province, South Africa.

Purpose: As South Africa's unemployment rate is at the highest it has ever been, the question is posed to government regarding what is being done to improve the situation. This study focuses specifically on identifying the personal deficiencies of incubates within the incubator sector and exactly why these factors are negatively impacting incubates.

Setting: This study was conducted amongst incubates, incubator managers and incubator staff within the Northern Cape province, South Africa.

Methodology: Semi-structured interviews were conducted amongst 63 participants who were Northern Cape incubates. A purposive non-probability sampling strategy was used whereby homogenous and snowballing sampling were used. The interview data was transcribed and analysed into research themes aligned within entrepreneurship.

Findings: The main deficiencies identified included a lack of: (1) entrepreneurial experience; (2) entrepreneurial orientation; and (3) entrepreneurial skills.

Value: New themes on entrepreneurial deficiencies amongst incubates are identified that are unique to the region and provides recommendations for future research. Professional development, a diversification of commercial activities, along with a selection instrument for applicant-entrepreneurs in incubators within the region are recommended.



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Keywords: incubation; incubator services; entrepreneurial experience; entrepreneurial orientation; entrepreneurial skills; Northern Cape

Introduction

Effective and successful incubators positively impact the regional economies in which they reside (Li, Ur Rehman and Asim 2019, 2; Sagath et al. 2019, 3). This positive impact can be witnessed when initially weak-but-promising incubates (i.e. start-up entrepreneurs) initially suffering from the liability of newness, graduate from the incubator. Successful graduation is achieved when incubates exit the incubator as a result of their development in terms of a designated time, and are heading towards or have become self-sustainable, competitive and profitable business ventures that grow regional economies (Sudana et al. 2019, 3).

In contrast to the potential successes that incubators may achieve, there are also possible challenges or deficiencies that may impede the success of an incubator. These challenges may originate from either the entrepreneur, the business case, or the incubator itself (Saldaña et al. 2017, 5). Some of the first challenges that originate from entrepreneurs include a lack of previous entrepreneurial experience; not understanding entrepreneurial orientation; a lack of general management skills; and deficient entrepreneurial skills and characteristics (Bornman and Steenkamp 2023, 2). These types of deficiencies lead to a low degree of innovation in the business proposition; poor value-proposition; poor understanding of market issues relating to the business proposition; low growth potential of the proposed venture; issues with relation to the sustainability of the proposed venture; inadequate financial capital sources; excessive financial gearing; low profit potential; poor business modelling; and the absence of critical non-financial resources such as equipment, technology and specialised human capital (Davies and Doherty 2019, 1046; Johnson 2019, 11).

Taking these factors into consideration, it is costly for an incubator to invest resources into incubates with the expectation of successful start-up, growth and graduation (Dee et al. 2019, 4). This is especially so since incubation can only bear economic fruits once the costs of incubation are exceeded by the regional economic development of employment and profits which the graduate incubates create (Foo and Turner 2019, 287). If incubates fail to develop the business and are unable to graduate, the resources of the incubator are squandered and the ability of the incubator to support other potential entrepreneurs is weakened (Nair and Blomquist 2019, 266). It is thus important for incubators to minimise costs and expenditure on weak entrepreneurs without sufficient promise (Silva and Da Cunha 2018, 301). If incubator management are not aware of incubate-based challenges or deficiencies of their incubates, the result is likely to be a low incubate turnover rate and stagnant incubates who clog up the incubation process (Croteau 2019, 10).

In the context of incubation, one way to decrease failure would be to eliminate weak-and-non-promising entrepreneurs from incubation-application with a proven selection

process-tool (Wachira, Ngugi and Otieno 2017, 31). Furthermore, incubates who were admitted into the incubator should be subjected to a performance management process in order to periodically determine if they are still worthy of incubator resources, or they should rather exit the incubator (Al-Mubarak and Busler 2017, 8).

Currently, no prior research has been conducted about the context of incubation within the Northern Cape province of South Africa, and especially in terms of the selection and performance management instruments against which incubates are measured. Therefore, the research problem was formulated to focus on the role that entrepreneurial challenges or deficiencies play during the incubation-application stage within the Northern Cape that may inhibit the creation of self-sustainable business ventures which can graduate the incubators and provide economic development for the province. At the time of the study, only 2.8% of South African small, medium and micro enterprises (SMMEs) were located within Northern Cape (Bhorat et al. 2018, 8).

The purpose of this study was to identify the incubate-based challenges and deficiencies that incubates and incubator management experience within the Northern Cape, and to compile a detailed description of these challenges in order to assist prospective incubates and incubators. This was explored through descriptive qualitative research by following a constructivist worldview philosophy. The study was undertaken at various large publicly funded incubators within Northern Cape predominantly, as well as the very few private incubators that exist within Northern Cape.

The following research question guided the study:

- What are the incubate-based challenges and deficiencies within the incubators of the Northern Cape province that inhibit effective or successful incubation?

Literature Review

Northern Cape is the largest, most rural and least populated province in South Africa. It occupies 30% of the land mass, but boasts only 3% of the population of the country. In addition, the province varies between the arid and semi-arid regions of the Great Karoo and Kalahari deserts. As such, commercial hubs are limited to cities that are great distances from each other, spaced over a vast area (Van der Spuy 2019, 3). The Northern Cape has approximately 25 577 SMEs, which equates to a mere 1% of SMEs in South Africa (Mmusi 2020, 9). The presence of incubators in the Northern Cape is extremely limited with a study suggesting that in 2014 there was only one in the whole province (Masutha and Rogerson 2014, 149). Within the Northern Cape, the only reference with relation to a business incubation policy is the creation of the Small Enterprise Development Agency (SEDA) Technology Programme which boasted two incubators within the province at the time of data collection (Masutha and Rogerson 2014, 144). The biggest challenges facing SMEs, entrepreneurs and incubates in the Northern Cape are a lack of funding, business support, weak economy, rural nature of locations, poor infrastructure, a lack of personal attributes, and poor business skills (Mmusi 2020, 54).

Incubators are often tasked with recruiting and selecting “weak-but-promising” early-stage entrepreneurs and to facilitate and accelerate their start-up, growth and sustainability (Sudana et al. 2019, 5). Business incubators may be defined as entrepreneurial development entities that assist entrepreneurs, also referred to as incubates, by starting, managing and growing their ventures. Incubators do so by linking incubates with access to critical resources and support services that incubates could not afford outside the incubator. Linking with this, incubates are aspiring entrepreneurs, who have certain critical weaknesses in terms of access to resources, skills and knowledge, and who enter the incubator for a greater chance of initial survival and success than they would possess outside the incubator. When referring to “weak-but-promising” aspects, some deficiencies or challenges to success may be nestled in the entrepreneur, and not necessarily in the incubator and incubation process (Bergek and Norrman 2008, 11). These challenges or deficiencies can be grouped into two categories, namely resource-deficiencies and competence-deficiencies (Clarysse et al. 2005, 185; Mian, Lamine and Fayolle 2016, 8). Resource-deficiencies refer to a lack of critical resources, whilst competence-deficiencies refer to a lack of entrepreneurial experience, entrepreneurial orientation, technical skills, personal skills and management skills.

Lack of Critical Resources

Critical resources refer to finances, human resources, technology, infrastructure and networks (Clarysse et al. 2005, 183).

Lack of Entrepreneurial Experience

Antecedent entrepreneurial experience influences the degree to which entrepreneurs react successfully to business opportunities (Wiklund, Yu and Patzelt 2018, 389). Ideally, entrepreneurs entering an incubator should have accumulated industry-related experience by owning and operating a business venture in the target industry (Davidsson and Gordon 2016, 919; Marvel, Davis and Sproul 2016, 607). Accordingly, entrepreneurs without any prior industry-related experience and knowledge struggle to identify feasible opportunities to capitalise on (Block, Fisch and Van Praag 2017, 68). In addition, it was found that entrepreneurs lacking previous industry-related experience are prone to lose motivation or urgency for the intended start-up quicker than experienced entrepreneurs, and they also have a lower propensity to actually start the business (Bird and Wennberg 2016, 710). Lastly, inexperienced entrepreneurs have a greater challenge in attracting funds, suppliers and customers (Alsos and Ljunggren 2017, 584).

Lack of Entrepreneurial Orientation

Understanding entrepreneurial orientation entails an individual’s ability to create something that is new, adds value, and can generate financial incentives (Papagiannis 2018 14). Crucial aspects of entrepreneurial orientation can be identified as: (1) opportunity awareness; (2) exploiting such identified opportunities; (3) creativity and

innovativeness; (4) risk taking; and (5) the ability to gather resources (Botha, Van Vuuren and Kunene 2015, 58; Prüfer and Prüfer 2019, 13).

Opportunity-awareness entails that an entrepreneur is aware of, or alert to, unexploited exogenous market problems and market opportunities, current market needs, as well as technological developments within the market or industry (Malen and Marcus 2017, 8; Pato and Teixeira 2016, 5). Opportunity-awareness require a comprehension of customer perception, market information and market competitors within an industry or a market (Hampel-Milagrosa, Loewe and Reeg 2015, 121). In addition, entrepreneurs are expected to create markets and demand through product and service innovations that are based on consumer needs, and also create consumer desire (Kitching and Rouse 2017, 561).

Once an opportunity is identified, entrepreneurs have to “pull-the-trigger” on the opportunity which entails that an incubate must be able to become a “self-starter”, or simply put, start the intended business venture (Hernandez, Fuentes and Crown 2018, 3; Prüfer and Prüfer 2019, 15). This start-up action can be attributed to the incubate’s ability to organise, combine and deploy the essential resources needed for start-up (Yachin 2019, 22). Thus, the entrepreneur transforms critical resources into an operational business; however, if an incubate does not utilise the “self-starter” aspect or is unable to “pull-the-trigger”, the opportunity will not become a reality. This will result in incubates who are unable to organise, combine and deploy gathered resources in order to capitalise on an opportunity (Patriotta and Siegel 2019, 2).

The concepts of opportunity and creativity or innovation are closely linked and are described as the starting point for entrepreneurs who intuitively sense new opportunities through “kaleidoscope thinking”, which entails combining seemingly non-related pieces of information to create and innovate a new business venture (Rodriguez-Sanchez, Williams and Brotons 2019, 879; Van Scheers 2016, 2). When there is a lack of creativity or innovation, it leads to the commercialisation of products with a low value-proposition to the target market as well as poor marketing potential (Sousa 2018, 2). In terms of incubates, if there is a lack of creativity or innovation, then they could find it harder to gather financial resources; struggle to use them creatively in bootstrapping; have inefficient cash-flow; and experience cost-reduction problems (Rodriguez-Sanchez, Williams and Brotons 2019, 881).

Another aspect of entrepreneurial orientation is risk taking which is often classified as an entrepreneurial personality trait or an entrepreneurial skill. However, there are authors who argue that an entrepreneur’s ability to take calculated risks indeed forms part of an entrepreneur’s orientation (Koe, Krishnan and Utami 2018, 56). The ability to tolerate risk is vital to entrepreneurs (Kerr, Kerr and Dalton 2019, 17714) and individuals who do not possess the ability to tolerate risk, are often unable to innovate, start, compete aggressively and grow the business (Zahra 2018, 219). In addition, individuals who are reluctant to take risks will have a lower ability to gather critical

resources, with a high focus on financial resources critical to the business venture (Sousa 2018, 2).

Gathering critical resource has become imperative for entrepreneurs in order for them to attract scarce, lacking and essential resources important to start and operate a business venture without having an established reputation (Ndoro, Louw and Kanyangale 2018, 3; Nouri and Ahmady 2018, 73; Nouri et al. 2018, 5). The most prevalent resources that are gathered are social, financial, and human resources (Lahti et al. 2019, 371). Incubates who display a lack of resource gathering skills are often unaware of available funding opportunities and are unable to attract vital social and human resource skills that are essential to the business venture (Hampel-Milagrosa, Loewe and Reeg 2015, 121).

Along with understanding entrepreneurial orientation, entrepreneurs require certain skills in order to create new ventures (Almahry, Sarea and Hamdan 2018, 2; Botha, Van Vuuren and Kunene 2015, 57; Henley et al. 2017, 1024; Mamabolo, Kerrin and Kele 2017, 7). These skills include technical skills and personal skills.

Lack of Technical Skills

Technical skills encompass proficiency in and understanding of production techniques and technical complexities of the primary product or service that will be sold (Almahry, Sarea and Hamdan 2018, 1; Mamabolo, Kerrin and Kele 2017, 7). Technical skills furthermore relate to an incubate's ability to interact with tools and technologies, technical infrastructure, digital-entrepreneurship, practical-technical know-how, product innovations, innovation tools and innovation infrastructures (Armanios et al. 2017, 1378; Kwong and Thompson 2016, 322).

Lack of Personal Skills

Linking to technical skills, the personal skills of incubates should include: (1) the ability to make decisions; (2) the ability to tolerate stress and ambiguity; (3) the possession of achievement motivation and an internal locus of control; (4) the ability to communicate; (5) a strong work ethic; (6) leadership; (7) literacy and numeracy; (8) problem solving; (9) the ability to learn; as well as (10) networking (Botha, Van Vuuren and Kunene 2015, 58; Mehtap et al. 2017, 26).

Entrepreneurs' personal skills start with decisiveness, where the lack of being decisive (i.e. indecisiveness) is associated with doubt, passiveness, timid behaviour, procrastination and hesitancy which negatively affect entrepreneurial abilities (Alan 2019, 316). If entrepreneurs are indecisive, it could develop into the inability to tolerate stress and uncertainty (Guo, Li and Zhang 2020, 1). Entrepreneurs who are intolerant to uncertainty face severe stress and anxiety in uncertain situations, and as a result struggle to function in such situations (Guo, Li and Zhang 2020, 1).

The need for achievement (i.e. achievement motivation) is an essential personality trait for entrepreneurs as it drives them to become competitive, and to overcome difficult challenges and barriers which are often self-set and require intense personal effort to overcome and achieve (Norasmah and Sukarni 2019, 80). This achievement motivation is closely linked to whether entrepreneurs possess an internal locus of control and perceive that their degree of success is dependent on the amount of effort that they invest personally (Auna 2020, 289; Hsiung 2018, 140).

Personal skills, such as communication skills and work ethic, also form a critical part of entrepreneurs' personal skills. Communication skills entail all electronic communication (websites, applications and social media), verbal, nonverbal, written, and interpersonal skills that entrepreneurs possess (Odewale et al. 2019, 211; Sriyakula and Jermsttiparsertb 2019, 240). Work ethic, on the other hand, can be defined as "a commitment to the value and importance of hard work" (Uygur et al. 2017, 1213).

Leadership skills also emphasise communication and communication skills, and they include effective interpersonal communication, relationship building, motivation and interaction between diverse individuals (Henley et al. 2017, 1017; Mamabolo, Kerrin and Kele 2017, 7). Furthermore, leadership skills entail the capacity to manage people, make decisions, and lead the transformation of an idea into a commercial opportunity (Sousa 2018, 2).

The aspect of literacy and numeracy as a personal skill is one which is very often overlooked (Radianto, Efrata and Dewi 2019, 386) and can be defined as the ability to read, write and interpret text, whilst numeracy is the ability to read, write and interpret numbers (Akinyemi 2019, 98). A lack of literacy and numeracy can quickly snowball into a bigger problem for any entrepreneur, thus problem-solving skills become critical.

Problem-solving skills in the entrepreneurial perspective can be understood as the use of creative and critical thinking capabilities to solve business obstacles of varying complexity (Azmi et al. 2018, 268).

Lastly, networking skills can be defined as the personal ability to build contacts and relationships with other individuals. These skills are essential to grow a business, and a lack thereof will result in a venture that lacks growth (James 2018, 625).

Lack of Management Skills

According to Mamabolo and Myres (2020, 43), the most critical management skills that incubates should possess are financial, human resources and marketing skills. A lack of financial skills will result in the inability to manage cash flow, prices and costs, and to interpret financial statements. Deficiencies in human resource skills will likely result in the inability to attract, recruit, hire and retain valuable human capital that is critical to the success of the incubated venture. Lastly, shortcomings in marketing skills will result in the inability to identify customers and competition, position products or services, and

thus the inability to promote these offerings to the market (Mamabolo and Myres 2020, 43).

Theoretical Framework

Figure 1 provides a visual framework of theoretical constructs that make up deficient incubates from an incubator perspective that was discussed above.

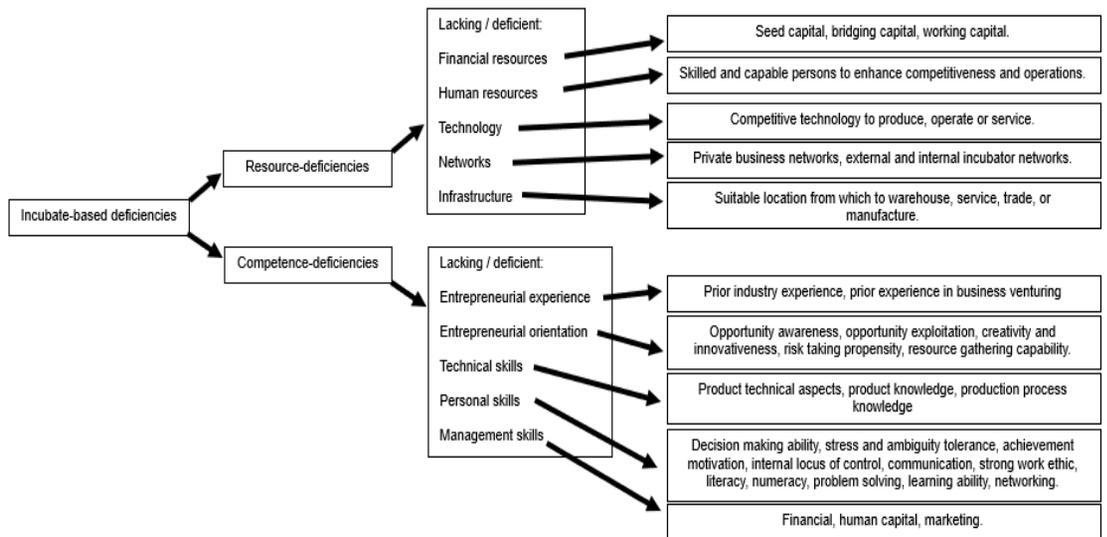


Figure 1: Theoretical framework of incubate-deficiencies or challenges to successful incubation

Source: Adapted from Mamabolo and Myres (2020, 43) and Mian, Lamine and Fayolle (2016, 8)

Research Methodology

Research Design

The current study was conducted in accordance with a descriptive qualitative research design, which is the correct choice according to Seixas, Smith and Mitton (2018, 778) when focusing on a specific research topic that lacks a strong body of existing literature. Furthermore, it considers the cultural and contextual uniqueness of the target population when interpreting the data collected (Vaismoradi and Snelgrove 2019, 1). This research design allows for the researchers to investigate perspectives and experiences of research populations that have not previously been measured (Hammarberg, Kirkman and De Lacey 2016, 499). Given the low amount of research that exists on the theme of SMMEs

and incubation in the Northern Cape, descriptive qualitative research was the logical choice (Hunter, McCallum and Howes 2018, 14). This design lends itself to exploring a phenomenon by investigating various perspectives on the topic by identifying underlying themes that appear due to detailed discussion with the participants (Hunter, McCallum and Howes 2018, 14). Observing phenomena and linking them back to existing themes and patterns are typical of descriptive qualitative research (Moser and Korstjens 2018, 13).

Sampling

Incubator managers, staff members and incubates formed the units of observation for the study. These individuals originated from seven incubators across the Northern Cape (i.e. units of analysis). A total of 63 semi-structured interviews were conducted. Sixty-three participants were utilised in the study in order to ensure continued site triangulation as well as to maintain access to as many descriptive explanations as available. The distribution of the participants is indicated in Table 1.

Table 1: Sample size and particulars

Incubator number	Number of participants	Number of managers and staff	Number of incubates
Incubator 1	19	3	16
Incubator 2	6	1	5
Incubator 3	8	3	5
Incubator 4	7	1	6
Incubator 5	10	1	9
Incubator 6	9	1	8
Incubator 7	4	1	3
Total	63	11	52

Source: Authors' own work

The participants in the sample ranged from a very wide span of industries including: stationery and office supplies; personnel and staffing solutions; catering and cooking; manufacturing; construction; transport; security; information and communications technology; automotive; jewellery and precious and semi-precious stones' and lastly, clothing and textiles. Two purposive sampling strategies were employed to sample the participants, namely, homogenous and snowballing. Homogenous purposive sampling allows the researcher to select participants according to certain predetermined characteristics with the purpose to reduce variations and enable the researcher to conduct a more focussed investigation. For the context of the current study, the participants had to be associated with an incubator within the province as incubates, incubator managers or incubator staff. As a starting point, an extensive online search for incubators within Northern Cape was undertaken. Incubators were easily found in

De Aar, Kimberley and Upington by advertising online. Snowballing allowed the researchers to pursue leads provided by the participants to locate and approach participants that were not detected during the initial sample selection. As such, incubators that were not visible online were contacted by means of referrals from incubators within the sample that provided contact details and introduction to these lesser-known incubators. At the time of data collection, the researchers exhausted both sampling techniques to ensure that they had included all functional incubators within the province at the time.

Data Collection

The data was collected by using a semi-structured interview protocol that was utilised during the interviews with participants. These interviews were conducted individually between the participants and the researchers. The data collection instrument was critiqued prior to commencement of the study by a senior academic colleague within the field of entrepreneurship. The data was collected between 2018 and 2019, prior to the Covid-19 lockdown.

Data Analysis

The data was analysed thematically, and the analysis was done inductively. The analysis was done by performing a comprehensive review of the existing themes on incubate-based deficiencies that negatively affect incubation according to the existing body of literature (Hunter, McCallum and Howes 2018, 14). Patterns within the data were then identified and connected inductively to existing themes identified through the literature review. Thus, a systematic approach to extracting and analysing themes was employed. Firstly, interviews were recorded on a portable audio recorder and were saved on an external hard drive for safekeeping. Secondly, the interviews were replayed on enhanced audio and transcribed using Microsoft Word. Thirdly, Atlas.ti was employed to identify main and sub-themes in the transcripts. Fourthly, all the transcripts and notes were reviewed for a second round to reduce the chance of error. Fifthly, all the themes were supported by a definition from the existing body of literature. Lastly, the sub-themes were linked to the existing body of knowledge where possible and were supported by the most appropriate quotes.

Trustworthiness and Ethical Consideration

As the study was purely qualitative in nature, it had to be trustworthy, credible, transferrable, dependable and confirmable (Mostert, Niemann and Kotzé 2017, 7). Credibility was achieved through site-triangulation (Niemann, Kotzé and Mannya 2018, 7) which requires the inclusion of participants from various geographic locations as well as participants that are not related to each other. This ensures that themes are not unique to a single geographical site of data collection and then erroneously applied to all the other sites in the target population that may not have been interviewed. A detailed description of the participants, data analysis methodology as well as a detailed literature review ensures transferability and authenticity (Niemann, Kotzé and Mannya 2018, 7).

By utilising dual sources of data through the literature review as well as empirical data, confirmability was boosted (Mostert, Niemann and Kotzé 2017, 7). Dependability was enhanced by circulating transcripts, analysed themes as well as the draft document for a peer-to-peer review (Vermeulen, Niemann and Kotzé 2016, 8).

The study ensured the participants' anonymity by the non-disclosure of the participants' names and geographical locations. The participants provided consent to participate in the study and this was done on a voluntary basis. All prominent names and landmarks were either removed or replaced by pseudonyms to avoid logical association with any participants in the sample.

Findings

The data was analysed into themes which were listed categorically according to the frequency of occurrence as well as known themes that were derived from the literature review.

Incubate-based Challenges to Effective Incubation

Lack of Entrepreneurial Experience

The participants from all seven incubators reported a lack of entrepreneurial experience. Most of the participants from all seven incubators were novice entrepreneurs attempting their hand at self-employment and business ownership for the first time. In fact, the participants from incubators 2, 4, 5, 6 and 7 were all nascent entrepreneurs attempting to start an initial business. This observation is supported by the existing body of literature stating that aspirant entrepreneurs without prior experience struggle to identify feasible opportunities (Block, Fisch and Van Praag 2017, 68). As a result, the incubators in these specific instances were burdened with pre-incubation and not actual incubation:

Yo! Currently now, most of our incubates are still in pre-incubation. But with start-up, we have our challenges. In fact, since I've started, most incubates are still in pre-incubation. In fact, most of their contracts have lapsed. (Incubator 2. Transcript 29. Participant 29. Male. Incubator manager)

In support of the existing body of theory, entrepreneurs within the sample who lacked entrepreneurial experience reported that they struggled to achieve start-up and lost motivation to pursue the business regularly (Bird and Wennberg 2016, 710).

With regard to incubator 1, the participants were all in charge of an initial business project that had been launched as a first attempt at entrepreneurship. However, they were all unprofitable and in many cases the businesses were dormant for a very prolonged time. This finding is supported by the literature stating that aspirant entrepreneurs without prior experience struggle to attract sources of finance, suppliers and customers (Alsos and Ljunggren 2017, 584). This also supports the theory in the

existing body of knowledge that a lack of entrepreneurial experience is a positive predictor for entrepreneurial failure (Hervas-Oliver, Lleo and Cervello 2017, 87):

They've been in business for a long time and they still have nothing. You've been in business for six years, why are you still struggling? Then you can hear where the blockages are. In most cases it is access to information. If you can show that individual where his market is, then he starts making money, because he's entrepreneurial. That is of course, besides the guys that do desperate entrepreneurial stuff because they can't get jobs and they are not really entrepreneurs but they have to do something to generate an income besides [South African Security Agency] SASSA [grants]. (Incubator 5. Transcript 50. Participant 50. Female. Incubator manager)

Through the data analyses it became evident that all the participants from all seven incubators indicated that there was and still is a lack of entrepreneurial experience which hinders them from successfully starting, developing and sustaining their business ventures or entrepreneurial ideas.

Lack of Entrepreneurial Skills

The participants from incubators 1 and 2 reported that their incubates were facing challenges with regard to a lack of entrepreneurial skills. Incubator 1 indicated that most of its incubates did not possess the ability to grow their business. This report coincides with the existing body of theory that individuals who lack entrepreneurial skills, struggle to grow their business ventures (Zahra 2018, 219). Incubator 5 noted that it is difficult to teach incubates to think like entrepreneurs. This report may point to a deficit of entrepreneurial orientation in general:

I do not see growth potential amongst most of my incubates. There are a few that can be accelerated, but I feel that the jockey is just not right. You can do whatever needs to be done but they are not right. (Incubator 1. Transcript 21. Participant 21. Male. Incubator manager)

Lack of Technical Skills

Incubators 1, 2 and 6 reported a high incidence of incubates who did not possess the required technical skills to advance their entrepreneurial aspirations:

Most of them have business plans that I had to type for them. Some of them come with hand written business plans which we go through, change where needed and send on to the manager to review. (Incubator 6. Transcript 59. Participant 59. Female. Incubator support-staff)

Lack of Personal Skills

A lack of innovative abilities coincides with the inability to create new market offerings that add value and result in financial profitability (Papagiannis 2018, 14). As a result, incubator 1 lamented the fact that its incubates were unable to create any uniqueness

and as a result were uncompetitive in the market. Incubators 4 and 5 indicated that a lack of innovative abilities, specifically the inability to gather and raise sufficient resources that are needed to start a business venture, was evident (Botha, Van Vuuren and Kunene 2015, 58):

You know what my biggest challenge is? I'll have a walk-in that says, "I need money to start a business." I always tell them: financing comes at a later stage. Look, I've got an entrepreneur that did get funding, but he started off with a R100 out of his own pocket. He bought a bag of potatoes, oil and salt and he started selling chips. Now, he's getting there. But now people think: "We just come here, and they give us money." (Incubator 4. Transcript 34. Participant 34. Female. Incubator manager)

Lack of Management Skills

In terms of a lack of management skills, the participants from incubators 1, 2, 4, 6 and 7 identified a lack of marketing and financial management skills as an inhibitor of effective incubation:

What we can say is, we are operating as a business currently. But what we expect is to train more in terms of management skills. Customer care, the issue of pricing, so that we can understand the pricing. Uh, also the issue of marketing. (Incubator 4. Transcript 38. Participant 38. Male. Incubate)

Tender-driven Mindset

Incubates from incubators 1, 4, 5 and 7 voiced a strong desire for the incubator management to enable and connect them with regard to government tenders. These incubates indicated that they were waiting for public tenders to come their way. This desire is nestled in the belief that it will result in quick and short-term wealth. In contrast, these incubates showed very low interest in engaging in day-to-day business activities with non-governmental parties. A tender system was introduced in South Africa post-1994 to empower and enfranchise predominantly previously disadvantaged entrepreneurs by giving such entities access to public-government tenders (Tangri and Southall 2008, 26). A quick result of this was "tenderpreneurship", a unique South-African socio-economic construct which entails previously disadvantaged entrepreneurs amassing "shameless and fabulous" wealth (Coetzer and Snell 2013, 30). However, tenderpreneurship has had the opposite effect than intended and has negatively influenced SMME development by favouring a small and politically connected black elite (Notshulwana 2017, 8). It also conditions entrepreneurs to accept unethical behaviour, predominantly bribes and kickbacks, as an "underhand method to secure tenders" (Georgieva 2017, 49):

When I have business, or a tender, it's when I receive a salary. This business is depending on tenders and stuff. This construction business, I can stay for five years not having tenders. (Incubator 4. Participant 40. Transcript 40. Male. Incubate)

Lack of Professional Business Conduct

From an entrepreneurial perspective, professional business conduct can be defined as: a willingness to work long hours; a continuous display of enthusiasm; maintaining ethical behaviour; acting with direction and intent; acting autonomously; retaining a customer-focus; endearing creativity; and maintaining business-like conduct (Kim 2019, 3). The participants from incubators 1, 3, 5 and 6 reported a lack of generally accepted business conduct as a challenge to effective incubation. Such conduct involved either a slow or an absence of response to email communication by the incubates to the incubator functions. Incubator 3 indicated that substance abuse occasionally resulted in the absence of incubates during office hours.

Summary of Findings and Theoretical Implications

This study suggests that there are indeed incubate-based challenges to successful incubation. A lack of prior entrepreneurial experience was found to be the major barrier to successful incubation. To a lesser degree, a lack of entrepreneurial skills by incubators and incubates was also reported. In terms of entrepreneurial orientation, four of the incubators indicated that there was a lack of entrepreneurial orientation amongst their incubates, whereas three incubators indicated that there was no lack in the understanding of entrepreneurial orientation amongst their incubates.

The fact that there are many entrepreneurs within the incubation system that are inactive reflects a current status quo of the incubation system, as well as an indication of a systemic problem that exists within the Northern Cape incubators that goes beyond incubate-based deficiencies alone. Although it is a product of incubate-based deficiencies partly, it may also involve flaws in the selection process; flaws in the business case; or flaws in the incubator incubation methodologies and interventions or services provided. This goes beyond the scope of the study and warrants future research that will be discussed below.

Practical Implications

The study findings have provided insights into the shortcomings that entrepreneurs within the incubation process possess. There are certain suggestions for industry to address these deficiencies. Firstly, incubators within Northern Cape should develop or commission and employ a comprehensive incubate selection instrument that place a high premium on the degree of entrepreneurial skills and entrepreneurial personalities of applicant-entrepreneurs prior to admitting them to the incubator. A pre-incubation model or process must be introduced to sift through the high volume of novice potential entrepreneurs that are flooding into the system and simply being admitted into incubation. Incapable incubates are left in the system for periods vastly exceeding normal incubation without any progress. In some cases, incubates regressed whilst being incubated.

Secondly, incubators should invest in high-quality business management skills development training to address the plight of incubates with regard to financial and marketing management skills inabilities. It is evident that many of the challenges and deficiencies faced by incubates are transferred from incubator staff and management as they are not proficient in the shortcomings that they need to address. It is highly recommended that all parties involved in incubating be appointed based on experience and proven skills.

Thirdly, incubates need constant development with regard to the technical craft that they perform. The technical aspects of the business form the core of the venture and incubates must be proficient in the technical aspects thereof.

Fourthly, it is very necessary to provide training with the aim of improving the level of professional behaviour exhibited and portrayed by incubates. Simple matters such as reading and replying to emails, arriving on-time for appointments, or arriving for appointments at all, remaining sober (not intoxicated by alcohol) and portraying a business-like demeanour within business hours whilst on the incubator premises needs refinement and development.

Fifthly, incubates must be persuaded to develop their business models and business expectations away from pure “tenderpreneurship” or the single hope of obtaining a lucrative government tender as a sole source of business income. Instead, it is vital for these incubates to identify private market sectors to service to earn multiple sources of income. It is recommended that incubators put an emphasis on linking incubates with private business networks rather than the bureaucratic state functions for business and assistance. This will improve the competitiveness of incubates.

Research Limitations, Future Research and Conclusion

One of the research limitations of the study is that it did not address issues with regard to the possible deficiencies nestled within the business case that incubates deposit into the incubators within the province. The study also did not attempt to understand the potential flaws in the services delivered to incubates by the incubators within the province. Lastly, the study did not attempt to research the selection methodology that Northern Cape incubators employ when selecting incubates into the incubators.

1. The following research questions are suggested for potential future research:
2. What are the potential obstacles to successful incubation within the Northern Cape province from a business case perspective?
3. What are the potential service-spectrum deficiencies within the offering of the Northern Cape incubators that are systemic to inhibiting successful graduation of incubates?

4. Which selection methodologies are employed when selecting aspirant incubates into the Northern Cape incubators?
5. Which potential obstacles inhibit successful incubation from an incubates' perspective?
6. What are the incubate-based deficiencies within South Africa?

These potential research questions may provide a trajectory for other researchers that sprout from the findings and limitations of this study.

Conclusion

It is evident that the Northern Cape incubators experience similar challenges when it comes to selecting, including and developing incubates into successful sustainable graduate entrepreneurs or business ventures. Challenges, such as the lack of entrepreneurial experience and the incorrect understanding of entrepreneurial orientation, have been identified as the first aspects to take into consideration when selecting and accepting a potential applicant into an incubator. With better understanding of the identified entrepreneurial challenges, it will become clearer which potential applicants could possibly stand a better chance at graduating from an incubate into a successful self-sustaining entrepreneur or business venture.

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