

The impact of human capital on youth entrepreneurship success - A focus on business development support beneficiaries in Gauteng

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ABSTRACT

South Africa is ranked globally as a country with one of the highest number of unemployed youth, with 40.3 per cent currently not in employment, education, or training. Small, Medium, and Micro Enterprise (SMME) development, specifically youth owned business development is one of the priority areas of government as SMMEs are viewed as key drivers of economic growth, innovation, and job creation, as well as advancement of inclusive growth in the country.

The purpose of this study was to ascertain the impact of human capital factors namely entrepreneurial education, business development support (BDS) training, and entrepreneurial experience on youth entrepreneurship success, with a focus on youth entrepreneurs who are BDS beneficiaries in Gauteng. The study measured entrepreneurship success as profitability, revenue generated, as well as the number of employees within the venture.

The research adopted a positivist and a cross-sectional approach due to the limited period. A survey questionnaire was administered, utilising the Qualtrics software, to the youth entrepreneurs through the Catalyst for Growth platform. The responses received totalled 661, of which 515 responses qualified for further analysis; 90 per cent of respondents were black youth entrepreneurs.

The three hypotheses tested the effect of human capital factors, namely entrepreneurial education, BDS training, and entrepreneurial experience, on entrepreneurial success. The effect of entrepreneurial education was inconclusive while BDS training had a significant, strong and positive effect, and entrepreneurial experience was strong, positive but insignificant.

Keywords: Human Capital, Business Development Support, SMMEs, Youth Entrepreneurship, Entrepreneurship.

DECLARATION

I, Ntuthuko Khoza declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Management in the Field of Entrepreneurship at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Ntuthuko Khoza

Signed at

On the day of 2020.

DEDICATION

This thesis is dedicated to my uncles, Mhlakusayo and Musawakhe Majozi, who have both passed. You may not be around to see this but I know in spirit you are. Your nephew did it!!!

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"Be still and know that I am God", Psalm 46:10.

First, to God almighty who has never forsaken me through my journey, I give you all the glory.

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CHAPTER 1: INTRODUCTION

1.1 Introduction

South Africa has a high level of youth unemployment, which is detrimental to the social state of any country primarily because youth are perceived as the future of an economy (Oseifuah & Rugimbana, 2010). Youth entrepreneurship is viewed as one method of integrating the youth into the job market, and a way of driving innovation within the space of entrepreneurship (Adams & Quagranie, 2018). The drive for youth employment through new venture creation is however difficult because as much as there is a drive and positive attitude to start new ventures many of them have limited to no human capital (Khumalo & Mutobola, 2014).

(Unger, Rauch, Frese, & Rosenbusch, 2011, p. 2) defined human capital as “skills and knowledge that individuals acquire through investments in schooling, on the job training and other type of experience”. He further indicated that human capital could be described over a broad spectrum to include formal education, employment, training, employment experience, start up and owner experience, background of parents, skills, and knowledge.

Over the last few decades, human capital has been an area of interest among a large number of scholars with much focus on those variables that affect entrepreneurship success. In their assessment of the relationship between human capital and entrepreneurship, Marvel, Davis, and Sproul (2016) indicated that multiple authors have supported the argument that human capital, in terms of educational investment and prior knowledge, aids in exploiting new ideas and ventures, making decisions about existing ventures, and accumulating knowledge. Venter and Urban (2017) echoed this notion by describing human capital as knowledge and skills acquired, inclusive of experience, that increases cognitive ability and enables a person to have superior ability in successfully exploiting an opportunity. Lastly, Unger et al. (2011) impressed a number of reasons for human capital being seen as an area of interest; one of those is the increase in ability of a

new owner to come up with ideas to explore in terms of the business, and a heightened ability to exploit those opportunities.

Human capital can be distinguished into general human capital and specific human capital. General human capital is characterised by highly transferable skills and knowledge, for example formal university education and on the job experience. Specific human capital is characterised by less transferable skills, such as previous managerial experience and industry expertise (Shoubaki, Laguir, & den Besten, 2019). Previous studies have regularly aligned human capital theory with success in running business ventures; however, it has always failed to indicate the magnitude or how much more or less human capital can be associated with success (Unger et al., 2011).

In 2005, the government, facing growing pressure to increase focus on Small, Medium, and Micro Enterprises (SMMEs), drafted the Integrated Small Business strategy which had three primary goals, promote entrepreneurship, create an enabling environment for entrepreneurship, and enhance competitiveness and capabilities of existing enterprises. Furthermore, this policy had multiple objectives, one of which was to expand education and training for small business (Mathibe & Zyl, 2011). Despite all these interventions, the South African economy continued to experience high mortality rates of SMMEs as they failed to grow and create the necessary employment previously envisaged by the government (Masutha & Rogerson, 2014a).

On the back of these failures, multiple private and public interventions in terms of Businesses Development Support (BDS) programmes were implemented to serve as support mechanisms to support SMMEs (Mathibe & Zyl, 2011). The BDS organisations' aim is to support small businesses both at a strategic and operational level with services such as business training of newly established and established businesses (Khoase, Mutinta, & MacArthur, 2018).

This study looked at the impact of human capital factors (entrepreneurial education, BDS training, and entrepreneurial experience) on youth entrepreneurship success

and focused on those youth entrepreneurs who were BDS beneficiaries in the city of Johannesburg, in the Gauteng province of South Africa

1.2 Theoretical Background to the Study

This research was firmly embedded within the theory of human capital. Human Capital increases the entrepreneurs capabilities of the discovery, exploration and exploitation of business opportunities (Marvel, Davis, & Sproul, 2016; Unger et al., 2011). human capital is a widely used concept in entrepreneurship because it represents those set of skills, knowledge and work experiences that an individual would utilise in performing a set task, and based on those skills an expectation of success is attached (Amaral, Baptista, & Lima, 2009; Libombo & Dinis, 2015). There has been much research by scholars, which shows a positive relationship between human capital and venture success; however, there needs to be agreement on the positive correlation of each factor (Marvel et al., 2016; Unger et al., 2011). The study focused on the impact of human capital factors (entrepreneurial education, BDS training, and entrepreneurial experience) on entrepreneurship success with youth entrepreneurs who are BDS beneficiaries in the City of Johannesburg, Gauteng.

1.3 Context of the Study

The promotion and support of the small, medium and micro enterprises (SMMEs) sector has become a major policy matter in post-apartheid South Africa as SMMEs were operating in the apartheid era however they were never given enough support (Mathibe & Zyl, 2011). They are considered pivotal to the growth of any economy and in light of global events such as recessions more and more attention is given to SMMEs (Chetty, 2013). The National Development Plan (NDP) of the Republic of South Africa recognises SMMEs as key drivers of economic growth, innovation, and job creation as well as the advancement of inclusive growth with a goal of creating 90 per cent of jobs in the country by 2030 (Khoase, Mutinta, & Mcarthur, 2018; Khoase & Ndayizigamiye, 2018; Masutha & Rogerson, 2014a, 2014b; NPC, 2011). SMMEs are considered as one of the main vehicles for addressing several post-apartheid issues including reconstruction and development of the economy as

well as poverty alleviation. This further includes job creation particularly because of the slow creation of jobs in large formal enterprises (Masutha & Rogerson, 2014b). Primarily, SMMEs are the biggest contributors to the South African gross domestic product (GDP), contributing 55 per cent to the waged employ of the country (Mokoena & Karodia, 2013; TIPS, 2019).

The highest prevalence of entrepreneurship activity in South Africa is among the youth, with over 20 per cent of SMMEs described as youth-owned businesses. These are owned by individuals who are below 35 years of age (SEDA, 2018). The Global Entrepreneurship Monitor (GEM) in its 19th edition indicated that the highest number of individuals who undertook entrepreneurial activity in efficiency driven economies was between the ages of 25 and 34 and the reason was that these individuals would have gone through higher education, attained formal education and ultimately become the most technologically advanced of all ages (Singer, Herrington, & Menipaz, 2018). This trend is no different in South Africa as the group with the highest prevalence of entrepreneurial activity are business owners of 25 to 34 years of age (youth entrepreneurs) and they contribute 21.5 per cent of the total SMME owner population. SEDA in their 2018 report, noted with concern that there was a contraction of youth owned businesses (25 to 34 year age group) in particular those that were three years and younger by 15 per cent year on year (Kojo Oseifuah & Rugimbana, 2010; SEDA, 2016). Of concern was that despite support received from government, these businesses continued to experience high mortality rates, which resulted in failure of business growth and lack of creation of new employment opportunities (Masutha & Rogerson, 2014b). Primarily the central cause of this is even though there is a drive for youth employment and there is generally a positive attitude by youth to undertake new ventures, most youth have limited to no human capital (Khumalo, 2014).

Many developing nations have identified business development as central in the development of their nation's entrepreneurial base as well as reducing the number of small businesses that go out of business (Masutha & Rogerson, 2014b). Business development services in various countries have been developed to attend to different foci, such as technology acceleration, business growth, revitalisation of

certain sectors of the economy and certain groups within the economy, and reduction in the failure rate of small businesses (Lose, Maziriri, Tengeh, & Madinga, 2016; Mazanai & Fatoki, 2011). In line with international standards the South African Department of Trade and Industry (DTI) has identified the importance of business development services as a strategic tool in growing small businesses (Mazanai & Fatoki, 2011). The state of business development services in South Africa is still in its infancy and requires much development and investment, particularly from different sectors such as government and business institutions (Khoase et al., 2018).

1.4 Problem Statement

Gauteng, particularly Johannesburg, is widely known as the financial and commercial hub of South African business and is largely touted as the land of opportunity by young people of South Africa (Khumalo & Mutobola, 2014). However, there is a problem in the low success rate of youth-owned SMMEs in South African and more particularly Gauteng (Mokoena & Karodia, 2013; SEDA, 2016). This is despite South Africans aged between 18 and 35 years being the most entrepreneurially active amongst all age groups comprising 50% to 60% of all early-stage entrepreneurial activity (Herrington & Hew, 2015) and Gauteng having well established BDS institutions that educate and skill young entrepreneurs (Masutha & Rogerson, 2014a). This problem negatively affects youth development, employment opportunities, as well as the wider socio-economic goals such as poverty alleviation and the inequality gap (Masutha & Rogerson, 2014a, 2014b; Mathibe & Zyl, 2011; Mazanai & Fatoki, 2011).

The aim of the study was to investigate the impact of human capital factors of entrepreneurial education, BDS training, and entrepreneurial experience on entrepreneurship success of youth entrepreneurs who are BDS beneficiaries in Gauteng.

1.5 Research Purpose and Objectives of the Study

The primary purpose of this study was to ascertain the impact of human capital factors (entrepreneurial education, BDS training, entrepreneurial experience) on youth entrepreneurship success, with a focus on youth entrepreneurs who are BDS beneficiaries in Gauteng. The three sub-aims of this study were:

- *Sub-aim 1:* To establish the impact of entrepreneurial education on youth entrepreneurship success of BDS beneficiaries in Gauteng;
- *Sub-aim 2:* To establish the impact of BDS training on youth entrepreneurship success of BDS beneficiaries in Gauteng; and
- *Sub-aim 3:* To establish the impact of entrepreneurial experience on youth entrepreneurship success of BDS beneficiaries in Gauteng.

1.6 Conceptual/Theoretical Definition of Terms

1.6.1 Entrepreneurship

In their work on entrepreneurship venture creation, Kloepfer and Castrogiovanni's (2018:685) study offered various definitions of entrepreneurship, starting with those coined by Low and MacMillan in 1988 to the most recent definitions of scholars such as Ireland and Webb in 2007. Common concepts that define entrepreneurship are newness, bringing about social change and development, founding a new organisation, as well as interconnected processes. Central to their findings is the concept of creation, concluding that entrepreneurship is in essence the process of venture creation (Kloepfer & Castrogiovanni, 2018).

1.6.2 Human capital

The definition of human capital varies according to researchers. Some researchers focused on particular dimensions of human capital whilst others focused its conceptualisation such as the ability of this resource to maintain and achieve long term sustainability and survival (Unger et al., 2011; Zainol, Al Mamun, Ahmad, &

Simpong, 2018). Human capital can be seen as the skills and knowledge that individuals can acquire through education, on the job training, and work of experiences (Mamabolo, Kerrin, & Kele, 2017a, 2017b; Unger et al., 2011). Furthermore, human capital can be described over a broad spectrum to include formal education, employment, training, employment experience, start up and owner experience, background of parents, skills, and knowledge (Marvel et al., 2016; Unger et al., 2011; Zainol et al., 2018). For this study we utilise the definition as per Unger et al. (2011) which indicates that human capital is the skills and knowledge that an individual acquires through education, on the job training and other work experiences.

1.6.3 Youth

The South African National Youth Policy 2020 defines youth as those people within the South African population between the ages of 14 and 35 years, which is consistent with the African Youth Charter (RSA, 2015), this definition is however broad and inclusive and divided into two distinct categories. Minors who are from 14 to 17 years of age and adult youth who are from 18 to 35 years of age (Altman, 2007; DTI, 2013). For purposes of this research youth shall mean adult youth.

1.6.4 Youth entrepreneurship

The Youth Enterprise Development Strategy 2013-2023 defined youth entrepreneurs as those young men and women, between the ages of 18 and 35 years, who are unemployed, reside in rural or urban areas, and aspire to own and run their own enterprises, or already run their own enterprises (Altman, 2007; DTI, 2013). This was the definition used for purposes of this research.

1.6.5 Entrepreneurship success

Entrepreneurship success or a measure of successful emergence of a business is defined as the ability to generate financial returns in the form of profit or generating an actual first sale from a new enterprise (Davidsson & Honig, 2003). For purposes

of this research, revenue (sales), growth in the number of employees, and profit generated by youth entrepreneurs was used in reference to entrepreneurship success.

1.6.6 Youth Enterprise

Youth enterprise is defined as businesses run by young men and women aged from 18 to 35 years who can enter into a business contract independently without the requirement of parental, guardian or representative assistance and consent (DTI, 2013)

1.6.7 Business development support (BDS)

“BDS providers are defined as all programmes, including incubators, accelerators, hybrids, corporate, Enterprise and Supplier Development (ESD) programmes, business advisory services, and others, that offer non-financial services and products to entrepreneurs at various stages of their business development” (ANDE, 2018, p. 2).

1.7 Contribution of the Study

There has been much research done by a variety of scholars on the subject of entrepreneurial success and human capital in isolation, as well as those studies that have focused on BDS services in isolation; however, there has not been much research on both entrepreneurial success and BDS services in the same space. (Marvel et al., 2016; Unger et al., 2011) focused much of their work on three decades of human capital research and its relationship with entrepreneurial success. This research primarily focused on the impact of human capital factors on entrepreneurial ventures in different settings such as high technology industries, developing and under developed countries, as well as younger and older businesses. Furthermore, their research looked into the individual entrepreneur, however there was no focus on the age or demographics of the individual. Davidsson and Honig (2003) defined entrepreneurship success as the ability to

generate financial returns in the form of profit or generating an actual first sale from a new enterprise. They looked at how the organisation becomes successful, and focused on the individual as a general entrepreneur that engages in a new venture.

BDS services received much attention by researchers both on the local and international research fronts. As indicated by, in their study of small business incubators in the South African economy as well as globally, BDS programs in both developing and developed countries have been founded to attend to specific needs such as technology acceleration, business growth and revitalisation of certain sector of the economy(Hackett & Dilts, 2004; Masutha & Rogerson, 2014a, 2014b; Mazanai & Fatoki, 2011). In El Salvador, Stosch and Hyman (2002) focused their research on BDS services for small-scale coffee shops. In their research, they focused on all owners of coffee shops without any particular reference to age groups and they found that there is a need for BDS to develop distinct guidelines for small businesses with niche offerings such as coffee especially if these businesses are found in rural areas. Locally there has been much focus on the impact of business support services on all SMMEs, regardless of the age of the entrepreneur even though there are areas where the youth is segregated from the rest of the study group. Masutha and Rogerson (2014a) further indicated much interest in youth-driven businesses in general; however, do not specify BDS to one age group, but rather to all age groups, with minimal reference to youth. The 2018 Catalyst for Growth (C4G) report indicated that overall, male, non-youth owned, and tertiary degree entrepreneurs had the highest changes of survival rate; non-youth owned business having an 80.2 per cent survival rate and the youth owned business having a 72.6 per cent survival rate. However, the report further indicates a requirement for assessment of the unique needs of the different groups such that future BDS is better channelled (C4G, 2019).

This study aimed to make a unique contribution, focusing not only on human capital, but also on the training that was provided by BDS providers. It looked at how this training benefited youth entrepreneurs, and in effect how this training contributed to the success of their individual businesses. This study would benefit all stakeholders and role-players involved with entrepreneurship, but specifically BDS service

providers and funders, allowing them to understand which human capital factors in the training they design and provide most influences youth enterprises, and to then tailor make their training offerings accordingly.

1.8 Delimitations of the Study

Human capital can include a broad spectrum of facets: formal education, employment, training, employment experience, start up and owner experience, background of parents, skills, and knowledge (Marvel et al., 2016; Unger et al., 2011; Zainol et al., 2018). This study was limited to three factors of human capital: entrepreneurial education, BDS training, and entrepreneurial experience. The study focused on youth entrepreneurs between the ages of 18 and 35 years, who were beneficiaries of BDS training, and not general youth entrepreneurs. Furthermore, these beneficiaries were from Gauteng and excluded all other provinces and rural areas. The reason for this was the ease of access to available information for BDS youth entrepreneurs in and around Gauteng. It excluded entrepreneurs who were survivalist in nature and did not keep any record of their finances. There was no restriction on the age of the business or the length of time the entrepreneur had been in business, provided it was in excess of one year to allow for measurement of success.

1.9 Structure of the Report

Chapter 1 introduces the purpose, objective, and context of the study, human capital dimensions investigated, as well as the significance of the study in relation to the impact of human capital factors on youth entrepreneurship success. The study commences in Chapter 2 with the theoretical background and detailed view of human capital, youth entrepreneurship, and the human capital dimensions of entrepreneurial education, BDS training, and entrepreneurial experience. Chapter 3 follows with an outline of the research methodology, design, population, and sample, as well as data collection process. Chapter 4 presents the empirical findings of the research, and Chapter 5 discusses the results. Finally, Chapter 6 provides the conclusions, implications, and recommendations.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The literature reviewed in this chapter provides key previous research findings on the relationship between human capital and the entrepreneurship successes in the context of youth entrepreneurs. The main aim was to uncover within theory the basis for the research and the tools used for conducting the research to find the relationship between human capital and youth entrepreneurship success. The research looked at entrepreneurship as a field of study and the role it plays in entrepreneurship theory, focusing on entrepreneurial education and training as well as entrepreneurship experience as dimensions of human capital. The chapter introduces and explains youth entrepreneurship in relation to youth unemployment and human capital. Primarily the study focused on the impact of human capital factors (entrepreneurial education, BDS training, and entrepreneurial experience) on the success of youth entrepreneurship in Gauteng.

2.2 Youth Entrepreneurship

The United Nations (UN) defines youth as those individuals between the ages of 15 and 24 years and the commonwealth uses the ages 15 to 29 years (Adams & Quagranie, 2018). In South Africa, youth are defined as people aged between 15 and 35 years of age, with those aged 15 years and above permitted to enter the labour force (Oseifuah & Rugimbana, 2010). The GEM defined youth entrepreneurs as those people in any population aged 18 to 34 years (Herrington & Hew, 2015; Schøtt, Kew, & Cheraghi, 2015). The Youth Enterprise Development Strategy 2013-2023 defined youth entrepreneurs as those young men and women, between the ages of 18 and 35 years, who are unemployed, reside in rural or urban areas, and aspire to own and run their own enterprises, or already run their own enterprises (Altman, 2007; DTI, 2013). For purposes of this was the definition used. The highest prevalence of entrepreneurship activity

in South Africa is among the youth, with over 20 per cent of SMMEs are described as youth owned businesses. These are owned by individuals who are below 35 years of age (Kojo Oseifuah & Rugimbana, 2010). The nineteenth edition of the GEM indicated that the highest number of individuals who undertook entrepreneurial activity in efficiency driven economies were between the ages of 25 and 34 years, because these individuals would have gone through higher education, attained formal education, and ultimately become the most technologically advanced of all ages (Singer et al., 2018). This trend is no different in South Africa as the group with the highest prevalence of entrepreneurial activity are business owners aged 25 to 34 years (youth entrepreneurs) who contribute 21.5 per cent of the total SMME owner population (Kojo Oseifuah & Rugimbana, 2010; SEDA, 2016). Recently, there has been much focus on youth entrepreneurship as a mechanism to alleviate youth unemployment by ensuring that young people participate in the creation of new businesses as a means of creating self-employment (Rajasekaran, Chinnathai, & Ramadevi, 2015). Young people are viewed as the entry point to economic activity in most economies, and by becoming entrepreneurs, they become economically self-sufficient and create jobs instead of looking for jobs. Furthermore, they are able to create the jobs that fit the current innovative and dynamic business environment, addressing unstable and rapid changes that occur (Holienka, Pilková, & Jančovičová, 2016).

In Europe, Ceptureanu and Ceptureanu (2015) indicated that youth unemployment is at 21 per cent and governments are in a panic because of the risk of disengagement of youth from the mainstream economy; therefore, new policies aimed at youth entrepreneurship and funding initiatives have been developed. In India, Rajasekaran et al. (2015) indicated that of the 300 million youth in need of employment, the government can only secure 100 million jobs leaving the system with a 200-million job deficit. This creates a crisis that cannot be easily resolved and the Indian government is continuously creating opportunities for youth entrepreneurship. Lastly, youth unemployment in South Africa, according to the survey conducted by Statistics South Africa (2018), is at 38.2 per cent. The government has tried multiple interventions to ensure employment of youth through entrepreneurship interventions such as incubation

facilities, youth entrepreneurship education, and tax relief for small businesses (Mohutsiwa, 2012).

Entrepreneurship in youth is a rare quality to find because entrepreneurs have the overall responsibility of starting and ensuring that a business is sustainable, barring all the risk that comes with doing so (Rajasekaran et al., 2015). For any new venture to thrive, an entrepreneur must have the necessary skills, ideas, and personality traits, which most young people lack (Ceptureanu & Ceptureanu, 2015). Entrepreneurial education is believed to not only be instrumental in providing skills and knowledge to young people, but also to assist in shaping the mind-set of young people to start thinking entrepreneurially (Rajasekaran et al., 2015).

In their work on financial literacy and youth entrepreneurship, (Kojo Oseifuah & Rugimbana, 2010, p. 167) mentioned that in 1977 researchers Schnurr and Newing defined entrepreneurship as “the practical application of enterprising qualities, such as initiative, innovation, creativity, and risk-taking into the work environment (either in self-employment or employment in small start-up firms), using the appropriate skills necessary for success in that environment and culture”. The skills and knowledge discussed above fall under the broader school of human capital, which (Unger et al., 2011, p. 147) defined as “skills and knowledge that individuals acquire through investments in schooling, on the job training and other type of experience”. Human capital and its related factors are discussed in-depth in section 2.5.

The Small Enterprise Development Agency (SEDA), in its 2018 report, noted with concern a contraction of youth owned businesses (the 25 to 34 year age group), particularly those with businesses three years and younger, by 15 per cent year on year (Altman, 2007; SEDA, 2016). The worrying factor was that even though these businesses received support from government they continued to experience high mortality rates, which resulted in failure to grow businesses and create new employment opportunities (Masutha & Rogerson, 2014a). Central to the high mortality rate is the lack of, or limited, human capital (Khumalo & Mutobola, 2014).

2.3 Business Development Support (BDS)

Global economies have moved to recognise the role of SMMEs as pivotal in economic development however there has been much concern on the start-up and survival of new ventures with high mortality experienced. Many of these economies entrust BDS providers to play a fundamental role in improving the start up and survival of businesses which aids in growth of the SMME sector and in turn the economy (Lose et al., 2016; Masutha & Rogerson, 2014a). BDS is viewed as an effective approach in helping entrepreneurs in new and established businesses by offering much needed financial and expert assistance in managing and growing businesses. It further assists in the development of skills and knowledge of entrepreneurs as well as contributes to overall social and economic development of economies (NBIA, 2002; Şchiopu, Vasile, & Țuclea, 2015). The support to entrepreneurs gives recognition to the fact that the right kind of business environment is increasingly being acknowledged as an essential factor to the success of small businesses (Dubihlela & Van Schalkwyk, 2014).

Founded in North America and Westerns Europe the activities of BDS providers have become a global phenomenon which are increasingly being featured in economic policies that promote innovation, entrepreneurship and business development in both global developing and developed economies (Gonsalves & Rogerson, 2019). Policies and programs supporting small businesses are supported in both developing and developed economies globally for the role they play in promoting social and economic development. These programs can take many shapes and forms from financial capital, training, regulatory provisions and other types of support which aims to nurture and support firms from foundation to growth (Scaramuzzi, 2002).

The National Business Incubation Association (NBIA) define a BDS as “an economic development tool designed to accelerate the growth and success of entrepreneurial companies through an array of business support resources and services” (NBIA, 2002, p. 4). The provision of such business support gives much credence to the importance of understanding the businesses environment in an ever changing business landscape as important for the survival of small

businesses (Schutte & Direng, 2019). Masutha and Rogerson (2014b) indicate that firms that have undergone BDS have a higher chance of survival as compared to those that did not go through or experience it. Schutte and Direng (2019) emphasize the importance of BDS in developing entrepreneurship to a relationship which is similar to that of a hospital and the incubation of a prematurely born baby. This demonstrates the sensitivity of new ventures to failure as well as the amount of support it will require in order for them to survive. According to Hackett and Dilts (2004), the continued growth and never-ending failure of multiple new ventures in North America since the 1980s spurred an increase in the number of incubators. These incubators believed that even with increased competition among firms it was important to incubate small firms to avoid failure until they were self-sustaining and had a good business structure. The theoretical foundation of a lot of incubator literature is found in market failure discussions, with authors indicating that once a business fails to be competitive with its products and services and its transactions are such that it makes little or no revenue, the business fails to produce the desired outcome (Hackett & Dilts, 2004).

In South Africa, the NDP recognises SMMEs as key drivers of economic growth, innovation, and job creation, as well as the advancement of inclusive growth in the country with a goal of creating 90 per cent of jobs by the year 2030 (Masutha & Rogerson, 2014a, 2014b; NPC, 2011). Since 1994, when South Africa transitioned into a democratic state, the advancement of small businesses has played a major part in the government's agenda as a driver to address inequalities brought by apartheid with a plan to address issues of economic restructuring and poverty alleviation (Masutha & Rogerson, 2014a). Primarily SMMEs are one of the biggest contributors to the South African GDP and contribute 55 per cent to waged employ in the country (TIPS, 2019). The idea of BDS was founded in 1995 where the then Small Business Development Corporation (SBDC) established what was known as hives or workstations of industry which gathered together to create a cluster of workshops that would be utilised to bridge economic obstacles (Lose et al., 2016).

The DTI identified the importance of BDS services as a strategic tool in growing small businesses (TIPS, 2019). The state of BDS in South Africa is still in its infancy and requires much development and investment particularly from different sectors such as government and business institutions (Khoase et al., 2018). As of 2017, there were an estimated 150 BDS providers in the country providing various services to entrepreneurs, and other key estimates indicate a higher number. In this case these include incubators, accelerators, hybrids, corporate Enterprise and Supplier Development (ESD) programmes and others which offer non-financial services and products (skills transfer and business advise) to entrepreneurs at various stages of their business needs (ANDE, 2018).

In 2004, four incubators were recorded in South Africa; however, by 2013 these had increased to 51 with 42 of those having been established through public sector participation and nine through private sector participation (Khoase & Ndayizigamiye, 2018). Of those recorded, 13 specialised in the manufacturing sector, eight were in mixed use industry, seven were in agriculture, five in construction, five in ICT, four in chemicals, four in jewellery, two in small scale mining, and one in bio and life sciences (Masutha & Rogerson, 2014a). In their 2018 report, C4G indicated that the number of BDS providers grew from 314 to 442 in Africa, and 59 of these centres are located in South Africa (C4G, 2019).

Many new businesses have valuable, tangible ideas; however, they lack the resources, skills, and knowledge to ensure these ideas materialise (Khoase & Ndayizigamiye, 2018). New businesses need assistance in terms of registering new businesses, finding funding, business training, as well as continuous support from inception to completion of an idea; many entrepreneurs who rely solely on their own capital and have little business knowledge have a higher chance of failure (Khoase & Ndayizigamiye, 2018). Research on BDS remains limited and fragmented primarily due to the difficulty in collecting longitudinal data used to assess SMMEs that are part of BDS programs and compare with those that are not; however, many countries across the globe have embraced BDS programs as means to encourage and cultivate entrepreneurship (C4G, 2019).

One of the main drivers of BDS is enterprise development, driven primarily by broad-based black economic empowerment, which remains a central tool of government that aims to achieve equality and employment creation through mechanisms such as small business development and giving smaller business a larger piece of the pie when trading with the state (Ntlamelle, 2015).

BDS identifies 7 key dimensions which are market access, technology and product development, input supply, infrastructure, training and technical assistance, policy or advocacy and alternative financing mechanisms (Miehlbradt & McVay, 2003). Table 1 below demonstrates a summary of the 7 Key dimensions.

Market access is one of the dimensions of BDS, which deals with the new ventures access to markets. This includes access to market information, market research and related services, trade fairs and product exhibitions, how products are packaged and advertised as well as the role of subcontractors and outsourcing (Miehlbradt & McVay, 2003).

Technology and product development is another dimension of BDS that includes linking SMMEs with technology suppliers as well as facilitating the procurement of different technologies that are required for the new venture. It further involves the leasing of required, quality assurance programs, design services as well as business commercialization (Miehlbradt & McVay, 2003). Small businesses have a limited to no access to technology-based services and this hinders them from accessing market information such as leases and financial support which are necessary for the survival of the venture (Lose et al., 2016). In the year 2000, the government launched the Godisa trust programme, which as one of its initiatives developed innovative support centres, which aimed to boost the commercialisation and transfer of technologies to start-ups and existing SMMEs in order to enhance their competitiveness and sustainability. These included technology centres and technology incubators (Masutha & Rogerson, 2014b).

Another dimension of BDS involves linking SMMEs with input or raw material suppliers. This involves improving the supply chain such suppliers have the capacity to continuously supply required goods, facilitating the establishment of

bulk buying groups as well as information of input supply sources (Miehlbradt & McVay, 2003). Small business supply chains are crucial especially in a competitive environment where small business has to compete with big business which are more experienced in conducting business and can leverage their buying power to get more value from suppliers (Reji, 2013). Another dimension of BDS is Infrastructure development, which concerns itself with all those business elements that are important for the day-to-day running of the business. This includes telecommunications and internet access, dissemination of information through print, TV and other media, internet services, secretarial services, banking and the movement of monies, warehousing, transport and distribution of products from manufacturing to the end client (Miehlbradt & McVay, 2003)

Policy and advocacy is another important dimension of BDS. This requires BDS to advocate for policies that will enable SMMEs to thrive in their business as well as analysis and communication of such policies. It further requires BDS to train SMMEs on the adoption of policies as well as running sponsorship conferences to discuss such policies (Miehlbradt & McVay, 2003). Historically the South African government focused mainly on big business as contributors to the economy and it is only in the 70s and 80s where the focus changed to SMMEs. As a result of this different support mechanisms have been put into place such as policy framework born out of the white paper on SMMEs in 1995 which will focus on promoting and supporting SMMEs (Masutha & Rogerson, 2014b; Mathibe & Zyl, 2011). Governments have played numerous roles when it comes to BDS programs — from policy makers, developers, facilitators and direct providers. In some developed countries they provide free or subsidized services to SMMEs (Miehlbradt & McVay, 2003).

Financial mechanisms is another dimension of BDS. Herrington and Hew (2015) indicate that access to finance was the second highest contributor to new venture creation after education and training. 2% of all new ventures in South Africa are able to access bank loans and 75% of applications by start-ups for bank credit are rejected. The main reason is primarily high risk of default when banks grant credit, low returns from SMMEs, high screening costs and dealing with informal

sector entrepreneurs due to cultural and language barriers (Mazanai & Fatoki, 2011). The government of South Africa, through the Department of Trade and Industries (DTI) has established a number of public sector institutions that caters for the funding needs of SMEs. Among them are Khula Enterprise Finance Ltd, Small Enterprises Development Agency (SEDA), Industrial Development Cooperation (IDC), Umsobomvu Youth Fund (UYF), South African Micro-Finance Apex Fund (SAMAF), National Empowerment Fund (NEF), South African Women Entrepreneurs' Network (SAWEN) and Technology for Women in Business (TWIB) (DTI, 2005)

Miehlbradt and McVay (2003) indicate that the dimension of training and technical assistance involves technical training, mentoring, financial and taxation advice, franchising and management training as well as feasibility and how an entrepreneur can conduct a business plan. This dimension is the most important because BDS training and education influence entrepreneurship by ensuring that new business owners have the necessary skills and knowledge to start new ventures, as well as instilling and stimulating entrepreneurship values such as creativity, risk-taking, and independence of entrepreneurs (Egelser & Rena, 2013). Furthermore, the ever-changing environment requires that small business owners equip themselves with the necessary skills and knowledge required to ensure sustained competitive advantage (Khoase et al., 2018). BDS training forms part of the key dimensions and objectives of this research will be elaborated further on in the following sections.

Table 1: 7 Categories/Dimensions of BDS

Market Access:	■ marketing business	■ marketing trips and meetings
	■ market linkages	■ market research
	■ trade fairs and product exhibitions	■ market space development
	■ development of samples for buyers	■ showrooms
	■ market information	■ packaging
	■ subcontracting and outsourcing	■ advertising

Infrastructure:	■ storage and warehousing ■ transport and delivery ■ business incubators ■ telecommunications ■ courier	■ money transfer ■ information through print, radio, TV ■ internet access ■ computer services ■ secretarial services
Policy/ Advocacy:	■ training in policy advocacy ■ analysis and communication of policy constraints and opportunities	■ direct advocacy on behalf of SEs ■ sponsorship of conferences ■ policy studies
Input Supply:	■ linking SEs to input suppliers ■ improving suppliers' capacity to provide regular supply of quality inputs	■ facilitating the establishment of bulk buying groups ■ information on input supply sources
Training and Technical Assistance:	■ mentoring ■ feasibility studies and business plans ■ exchange visits and business tours ■ franchising ■ management training	■ technical training ■ counseling/advisory services ■ legal services ■ financial and taxation advice ■ accountancy and bookkeeping
Technology and Product Development:	■ technology transfer/commercialization ■ linking SEs and technology suppliers ■ facilitating technology procurement	■ quality assurance programs ■ equipment leasing and rental ■ design services
Alternative Financing Mechanisms:	■ factoring companies that provide working capital for confirmed orders ■ equity financing ■ facilitating supplier credit	

Source: Miehlabradt and McVay (2003)

2.4 Entrepreneurship Success

Entrepreneurship can be viewed both at an individual level and at an organisational or new venture level, with the individual having independence, persistence, achievement, locus of control, hard work, self-efficacy, and willingness to take risks: some of the characteristics that define entrepreneurial success (Overall & Wise, 2017). At an organisational level, the term entrepreneurial success is mostly measured through performance indicators such as profit or business growth, owner hours, the number of people employed, return on investment, goal achievements, and economic success (Fisher, Maritz,

& Lobo, 2014). Further to the business view of entrepreneurship it can be understood as having a return on investment from activities related to idea generation, venture creation, and a continued growth rate in business or the stock market (Limsong, Sambath, Seang, & Hong, 2016). Successful entrepreneurial businesses are associated with entrepreneurs' ability to identify new opportunities, followed by all those activities that bring the business to life such as mobilising resources and utilising its human capital abilities to create value (Sar, 2017).

Entrepreneurial success is a phenomenon that is more understood by its implied meaning or context and more times than not it is understood as a grammatical construct in reference to entrepreneurship (Fisher et al., 2014). There is no consistent and accepted definition of entrepreneurship success in literature, which has posed issues for researchers; however, entrepreneurship is understood and defined through the context within which it is found (Fisher et al., 2014).

Entrepreneurship success or a measure of successful emergence of a business is defined as the ability to generate financial returns in the form of profit or generating an actual first sale from a new enterprise (Davidsson & Honig, 2003). For this research revenue (sales), growth in the number of employees, as well as profit generated by youth entrepreneurs were utilised to measure entrepreneurship success. This objective measure of success utilises profitability, sales revenue at a point in time, or when the data is collected, as well as growth year-on-year in the number of employees.

2.5 Human Capital

Human capital is a widely used concept in entrepreneurship because it represents those set of skills and knowledge that an individual would utilise in performing a set task, and based on those skills an expectation of success is attached (Dimov, 2017; Mamabolo et al., 2017a, 2017b). The importance of human capital and its main dimensions such as skills, education, and training has been central to entrepreneurship scholars because of the belief that an increased

level of human capital increases the ability of an entrepreneur to discover, explore, and exploit new ventures (Marvel et al., 2016; Unger et al., 2011). Human capital can be separated into general and specific human capital, with the former meaning education and overall practical experience and the latter meaning education and experience in relation to a particular activity or context (Davidsson & Honig, 2003).

Zainol, Al Mamun, Ahmad, and Simpong (2018) noted that the true definition of human capital varies across researchers with some concentrating on the conceptualisation of particular areas of interest such as the long-term survival and sustainability of businesses, while some focus on elements related to the individual entrepreneur. Zainol et al., (2018) supported this argument by indicating that there are multiple factors of human capital such as formal education, training, employment experience, start-up experience, owner experience, parent's background, skills knowledge, and others that a person possesses that could aid in decisions regarding discovery, exploration, and exploitation of an opportunity.

While noting the importance of human capital, Mamabolo, Kerrin, and Kele (2017a) argued that scholars impede its growth because there is no coherent agreement of the specific skills that are needed by entrepreneurs, hence the study of entrepreneurship is seldom empirical and mostly theoretical. Dimov (2017) added that although the area of human capital is wide enough, the biggest challenge is to convert the theoretical notion into those specific fields of study that can assist future entrepreneurs. Scholars are also incoherent about the actual impact of human capital with some arguing that for it to be impactful; it depends on the human capital dimension under scrutiny, and not human capital in general. Some scholars find no correlation between human capital and entrepreneurship, while most find some relationship even though the extent of this relationship is arguable (Schwab, 2018).

Human capital in the South African context is viewed as one of the most important areas in terms of entrepreneurship and SMME growth. South Africa ranks among the poorest countries in terms of human capital recognition; SEDA (2018)

indicated that 70 per cent of the country's entrepreneurs have a matric or lower qualification.

There are multiple factors of human capital such as formal education, training, employment experience, start-up experience, owner experience, parent's background, skills, knowledge, and others (Marvel et al., 2016). For purposes of this study, and as mentioned above, the focus was on the three dimensions of human capital, namely entrepreneurial education, training received during BDS, and entrepreneurial experience.

2.5.1 Entrepreneurial education

Entrepreneurial education aims to provide students with the necessary skills, knowledge, and motivation required to become successful in starting up new ventures and seeing these through to profitability (Ndedi & Ahmed, 2013). Entrepreneurship education involves the development of personal skills, abilities and attitudes, and formal business knowledge that entrepreneurs need to exploit opportunities in economic, social, and cultural contexts (Ndedi & Ahmed, 2013). Furthermore, entrepreneurial education covers the teaching of skills, such as the promotion of those ideas that are important in entrepreneurship thinking, the creation and growth of businesses, as well as understanding innovation from an entrepreneurship context (Libombo & Dinis, 2015)

Despite the amount of research invested in the area of entrepreneurial education there is still a big gap between what is learned and what is applied, and thus most education initiatives do not fundamentally address the needs of entrepreneurs and equip them with skills required to be successful in their endeavours (Van Vuuren & Botha, 2010). One of the main issues, especially for developing countries, is the different landscape experienced by upcoming entrepreneurs who have a barrier to entry in the form of adverse government regulation, inadequate infrastructure, legal barriers, financial start-up funding, and other related policies (Libombo & Dinis, 2015). Entrepreneurial education is still viewed as an important tool to address unemployment and alleviate poverty, especially if introduced at

higher education institutes in a formal and well-structured manner to develop hands on skills and abilities (Ndedi & Ahmed, 2013).

2.5.2 BDS training

The role of SMMEs as change agents and a contributors to economies is well documented; however, evidence seems to suggest that the true value of small business is far from being realised, primarily because most entrepreneurs are not educated or skilled to run businesses. A more organised and coordinated approach is needed to allow small business to run a more effective role in the economy (Egelser & Rena, 2013).

BDS training and education influence entrepreneurship by ensuring that new business owners have the necessary skills and knowledge to start new ventures, as well as instilling and stimulating entrepreneurship values such as creativity, risk-taking, and independence of entrepreneurs (Egelser & Rena, 2013). Furthermore, the ever-changing environment requires that small business owners equip themselves with the necessary skills and knowledge required to ensure sustained competitive advantage (Khoase et al., 2018).

Various studies on entrepreneurial training have found that different training programmes, whether customised or generic, are necessary for new venture growth, and improve SMMEs chances of success. There is a need for diverse training programs, which focus on different industries (Khoase et al., 2018). It is generally perceived of key areas of running a business, such as basic accounting, economics, marketing, and cash flow management (Egelser & Rena, 2013).

The small business and entrepreneurship training environment in South Africa is still highly fragmented with multiple role players such as government agencies such as Youth Development Agency and SEDA, NGOs, Community-based organisations, as well as educational institutions at all levels (Nieman, 2013). The National Small Business Act paved the way for the Department of Trade and Industry who publicised the White Paper on National Strategy for the Development and Promotion of Small Business in South Africa (Nieman, 2013). This paper indicated, in terms of training, three primary pillars as the central

focus: modular training relevant to sectors and certain groups, training of trainers, as well as training services and methods and that local business centres should use as training agencies for small business owners (Nieman, 2013). Currently, there is a major skills gap in South African SMMs, primarily because some entrepreneurs are content with the skills they have, which are enough to run a small business. Some cannot put aside time to attend BDS training programs, and cannot afford to attend (Khoase et al., 2018).

There are various schools of thought with reference to the impact of training on business performance. Some researchers argue that the involvement of government in creating an environment conducive to business might hinder business growth due to some new ventures being highly informal, and any attempt to formalise them might result in complete collapse of the venture (Khoase et al., 2018). However, some scholars believe that entrepreneurship education should be focused on those entrepreneurs who will act as change agents for the next decade. Focusing on the existing entrepreneur is short-sighted considering that different programmes have come and gone and their impact has not yielded its true value (Nieman, 2013).

2.5.3 Entrepreneurial experience

Entrepreneurial experience can be defined as experience, knowledge, and skills acquired upon having created a venture (Mamabolo, Kerrin, & Kele, 2017b). Lee and Tsang (2001) further indicated that entrepreneurial experience comprises three main factors: prior business ownership, industry experience, and managerial experience. Shoubaki et al. (2019) stated that entrepreneurial experience equips the individual with abilities, knowledge, and skills that are particular in context to their application even though it has lower levels of transferability, compared to education. Individuals who start businesses based on their entrepreneurial experience tend to start businesses that are similar to those they have started before (Shoubaki et al., 2019). One of the important factors in venture creation is the ability to identify a business opportunity, bear the risk of its creation, and organise the necessary resources to see it to success; all these can be found in those individuals with entrepreneurial experience (Estrin,

Mickiewicz, & Stephan, 2016). Research indicates that entrepreneurial experience is a source of useful skills, because those who have experience in managing their own businesses possess heightened levels of human capital and skills as well as technical expertise and management ability to run new ventures (Adom & Asare-Yeboah, 2016). Business owners who have successfully run businesses have a better chance to discover or create opportunities for exploitation, as they are aware of how and what to look for in terms of new venture possibilities (Mamabolo et al., 2017b). Studies have found a positive relationship between entrepreneurial experience and entrepreneurship, especially at the industry level, as well as managerial experience and the possible success of venture creation within various industries (McDermott & Boyd, 2017). However, some studies have found that as much as entrepreneurial experience provides the necessary skills to initiate a new venture, this does not guarantee that the new venture will be successful post the inception phase (Mamabolo et al., 2017b).

Entrepreneurial experience affords individuals the skills and expertise of how to gather information about opportunities that are available and to exploit them, which involves the detection, pursuing, and successful outcome of such opportunities (Amaral, Baptista, & Lima, 2009).

a. Prior business ownership

Previous business ownership is defined as the number of preceding business ventures that were owned by the entrepreneur in a particular trade (McDermott & Boyd, 2017). Research indicates that entrepreneurs who have prior ownership of businesses develop businesses faster, generate higher income, and are less likely to experience failure in running their businesses (McDermott & Boyd, 2017).

Entrepreneurs that report lengthy terms of business ownership normally have a longer period of business experience and may hold much stronger human capital, than those who have had much shorter terms, because the longer-term entrepreneurs have accumulated more experience and leveraged their human capital (Asah, Fatoki, & Rungani, 2015). Business ownership experience as human capital is vital in starting and running businesses, primarily because finance houses trust those entrepreneurs that have some business experience,

those that have experienced some level of risk management, as it contributes to innovativeness and coming up with new products and services (Asah et al., 2015). “Longer durations of business ownership experience can provide the time to build up routines for innovation, which encode entrepreneurs’ tacit knowledge and sophisticated heuristics to guide action. Experienced entrepreneurs, over time, may have tested alternative approaches to innovation” (Asah et al., 2015, p. 308).

b. Industry experience

Scholars have done many studies looking into the relationship between previous occupation and entrepreneurship (McDermott & Boyd, 2017). Research further indicates that people who have worked or are working in jobs in the corporate world are more likely to start new ventures, than are their peers employed in public or government sectors. In addition, those who have managerial experience are more likely to start their own businesses, than those who have no managerial experience (McDermott & Boyd, 2017).

c. Work experience

Venter and Urban (2017) noted that the reason why work experience is important to venture creation is because it is those skills acquired from work spaces that result in people starting ventures that align to these work experiences. Work experience is indicated by the number of years occupying a certain job, number of full time jobs held, and what positions were held.

McDermott and Boyd (2017) indicated that people who work in the corporate world are more prone to starting businesses than their counterparts who work in the public sector. Furthermore, people who possess managerial experience are more likely to start businesses than those individuals who do not have any managerial experience (McDermott & Boyd, 2017). An added advantage to those individuals who have worked in different settings or industries on their starting and managing businesses (Mamabolo et al., 2017a). Managerial work experience is known as the stock of competences, knowledge, and personality attributes that define managerial skills as the stock of competences that are

embodied to perform manual labour and derive economic value (Asah et al., 2015). The central expectation of entrepreneurial skills is the ability to create, explore, and exploit entrepreneurial opportunities, utilise managerial skills to manage resources, whether human or financial, as well as execute the technical requirements of the new venture (Asah et al., 2015). This ownership experience can add to human capital through enhanced business reputation and a better understanding of the financial sector where finances are sought (Asah et al., 2015).

2.6 Hypothesis Development

This section aims to show the hypotheses developed in line with the literature review on entrepreneurial education, training, and entrepreneurial experience, and its impact on the success of youth entrepreneurs. It also provides the conceptual model that depicts the hypothesized impact of entrepreneurial education, BDS training, and entrepreneurial experience on youth entrepreneurship success.

2.6.1 Hypothesis 1

Entrepreneurship education involves the development of personal skills, abilities, attitudes, and formal business knowledge, that entrepreneurs need to exploit opportunities in economic, social, and cultural contexts (Ndedi & Ahmed, 2013). Further to the above, entrepreneurial education covers the teaching of skills such as the promotion of those ideas that are important in entrepreneurship thinking, the creation and growth of businesses, as well as understanding innovation from an entrepreneurship context (Libombo & Dinis, 2015).

- *H1*: There is a positive impact of entrepreneurial education on youth entrepreneurship success of BDS beneficiaries in Gauteng.

2.6.2 Hypothesis 2

BDS in various countries has been developed to attend to different reasons such as technology acceleration, business growth, revitalisation of certain sectors of the economy, as well as certain groups within the economy, and reduction in the failure of small businesses (Masutha & Rogerson, 2014a).

- *H2*: There is a positive impact of BDS training on youth entrepreneurship success of BDS beneficiaries in Gauteng.

2.6.3 Hypothesis 3

(Mamabolo et al., 2017a) indicated that previous new venture experience enhances the ability of the entrepreneur to create or discover new opportunities and overcome the difficulties that are presented. Individuals who have attempted and run new businesses have a higher level of human capital than those who have no experience in new venture creation (Mamabolo et al., 2017a). The research looked into the relationship between entrepreneurial experience and the success of youth entrepreneurship in Johannesburg.

- *H3*: There is a positive impact of entrepreneurial experience on youth entrepreneurship success of BDS beneficiaries in Gauteng.

2.6.4 Conceptual framework of hypotheses

Figure 1 diagrammatically represents the three hypotheses of entrepreneurial education, BDS training, and entrepreneurial experience, as well as the component of entrepreneurial success

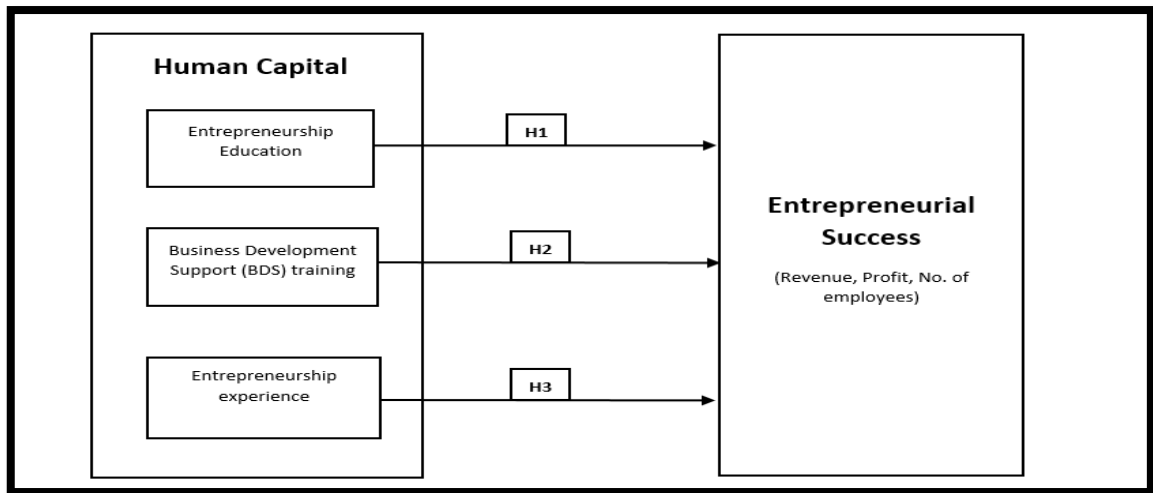


Figure 1: Conceptual framework

Based on (Marvel et al., 2016; Unger et al., 2011; Zainol et al., 2018)

2.7 Conclusion of Literature Review

The literature has demonstrated that youth unemployment is a global phenomenon and that South Africa shows similar traits to both developing and developed countries. The South African government, through multiple interventions, has continuously aimed at assisting small businesses in general, and youth-driven businesses in particular, such that a separate Ministry on Small Business Development was created in 2014. Despite all these interventions, progress has been slow with regard to growth of youth-driven businesses; central to this is the lack of training and education on how to run new ventures.

The literature looked at the human capital factors of entrepreneurial education, training, and experience, and their relation to entrepreneurship at a global level as well as in the South African context. BDS services were introduced as a central theme to training, and both the global and local context of BDS services was discussed. The history of BDS services across South Africa was examined and the current trends of BDS programmes were discussed. Lastly, the element of business success and its components, revenue, sales, and growth, was deliberated. It was important to denote this as the research aimed to investigate the impact of human capital factors on youth entrepreneurship success for BDS

beneficiaries in Gauteng. The study, as indicated in the sections above, aimed to address the following objectives;

- *Objective 1:* To establish the impact of entrepreneurial education on youth entrepreneurship success.
- *Objective 2:* To establish the impact of BDS training on youth entrepreneurship success.
- *Objective 3:* To establish the impact of entrepreneurial experience on youth entrepreneurship success.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

The research methodology chapter describes in detail the overall strategy to conduct the research. It explains the link between the theory and the research conducted as well as the methods utilised for the research. The chapter covers the research paradigm and research design, the screening of data, the population and sampling, the research instrument, the procedure followed when collecting, analysing, and interpreting the data, as well as the validity and reliability of the research instrument utilised.

3.2 Research Paradigm

The study was concerned with the impact of human capital factors (entrepreneurial education, BDS training, and entrepreneurial experience) on youth entrepreneurship success for those youth entrepreneurs who were BDS beneficiaries. The research conducted followed a positivist approach. This approach allows the formulation of hypotheses and tests these objectively, resulting in measurable and quantifiable data, to be interpreted and utilised in further development of theory (Saunders, Lewis, & Thornhill, 2016). A deductive quantitative methodology was utilised to test the hypotheses.

3.3 Research Design

Research is primarily based on observations, which can be made at a point in time (cross-sectional) or over a longer period (longitudinally) (Babbie & Mouton, 2012). For the purposes of this research a cross-sectional approach was utilised primarily because there was not the luxury of time. A survey questionnaire was utilised to collect data, from C4G's database of youth entrepreneurs who have received BDS services from BDS providers, and was administered through Qualtrics.

According to (Saunders et al., 2016) the following advantages can be found when utilising a quantitative approach:

- It examines relationships between variables such that they can be measured numerically and can be analysed through the utilisation of statistical methods and techniques;
- It incorporates various controls to ensure and test the validity of the data collected from a variety of people; it is important to ensure that questions are expressed clearly and understood the same way for all participants; and
- There is independence between the researcher and the respondents, which reduces the element of influence by the researcher on the outcome of the research.

It must be emphasized that one cannot decide that qualitative studies or quantitative studies may be conducted for different purposes, may have different applications or are aimed at uncovering different results (Blumberg, Cooper, & Schindler, 2014). one of the main disadvantages that can be found with utilising a quantitative approach is, unlike qualitative data, quantitative data lacks the thoroughness and descriptive nature associated with qualitative data, because researchers do not immerse themselves in the study; however, play the role of observer (Blumberg et al., 2014; Saunders et al., 2016). As indicated above, a deductive quantitative methodology was utilised to test theory and the develop hypotheses; the data utilised was primary data collected directly from respondents obtained through the C4G database.

3.4 Population and Sample

3.4.1 Population

The set of all related elements from which a sample is drawn is called a population and it is important for the research that the sample be drawn from the population,

such that it matches the research questions and objectives (Saunders et al., 2016).

Gauteng is the economic hub and 33.5 per cent of SMMEs are located within the province (Altman, 2007). The interest in Johannesburg, as noted by Schwab (2018) in the Real Economy Bulletin, is that two thirds of formal small businesses are located in metros and most of these are situated in Johannesburg, Gauteng. The population of this study was youth-driven SMMEs who had completed BDS programmes from various BDS service providers under the C4G platform in Gauteng.

3.4.2 Sample and sampling method

The C4G platform currently contains data on over 3 400 SMMEs in South Africa as well as 47 BDS providers (Ndwandwe, 2018). The survey questionnaire was sent through email and WhatsApp platforms to youth entrepreneurs who had graduated from BDS initiatives in South Africa and were part of the C4G platform. The administration of responses was managed through the qualtrics software. More than 3 000 respondents were targeted; 90 per cent of those reside in Gauteng. Of the 661 responses received, 515 qualified for further analysis post the survey.

Table 2: Profile of respondents

Description of respondent	Number sampled
South Africans who are beneficiaries of BDS services who run their own enterprises, are between the ages of 18 and 35 years and have their business in Gauteng. The research was neither gender nor race specific.	515

3.5 The Research Instrument

A survey questionnaire was utilised to collect data; these questionnaires were designed both as a standard questionnaire and on a seven-point Likert scale

format questionnaire. The Likert scale, devised by Rensis Likert is advantageous to a researcher because it allows the respondent to indicate the intensity of their agreement or disagreement with a subject under study (Babbie & Mouton, 2012). The aim of this study was to look into the human capital factors of entrepreneurial education, BDS training, and entrepreneurial experience, and the impact of these factors on entrepreneurship success. The instrument was therefore designed to reflect these elements.

The instrument (see Appendix A) was broken up into five sections, including demographic data:

- (1) *Part A*: The first part of the instrument aimed to collect demographic data, such as gender, age, education, and race. Of critical importance on the first part was to ascertain the age of the respondents as this is the determining factor to the usefulness of a respondent's data.
- (2) *Part B*: The second part of the instrument focused on business data, such as age of business, type of industry the business specialises in, the number of employees within a business, turnover, and profitability. Of importance in this part of the instrument was profitability, revenue, and number of employees, as these determined the success factor.
- (3) *Part C*: The third part of the questionnaire tested entrepreneurial experience, such as the number of businesses that an entrepreneur owned, their experience in the industry in which they currently operate, and previous managerial experience.
- (4) *Part D*: The fourth part of instrument aimed to uncover the extent to which BDS training had had an impact on youth SMMEs that were beneficiaries of BDS services, investigating areas such as graduation from BDS programmes, the number of BDS programmes an entrepreneur had participated in, and the extent to which the BDS training had assisted running their SMMEs.
- (5) *Part E*: The last part of the instrument tested the human capital factor of entrepreneurial education. It aimed to uncover the entrepreneurial education programmes youth entrepreneurs had undertaken, and the

extent to which this education had had an impact on their business. These entrepreneurial education programmes were those beyond BDS training.

Table 3: Measures used in the study

Construct	Literature sources	Dimensions
Entrepreneurial Education (IV) Measured on Standard questionnaire & 7-point Likert scale: '1= 'Strongly Disagree' to 7= 'Strongly Agree'	Khoase & Ndayizigamiye (2018); Masutha & Rogerson (2014a); Mathibe & Van Zyl (2011);	Part C: Entrepreneurship education Question 10 to 11
BDS Training (IV)	ANDE (2018); Khoase et al. (2018); Masutha & Rogerson (2014a); Mathibe & Van Zyl, (2011)	Part D: BDS Training • BDS Programmes participation Environment • BDS training completion • BDS Training impact on business Question 12 to 15
Entrepreneurial Experience (IV) Measured on Standard questionnaire & 7-point Likert scale: '1= 'Strongly Disagree' to 7 = 'Strongly Agree'	Amaral et al.(2009); Estrin et al. (2016); Libombo & Dinis (2015); McDermott & Boyd (2017); Oseifuah & Rugimbana (2010); Unger et al. (2011)	Part E: Entrepreneurial Experience • Number of businesses • Industry experience • Managerial experience Question 16 to 19
Entrepreneurial success (DV) Measured on a Standard questionnaire	Fisher et al.(2014); Limsong et al. (2016); Overall & Wise (2017); Sar (2017)	Part B: Entrepreneurship Success • Annual Revenue • Number of Employees • SMME Performance Question 7 to 9

Note: IV = independent variable, DV = dependent variable

3.6 Procedure for Data Collection

The study was a cross-sectional study. Cross-sectional studies are advantageous because they capture a particular phenomenon at a point in time and are not time consuming (Babbie & Mouton, 2012; Saunders et al., 2016). This research adopted this method because of the limited time available to conduct the study. The self-administered questionnaire was designed on Qualtrics software and subsequently sent to respondents who are part of the C4G platform via email and WhatsApp application. The use of WhatsApp as one of the methods of facilitating the questionnaire allowed for ease of access and flexibility for the entrepreneur. The data was collected between November and December 2019.

A link was embedded on the body of the email or WhatsApp application which, upon being clicked, would redirect the respondent to the qualtrics software page where they would proceed to respond to the questionnaire. When finished with the questionnaire a message would prompt them to this and they would close the questionnaire. It's important to note that the qualtrics software is adaptable to both a computer and mobile device and therefore it allows flexibility to respondents on where to respond.

3.7 Data Screening and Analysis

Saunders et al. (2016) indicated that quantitative data in its raw form is practically of little meaning and relays nothing to the researcher; therefore, data collected has to be processed and converted into information for use. After collection of the data directly into Qualtrics, it was cleaned to ensure the integrity of the data was not compromised. Data was checked for completeness as well as any errors in coding. Once this was done it was exported from Qualtrics directly into the Statistical Package for Social Sciences (SPSS) where it was further checked for missing data and the statistical analysis was undertaken. The data was further tested for any violation of the multivariate analysis, which was followed by the validity and reliability testing, and lastly the techniques for testing the hypotheses.

3.8 Validity and Reliability of Research

The study tested for validity and reliability of the instrument in line with the fact that a questionnaire was used to collect data. Babbie and Mouton (2012) indicated that validity and reliability testing are central to the judgements about the quality of quantitative research in the natural and social sciences.

3.8.1 Reliability

Reliability refers to the replication consistency of the measuring instrument such that any researcher is able to replicate the research design and find the same set of results; this research instrument would be said to be reliable (Egelser & Rena, 2013). Reliability testing concerns itself with the robustness of the questionnaire designed and therefore aims to uncover if what is questioned is actually what the researcher aims to find. To test this, the Cronbach's alpha was utilised in this study. The Cronbach's alpha was utilised to test internal consistency of set responses on a scale from zero to one (Saunders et al., 2016). To ensure further reliability of the instrument, two questions were drafted in reverse in order to test that respondents do not repetitively respond to questions in a pattern.

3.8.2 Validity

Internal validity in a questionnaire refers to the ability of the research instrument being able to measure what it intended to measure (Blumberg et al., 2014). Primarily, validity testing refers to whether the research instrument actually represents all constructs and elements, which it aimed to test for in the research. Both Internal and external validity were conducted utilising exploratory factor analysis (EFA) (Blumberg et al., 2014; Saunders et al., 2016). EFA is employed to present data in a graphical format so that relationships can be found between numbers, and other related numbers that indicate some form of relationship are found (Babbie & Mouton, 2012). It was important to utilise the EFA because it validated the data, especially as most of the data was accessed online, which automatically biases those without computers.

3.9 Ethical Consideration

According to (Saunders et al., 2016) research ethics refers to the standards of behaviour that guide your conduct in relation to the rights of those who become the subject of your work, or are affected. Blumberg et al. (2014) add that ethics is the study of the right behaviour and addresses how the researcher conducts research in a moral and ethical way.

As part of the ethics process the Postgraduate Studies Committee of the Faculty of Commerce, Law & Management at Wits University requires the researcher to apply and be granted ethical clearance. The researcher applied and was granted ethical clearance to conduct the study. Further, respondents were informed that the questionnaire was voluntary and that they could opt out of responding to the questionnaire at any point as they so wish. Sensitive questions such as names, addresses of the respondents was removed and information that is income related was not specific but was kept to a wide lower and upper limit.

3.10 Conclusion

The main aim of this chapter was to discuss the research methodology adopted, the research paradigms, which assumed a positivist approach, and a quantitative research method. The research design was also discussed, which involved the population, the sample, and sampling method of the study. The instrument involved in the study was discussed, indicating the number of areas of focus on the instrument, and the measurement of the different constructs. A plan on the data screening and analysis, as well as the different statistical methods used was discussed.

CHAPTER 4: PRESENTATION OF RESULTS

4.1 Introduction

The objective of this chapter is to present the results of the study. The first part presents sample characteristics specific to youth entrepreneurs who are BDS beneficiaries. The second part presents the business characteristics of the entrepreneurs, the third part presents the major findings of the human capital dimensions, the fourth part tests the reliability and validity of the measurement scales, and lastly hypothesis testing and its results are presented.

4.2 Respondents Characteristics

There were 661 responses received from the survey within the prescribed period. Of the total responses, 81 of the responses were not usable due to mainly missing data and minimum requirements such as prescribed period and response time and 65 did not meet the criteria of location of Gauteng. Upon cleaning and screening of the data set, 515 usable responses formed the sample for further analysis. The study collected age, gender, education, and race as the primary demographics of the respondents.

4.2.1 Age and gender

The data collected indicated that more respondents (48 per cent) were male than female (42 per cent), while 10 per cent of the respondents were indicated as other. To test age there were two intervals 18 to 25 years and 26 to 35 years, as the study focused on youth entrepreneurs it was capped at that age. There were more youth entrepreneur respondents in the age bracket 26 to 35 years for both genders with females recording 45 more in this bracket and males recording 70 more in this age bracket. The gap between male and female respondents in the age bracket 18 to 25 years was only five respondents, and on the age gap 26 to 35 years it was much higher at 30. This indicated considerably more male youth entrepreneurs owned businesses in age group of 26 to 35 years, than for the age

bracket of 18 to 25. Figure 2 denotes a graphical representation of age and gender of respondents.

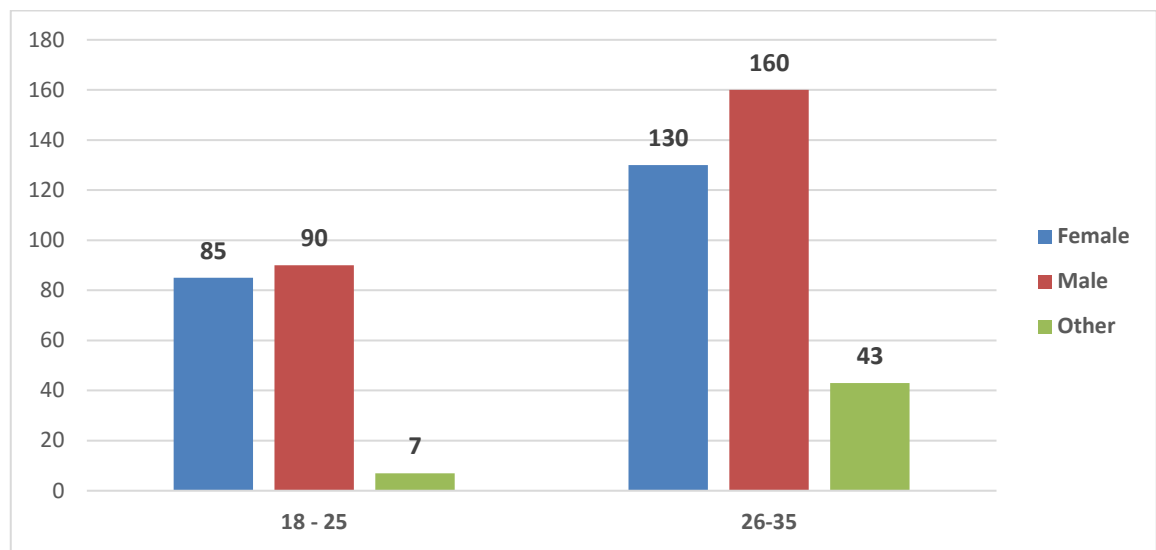


Figure 2: Age and gender

4.2.2 Education

With regard to the education levels of respondents, 145 respondents had a degree, 136 had an honours degree or equivalent, 63 had diplomas, 50 had a master degree or equivalent, 49 indicated a post-matric certificate, 41 indicated a matric certificate, and 11 had a PhD or doctoral level qualification. Figure 3 is a graphical representation of the qualifications.

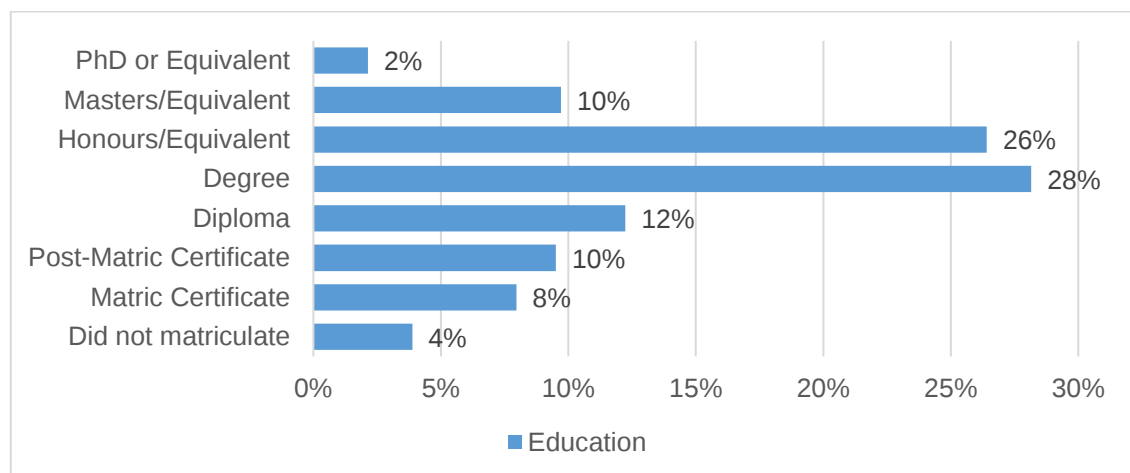


Figure 3: Education

4.3.3 Race

The highest number of respondents are African/black (75 per cent), with white and coloured respondents constituting eight per cent respectively, Indian respondents six per cent, Asian three per cent, and other one per cent. Figure 4 shows a summary of these results

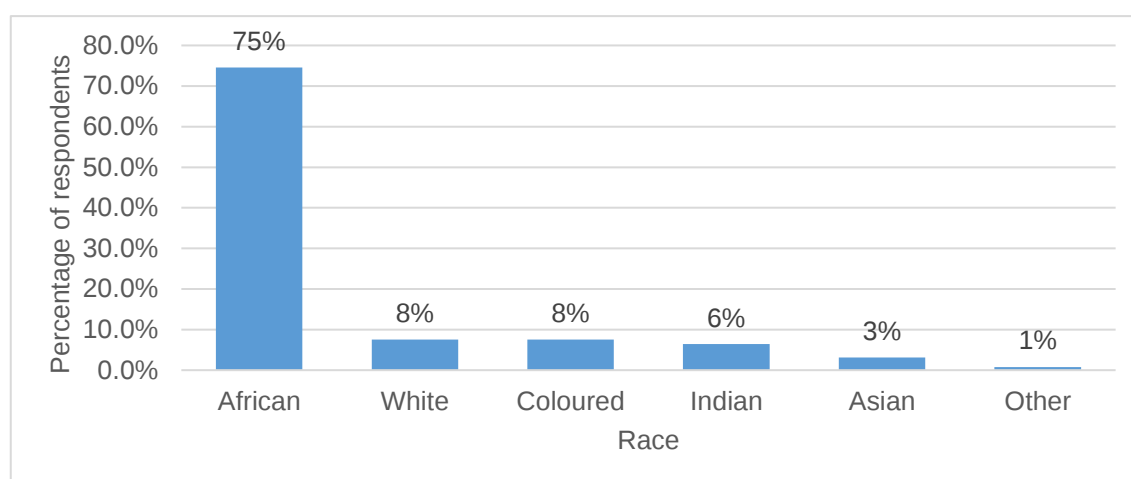


Figure 4: Race

4.3 Business Characteristics

This section focuses briefly on youth-owned SMME characteristics, which are age of venture, area of specialisation, number of employees, and the recent annual turnover of the venture.

4.3.1 Years of business existence

Of the respondents, 341 indicated that their businesses had been around for more than 3.5 years, 145 indicated that their business had been in survival for between four and 42 months, and 29 indicated that their businesses had been around for 3 months or less. Table 3 indicates the age of businesses.

Table 4: Years of business existence

Years of Business Existence	Frequency	Percent
3 months or less	29	5,6%
4 months - 42 months (3.5 years)	145	28,2%
more than 3.5 years	341	66,2%

4.3.2 Industry

The majority of respondents are in the retail, hotels and restaurants industry (76), entertainment (76), and manufacturing industries (75). The lowest ranking respondents are in healthcare, education and social services (20), and mining and construction sectors (20). Table 4 indicates the different sectors of respondents.

Table 5: Industry

Business Industry	Frequency	Percent
Retail, hotels and restaurants	76	14,8%
Entertainment	76	14,8%
Manufacturing	75	14,6%
Business services	53	10,3%
Transport and communication	52	10,1%
Agriculture, forestry, hunting and fishing	44	8,5%
Wholesale, motor vehicle repairs and sales	44	8,5%
Healthcare, education and social services	27	5,2%
Mining and construction	20	3,9%
Other	48	9,3%

4.3.3 Number of employees

More than 70 per cent of respondents indicated that they employed between two and 50 employees. A substantial number (84) of respondents were self-employed or run their business without extended structure or employees.

Table 6: Employees

Number of Employees	Frequency	Percentage
One	84	16,3%
2 - 10 employees	191	37,1%
11 - 50 employees	175	34,0%
51 - 250 employees	65	12,6%

4.3.4 Business turnover

Over 90 per cent of respondents indicated that they made some kind of revenue during their last financial year. Over 30 per cent of respondents indicated that they made up to R100 000 revenue in their business. Just under half (44.5 per cent) of respondents indicated that they made between R100 000 and R500 000 worth of revenue. Only 5.2 per cent of respondents indicated that they made over R1 million in revenue. Table 6 indicates the revenue generated by all respondents.

Table 7: Turnover generated by businesses over their last financial year

Revenue generated	Percentage
No Revenue	1,7%
R1 - R100 000	30,3%
R100 001 - R500 000	44,5%
R500 001 - R1 000 000	18,3%
More than R1 000 000	5,2%

4.4 Presentation of Key Findings

In this section, descriptive statistics are presented in relation to the key areas of the study, the three human capital dimensions of entrepreneurial education, BDS training, and entrepreneurial experience. Lastly, statistical results of entrepreneurship success are presented.

4.4.1 Entrepreneurial education

Table 6 presents the dimension of entrepreneurial education where 44.5 per cent of respondents indicated that they had attended at least one entrepreneurial education programme with over 80 per cent of respondents indicating the longest programme they attended was between one and six months in duration. Of respondents, 28.9 per cent indicated that they had not attended any entrepreneurial education programme with a substantial number indicating that they had not attended any programmes. Only 10 per cent of respondents had attended programmes with a duration of more than 12 months.

Table 8: Entrepreneurial education

Variable	Option	Percentage
No. of Programs	0	28,9%
	1	44,5%
	2	19,8%
	3	3,9%
	4	1,2%
	5	,2%
	More than 5	1,6%
Duration of Programs	1 - 3 Months	65,8%
	4 - 6 Months	17,8%
	7 - 11 Months	6,8%
	12 - 24 Months	8,5%
	More than 24 Months	1,1%

4.4.2 BDS training

The second human capital dimension on which data was collected was BDS training. The aim was to uncover the number of BDS training programmes the youth entrepreneurs had attended, the length of these BDS programmes, as well as the adequacy of the BDS programmes attended in relation to the effect on their businesses. Table 8 presents BDS training programme results, where 95 per cent of all respondents had attended one or more BDS training programmes. Of respondents, 85 per cent had attended up to six months BDS training, and 13 per cent of respondents had attended over 12 months of training programmes provided by BDS service providers. The first set of questions aimed to uncover how many BDS training programmes respondents had attended while in business.

Table 9: BDS training

Variable	Option	Percentage
BDS training programmes	0	4,1%
	1	18,1%
	2	36,7%
	3	19,0%
	4	16,1%
	5 and more	6,0%
What was the duration of the last BDS training programme you participated in?	1 - 3 Months	53,6%
	4 - 6 Months	32,2%
	12 - 24 Months	13,0%
	More than 24 Months	1,2%

For adequacy of training, a seven point Likert scale was utilised ranging from extremely inadequate to extremely adequate. Four elements of training were measured namely marketing (Table 9), innovation (Table 10), management (Table 11), risk-taking (Table 12), and financial control (Table 13).

For marketing, over 80 per cent of respondents indicated that within the BDS training programme received, there was an adequate to an extremely adequate level of competence to perform these skills in their business.

Table 10: Adequacy of MARKETING training covered during BDS program

Element	Extremely inadequate	Inadequate	Slightly inadequate	Neither adequate nor inadequate	Slightly adequate	Adequate	Extremely adequate	Mean	Std Dev
Setting and meeting market share goals	0,4%	0,6%	1,4%	1,6%	7,5%	54,7 %	33,8 %	6,14	,886
Setting and meeting sales goals	0,0%	1,0%	1,0%	1,0%	13,2 %	55,9 %	27,9 %	6,06	,838
Setting and meeting profit goals	0,2%	0,8%	1,4%	1,2%	10,7 %	54,9 %	30,8 %	6,09	,874
Establishing a position in the marketplace	0,4%	0,6%	2,0%	1,8%	14,6 %	48,8 %	31,8 %	6,03	,958
Conducting a market analysis	0,0%	1,0%	1,0%	1,6%	10,1 %	53,0 %	33,2 %	6,13	,858
Capabilities to expand my own business	0,4%	0,6%	1,4%	1,8%	10,5 %	53,0 %	32,2 %	6,09	,905

For the element of innovation, over 80 per cent of respondents indicated that within the BDS training programme received, there was an adequate to an extremely adequate level of competence to perform these skills in their business. Table 10 indicates the level of adequacy of respondents.

Table 11: Adequacy of INNOVATION training covered during BDS program

Element	Extremely inadequate	Inadequate	Slightly inadequate	Neither adequate nor inadequate	Slightly adequate	Adequate	Extremely adequate	Mean	Std Dev
Developing new business ideas	0,2%	1,0%	1,4%	1,8%	5,9%	57,3 %	32,4 %	6,14	,882
Developing new products and services	0,4%	0,2%	1,6%	0,8%	11,7 %	54,3 %	31,0 %	6,10	,855
Identifying new markets and geographic territories	0,2%	1,0%	2,0%	1,2%	9,7%	54,3 %	31,6 %	6,08	,923
Developing new methods of production or systems	0,4%	0,4%	1,6%	1,2%	12,1 %	52,8 %	31,4 %	6,08	,889
Developing new methods of marketing my business	0,0%	0,8%	1,2%	1,6%	7,5%	54,5 %	34,4 %	6,17	,834
Developing new ways of managing my business	0,2%	0,8%	1,0%	1,2%	11,9 %	48,8 %	36,0 %	6,14	,883

For the element of management, over 80 per cent of respondents indicated that within the BDS training programme received, there was an adequate to an extremely adequate level of competence to perform these skills in their business. Table 11 indicates the level of adequacy of respondents.

Table 12: Adequacy of MANAGEMENT training covered during BDS program

Element	Extremely inadequate	Inadequate	Slightly inadequate	Neither adequate nor inadequate	Slightly adequate	Adequate	Extremely adequate	Mean	Std Dev
Reducing risk and dealing with uncertainty	0,4%	2,0%	2,0%	1,0%	6,5%	59,7 %	28,3 %	6,04	,998
Strategic planning	0,2%	0,8%	1,0%	1,4%	12,3 %	55,7 %	28,5 %	6,06	,857
Managing my time by establishing goals	0,2%	0,6%	1,0%	1,4%	10,1 %	56,5 %	30,2 %	6,11	,830
Establishing and achieve goals and objectives	0,2%	0,6%	0,8%	1,6%	16,2 %	52,0 %	28,5 %	6,03	,856
Defining organisational roles and responsibilities	0,4%	0,4%	0,8%	1,2%	7,1%	56,5 %	33,6 %	6,18	,814

For the element of risk taking, over 80 per cent of respondents indicated that within the BDS training programme received, there was an adequate to an extremely adequate level of competence to perform these skills in their business. Table 12 indicates the level of adequacy of respondents.

Table 13: Adequacy of RISK-TAKING training covered during BDS program

Element	Extremely inadequate	Inadequate	Slightly inadequate	Neither adequate nor inadequate	Slightly adequate	Adequate	Extremely adequate	Mean	Std Dev
Taking calculated risks	0,6%	0,4%	1,2%	2,0%	5,1%	59,7 %	31,0 %	6,14	,866
Making decisions under uncertainty and risk	0,4%	0,4%	0,8%	1,6%	12,1 %	53,4 %	31,2 %	6,10	,854
Taking responsibility for ideas and decisions	0,2%	0,6%	0,6%	1,6%	10,9 %	54,5 %	31,6 %	6,12	,824
Working under pressure and conflict	0,4%	0,4%	0,8%	1,2%	12,1 %	49,2 %	35,8 %	6,15	,864

For the element of financial control, over 80 per cent of respondents indicated that within the BDS training programme received, there was an adequate to an extremely adequate level of competence to perform these skills in their business. Table 13 indicates the level of adequacy of respondents.

Table 14: Adequacy of FINANCIAL CONTROL training covered during BDS program

Element	Extremely inadequate	Inadequate	Slightly inadequate	Neither adequate nor inadequate	Slightly adequate	Adequate	Extremely adequate	Mean	Std Dev
Performing financial analysis	0,4%	0,6%	0,8%	0,4%	4,3%	57,5 %	36,0 %	6,24	,796
Developing financial systems	0,4%	1,0%	0,8%	0,8%	8,1%	57,3 %	31,6 %	6,13	,865
Controlling costs	0,4%	0,8%	0,8%	1,0%	7,1%	56,3 %	33,6 %	6,17	,851
Organise and maintain the financial records of my business	0,4%	0,8%	1,2%	1,0%	11,1 %	51,8 %	33,6 %	6,12	,903
Manage the financial records of my business	0,2%	0,4%	1,2%	0,8%	8,9%	55,3 %	33,2 %	6,16	,808
Read and interpret financial records	0,2%	0,6%	0,8%	0,6%	8,9%	50,8 %	38,1 %	6,22	,817

4.4.3 Entrepreneurial success

The study defined business success as revenue, number of employees, and profit. These factors were all measured on a seven-point Likert scale ranging from declined extensively, in the event that estimated revenue, jobs, estimated profit, and profit margins had declined by more than 20 percent or had grown by over 20 per cent. Table 14 indicates the success elements as defined by the respondents.

Table 15: Business financials

Element	Declined extensively (over 20%)	Declined substantially (over 10%)	Declined moderately (less than 10%)	Stay the same	Grow moderately (less than 10 %)	Grow substantially (over 10%)	Grow extensively (over 20%)	Mean	Std Dev
Estimated annual revenue	1,0%	,8%	1,6%	21,2%	22,3%	38,8%	14,4%	5,37	1,152
Jobs (full & part-time)	,6%	,4%	1,0%	26,4%	30,7%	23,9%	17,1%	5,26	1,135
Estimated annual profit	,8%	,8%	2,1%	18,6%	25,2%	35,0%	17,5%	5,42	1,160
Profit margin	,4%	1,0%	2,1%	23,5%	22,1%	31,3%	19,6%	5,38	1,193

4.5 Validity Testing

According to literature, internal validity in a questionnaire refers to the ability of the research instrument to measure what it is supposed to measure (Saunders et al., 2016). Primarily, validity testing refers to whether the research instrument actually represents all constructs and elements that it aimed to test. Both internal and external validity were tested using EFA (Saunders et al., 2016). EFA is employed to present data in a graphical format so that relationships can be found between numbers and other related numbers that indicate some form of relationship between numbers are identified (Saunders et al., 2016). The Kaiser-Meyer-Olkin Measure of Sampling Adequacy value of 0.956 indicates that the sample was adequate to conduct factor analysis. A significant Bartlett's Test of Sphericity ($p\text{-value} = 0.000 < 0.05$) indicated that the items were correlated strongly enough for conducting factor analysis. Table 15 presents the results.

Table 16: KMO and Bartlett's tests

Test		Result
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.956
Bartlett's Test of Sphericity	Approx. Chi-Square	14271.292
	df	528
	Sig.	.000

All items tested retained communality values greater than 0.3 and any item with a communality less than 0.3 was eliminated. Three items were eliminated from the BDS training construct because they had a communality less than 0.3. The entrepreneurship education construct had two items and therefore did not constitute a construct, they were thus eliminated from further analysis. One item was eliminated from the entrepreneurship experience construct as it had a communality value less than 0.3. Table 16 shows the communality values at initial and extraction phase

Table 17: Communality values

Item	Initial	Extraction
Years of experience as Manager	.638	.635
Total years of experience as business owner	.661	.774
No. of businesses owned	.392	.343
Business Turnover	.422	.398
Performance - Estimated annual revenue	.817	.829
Performance - Jobs (Full & Part-time)	.746	.732
Performance - Estimated annual profit	.844	.862
Performance - Profit Margin	.877	.916
Training Adequacy- Marketing- Setting and meeting market share goals	.704	.617
Training Adequacy- Marketing - Setting and meeting sales goals	.743	.674
Training Adequacy- Marketing - Setting and meeting profit goals	.767	.699

Item	Initial	Extraction
Training Adequacy- Marketing - Establishing a position in the marketplace	.703	.635
Training Adequacy- Marketing - Conducting a market analysis	.710	.640
Training Adequacy- Marketing - Capabilities to expand my own business	.685	.584
Training Adequacy- Innovation - Developing new business ideas	.651	.573
Training Adequacy- Innovation - Developing new products and services	.728	.633
Training Adequacy- Innovation - Identifying new markets	.601	.521
Training Adequacy- Innovation - Developing new methods of production	.688	.639
Training Adequacy- Innovation - Developing new methods of marketing	.704	.616
Training Adequacy- Innovation - Developing new ways of managing my business	.731	.619
Training Adequacy- Innovation - Reducing risk and dealing with uncertainty	.607	.524
Training Adequacy- Management - Strategic planning	.754	.681
Training Adequacy- Management - Managing my time by establishing goals	.716	.613
Training Adequacy- Management - Establishing and achieve goals and objectives	.717	.659
Training Adequacy- Management - Defining organisational roles	.709	.645
Training Adequacy- Risk-taking- Taking calculated risks	.611	.534
Training Adequacy- Risk-taking - Making decisions under uncertainty and risk	.737	.632
Training Adequacy- Risk-taking - Taking responsibility for ideas and decisions	.641	.557
Training Adequacy- Risk-taking - Working under pressure and conflict	.701	.591
Training Adequacy- Financial Control- Developing financial systems	.646	.501
Training Adequacy- Financial Control - Organise and maintain the financial records	.690	.542

Item	Initial	Extraction
Training Adequacy- Financial Control - Manage the financial records	.623	.548
Training Adequacy- Financial Control - Read and interpret financial records	.677	.511

Extraction Method: Principal Axis Factoring.

The extraction method utilised was principal axis factoring with promax rotation. EFA retained four factors with a minimum Eigenvalue of at least one. The factor loadings for the fourth factor were all less than the minimum required value of at least 0.4. Three factors were extracted. The three factors retained explained 64.999 per cent of the variance in the initial individual items. Total variance explained by the retained factors is shown in Table 15

Table 18: Total variance explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	15.993	48.463	48.463	15.604	47.286	47.286	15.473
2	3.115	9.439	57.902	2.932	8.885	56.171	5.252
3	2.342	7.097	64.999	1.942	5.884	62.055	2.981
4	1.068	3.237	68.236				
5	.956	2.898	71.134				
6	.801	2.429	73.563				
7	.735	2.229	75.791				
8	.632	1.916	77.707				
9	.596	1.805	79.512				
10	.547	1.658	81.170				
11	.496	1.504	82.675				
12	.477	1.447	84.121				

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
13	.463	1.402	85.523				
14	.382	1.158	86.681				
15	.366	1.110	87.791				
16	.358	1.085	88.876				
17	.340	1.031	89.906				
18	.314	.952	90.858				
19	.301	.911	91.769				
20	.280	.848	92.617				
21	.272	.826	93.443				
22	.262	.794	94.237				
23	.243	.737	94.974				
24	.228	.691	95.665				
25	.204	.619	96.284				
26	.199	.602	96.886				
27	.195	.590	97.476				
28	.187	.566	98.042				
29	.162	.491	98.533				
30	.153	.463	98.996				
31	.132	.401	99.396				
32	.117	.354	99.750				
33	.082	.250	100.000				

Extraction Method: Principal Axis Factoring.

a. When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

As indicated above, principal axis factoring was utilised as the extraction method and the rotation method utilised was Promax with Kaiser Normalisation. Three factors were extracted with the first factor related to BDS training, retaining 25

items with all items having had factor loadings well above acceptable limits of .5 (.667 to .849). The second factor related to entrepreneurship success and it retained four items with all items having factor loading well above acceptable limits of .5 (.830 to .960). Lastly, the factor of entrepreneurial experience retained four items. All these items were also above the acceptable limit of .5 (.512 to .895). Table 18 shows the pattern matrix of items belonging to each factor.

Table 19: Pattern matrix

Construct	Items	Factor		
		1	2	3
BDS Training	Training Adequacy - Marketing - Setting and meeting profit goals	.849		
	Training Adequacy - Management - Strategic planning	.844		
	Training Adequacy - Management - Establishing and achieve goals and objectives	.842		
	Training Adequacy - Marketing - Setting and meeting sales goals	.836		
	Training Adequacy - Marketing - Establishing a position in the marketplace	.810		
	Training Adequacy - Innovation - Developing new methods of production	.807		
	Training Adequacy - Risk-taking - Taking responsibility for ideas and decisions	.805		
	Training Adequacy - Innovation - Developing new products and services	.805		
	Training Adequacy - Management - Establishing and achieve goals and objectives	.793		
	Training Adequacy - Management - Defining organisational roles	.786		
	Training Adequacy - Risk-taking - Working under pressure and conflict	.785		
	Training Adequacy - Innovation - Developing new ways of managing my business	.784		

Construct	Items	Factor		
		1	2	3
BDS Training (continued)	Training Adequacy - Innovation - Developing new methods of marketing	.781		
	Training Adequacy - Marketing - Conducting a market analysis	.774		
	Training Adequacy - Risk-taking - Making decisions under uncertainty and risk	.764		
	Training Adequacy - Marketing- Setting and meeting market share goals	.750		
	Training Adequacy - Marketing - Capabilities to expand my own business	.742		
	Training Adequacy - Innovation - Identifying new markets	.719		
	Training Adequacy - Financial Control - Manage the financial records	.718		
	Training Adequacy - Innovation - Developing new business ideas	.716		
	Training Adequacy - Financial Control - Organise and maintain the financial records	.716		
	Training Adequacy - Management - Reducing risk and dealing with uncertainty	.703		
	Training Adequacy - Risk-taking - Taking calculated risks	.703		
	Training Adequacy - Financial Control - Developing financial systems	.695		
	Training Adequacy - Financial Control - Read and interpret financial records	.677		
Entrepreneurship Success	Performance - Profit Margin		.960	
	Performance - Estimated annual profit		.922	
	Performance - Estimated annual revenue		.919	
	Performance - Jobs (Full & Part-time)		.830	

Construct	Items	Factor		
		1	2	3
Entrepreneurial Experience	Years of experience as Manager			.895
	Total years of experience as business owner			.809
	Business Turnover			.576
	No. of businesses owned			.512

Extraction Method: Principal Axis Factoring.

Rotation Method: Promax with Kaiser Normalization.

^a. Rotation converged in 4 iterations.

4.6 Reliability of Measurement Scale

The Cronbach's alpha is utilised to test internal consistency of a set responses on a scale from 0 to 1 (Saunders et al., 2016). Cronbach's Alpha was conducted to assess the reliability of the scale. BDS training reliability (25 items, $\alpha = 0.973$) and entrepreneurial success (four items, $\alpha = 0.954$) had excellent reliability level with Cronbach's alpha values greater than 0.9 while entrepreneurship experience (four items, $\alpha = 0.791$) had an acceptable reliability level since the Cronbach's Alpha value was greater than 0.7.

Since all the constructs had Cronbach's alpha values greater than the minimum required value of at least 0.7, a composite scale was computed for each construct by calculating the mean on of the items retained in the factor. The results are shown in Table 19.

Table 20: Reliability of scale

Construct	Number of items	Cronbach's Alpha	Reliability Level
BDS training	25	.973	Excellent
Entrepreneurial success	4	.954	Excellent
Entrepreneurship experience	4	.791	Acceptable

4.7 Hypothesis Testing

The process to test the hypotheses was initiated with an analysis of the correlation of variables to ascertain the size, strength, direction, and significance of the relationships with variables; thereafter, the selection of variables that were significant followed to conduct the regression analysis.

4.7.1 Correlation results

BDS training and entrepreneurship experience were measured first as the two remaining independent variables and entrepreneurial success was measured last as the only dependant variable. BDS training was the highest rated construct (mean = 6.11 out of seven) followed by entrepreneurial success (mean = 5.36 out of seven) and entrepreneurship experience was rated 2.40 out of five.

There was a moderately positive and significant correlation between entrepreneurship success and BDS training ($r = 0.347$, $p\text{-value} < 0.01$), while entrepreneurship experience ($r = 0.142$, $p\text{-value} < 0.01$) had a weak but positive and significant correlation with entrepreneurship success. Table 20 summarises the correlation results.

Table 21: Descriptive statistics and Pearson's correlation

Descriptive Statistics			Pearson's Correlation		
Construct	Mean	Std. Deviation	BDS Training	Entrep. Experience	Entrep. Success
BDS training	6,11	0,68	1		
Entrepreneurship experience	2,40	0,55	.253**	1	
Entrepreneurship success	5,36	1,09	.347**	.145**	1

** . Correlation is significant at the 0.01 level (2-tailed).

4.7.2 Multiple regression analysis results

Multiple regression analysis was conducted with the two independent variables of entrepreneurship experience and BDS training, as well as the dependant variable of entrepreneurship success. The results showed that the model (entrepreneurship experience and BDS training) explained 12.2 per cent of variation in entrepreneurship success (R-square = 0.122). See Table 21.

Table 22: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.349 ^a	.122	.118	.99192	1.522

a. Predictors: (Constant), Entrepreneurship experience, BDS training

b. Dependent variable: Entrepreneurship success

The regression model of entrepreneurship experience and BDS training as the independent variables was significant in predicting entrepreneurship success, since the p-values for F (2, 491) was 0.000, which was less than 0.05. Table 22 shows the Anova results explaining whether both entrepreneurship experience and BDS training were significant in predicting entrepreneurship success.

Table 23: Anova table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	66.904	2	33.452	33.999	.000 ^b
	Residual	483.094	491	.984		
	Total	549.998	493			

a. Dependent variable: Entrepreneurship success

b. Predictors: (Constant), Entrepreneurship experience, BDS training

Tests for multicollinearity as well as normality were conducted. The result (Table 23) indicated that the variance inflation factors (VIF) values were both less than 10. This implies that there is no multicollinearity. A regression of standardised residuals histogram was plotted as well as a normal P-Plot to assess whether the residuals were normally distributed. Most bars fell within or below the normal

distribution curve, which suggested that the residuals are normally distributed. See Figure 5.

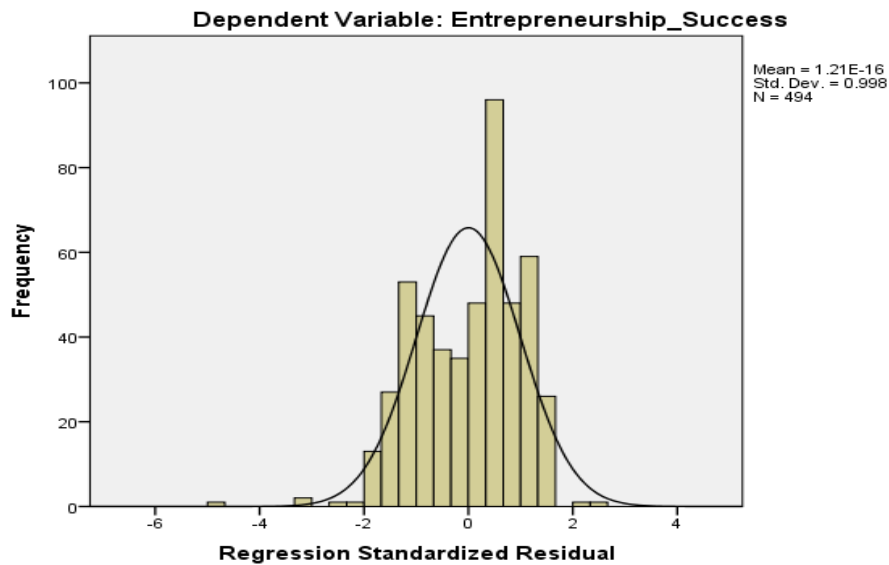


Figure 5: Histogram

The P-Plot of standardised residuals aims to indicate values close to the diagonal line as expected for normality. A normal P-P plot of the standardised residuals showed values close to the diagonal line, as expected for normality. This indicated that the residuals approximate the normal distribution as required for regression. This means that the normality assumption was met. See Figure 6.

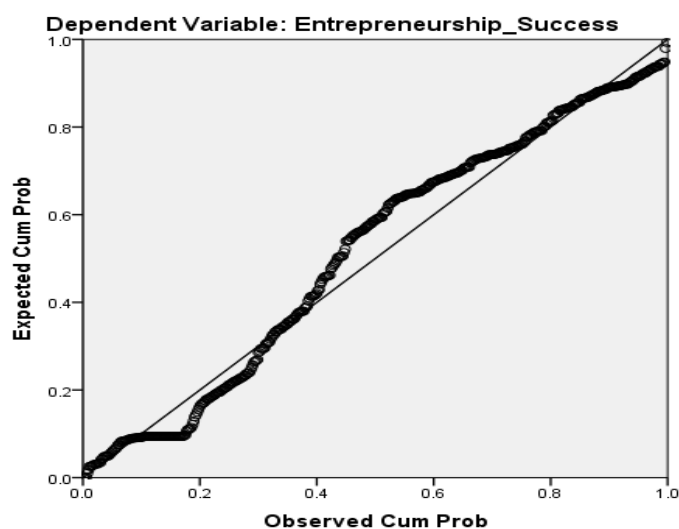


Figure 6: Normal P-P plot of regression standardised residual

Lastly, testing for heteroscedasticity was done, which aims to assess whether the variance of the residuals is constant throughout a scatter plot. The residuals did not show an obvious pattern and therefore homoscedasticity was as required for regression as shown in Figure 7.

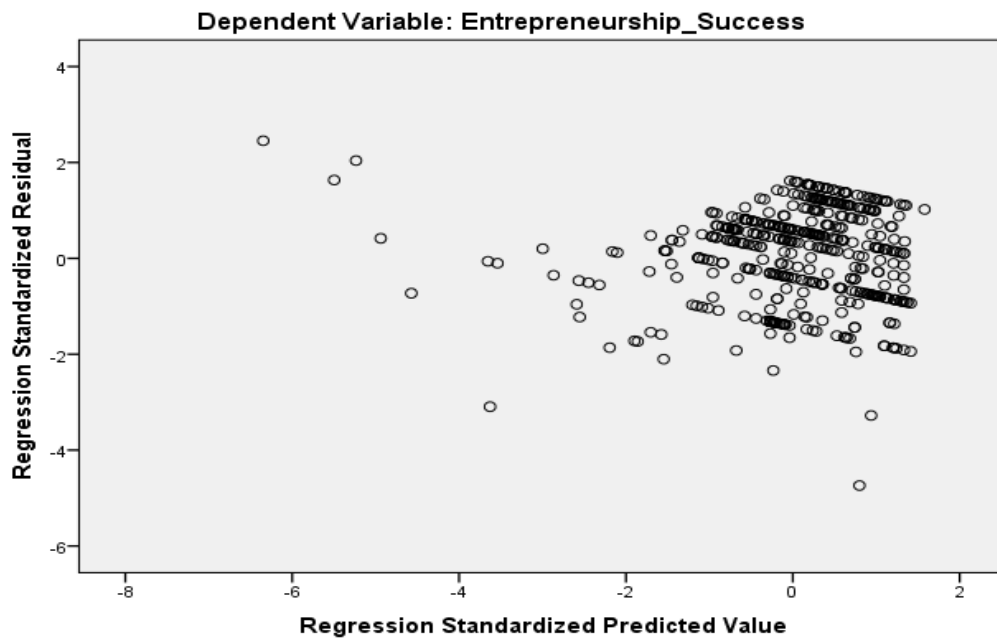


Figure 7: Scatter plot

4.7.3 Hypothesis results

The coefficient results in Table 23 were utilised to test each of the hypotheses.

Table 24: Coefficients

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.030	.417		4.866	.000		
	BDS training	.528	.068	.340	7.769	.000	.936	1.068
	Entrepreneurship experience	.061	.086	.031	.711	.477	.936	1.068

a. Dependent Variable: Entrepreneurship Success

a. Results pertaining to H1:

- *H1:* There is a positive impact of entrepreneurial education on youth entrepreneurship success in Gauteng.

The first hypothesis was rejected because during factor analysis, factor loadings were all less than the minimum required value of at least 0.4, and therefore was not taken further.

b. Results pertaining to H2:

- *H2:* There is a positive impact of BDS training on youth entrepreneurship success in Gauteng.

The results in the coefficients table (Table 23) indicated that BDS training ($\beta = 0.340$, $p\text{-value} = 0.000$) had a significant and positive impact on entrepreneurship success. The impact was positive since the coefficient for BDS training was greater than zero and was significant because the $p\text{-value}$ was less than 0.05. It was therefore concluded that entrepreneurial education had a positive impact on youth entrepreneurship success in Gauteng.

c. Results pertaining to H3

- *H3:* There is a positive impact of entrepreneurial experience on youth entrepreneurship success in Gauteng.

It can be noted from the coefficients table (Table 23) that entrepreneurship experience ($\beta = 0.061$, $p\text{-value} = 0.477$) had a positive impact on entrepreneurship success since the coefficient for entrepreneurship experience was greater than zero. The impact was, however, not significant since the $p\text{-value}$ was greater than 0.05.

4.8 Conclusion

The aim of this chapter was to present empirical findings in relation to theory presented in the literature review concerning the impact of human capital factors of entrepreneurial education, BDS training, and entrepreneurial experience on youth entrepreneurship success for those entrepreneurs who were BDS beneficiaries. Evidence presented indicated that indeed there was a positive impact of at least two of these factors namely entrepreneurial experience and BDS training on youth entrepreneurship success; however, entrepreneurial education was positive but not significant.

CHAPTER 5: DISCUSSION OF THE RESULTS

5.1 Introduction

The study investigated the impact of human capital factors on youth entrepreneurship success in Gauteng for those youth who were BDS beneficiaries. It focused on the three dimensions of human capital namely entrepreneurial education, BDS training, and entrepreneurial experience, to ascertain how these individual dimensions aided in the success of youth-owned SMMEs located in Gauteng.

This chapter continues from the results presented in Chapter 4, with the aim of discussing the important findings starting with the demographic profile of the respondents, followed by each human capital dimension, and lastly the outcomes of the hypotheses.

5.2 Demographic Profile of Entrepreneurs

There were 515 respondents in this study, all had businesses in Gauteng and were below the age of 35 years. The important demographics are discussed below.

5.2.1 Age and gender

The study focused on youth entrepreneurs who were BDS beneficiaries and had their businesses in Gauteng. The South African National Youth Policy 2020 defined youth as those people within the South African population of ages 15 to 35 years, which is consistent with the African Youth Charter (RSA, 2015). Furthermore, the Youth Enterprise Development strategy 2013-2023 defined youth entrepreneurs as those young men and women who are between the ages of 18 and 35 years, who are unemployed, reside in rural or urban areas, and aspire to own and run their own enterprises or already run their own enterprises (DTI, 2013). This is the definition used for this research. There were two intervals used to test age: 18 to 24 years and 25 to 35 years. The age group 18 to 24 years

constituted 182 respondents, and the group 25 to 35 years constituted 333 respondents. This number was expected because those in the 25 to 34 year age group were those entrepreneurs most likely to have earned a tertiary education and gained a certain level of work experience; however, they might not have reached a level where they own lucrative businesses or provide stable employment (Singer et al., 2018).

There were 215 female respondents, compared to 250 male respondents in this study; males constituted six per cent more than females. Of the 48 countries measured by the GEM report 2018, only six countries indicate a similar representation of both male and female entrepreneurs, which indicates that male entrepreneurs still dominate the world of business start-up (Singer et al., 2018). Lastly, in their report for 2017 C4G indicated that for their survey 58 per cent of youth entrepreneurs were male and the rest were female. This indicates that youth entrepreneurs are predominantly male (C4G, 2018).

5.2.2 Education

Adom and Asare-Yeboah (2016) defined education as the process of acquiring skills and knowledge such that human capital is developed. Education in fields of specialisation, in education institutions, has an impact on individuals' skills and knowledge such that it makes them competitive and highly productive (Adom & Asare-Yeboah, 2016). In relation to entrepreneurship "human capital theorists surmise that education is an investment that yields higher wage compensation in return for an individual's variations of skills, training, and experience" (Venter & Urban, 2017, p. 58).

Of the respondents, 145 had a degree, 136 had an honours degree or equivalent, 63 had diplomas, 50 had a master's degree or equivalent, 49 had a post-matric certificate, 41 had a matric certificate, and 11 had a PhD or doctoral level qualification. In comparison to other entrepreneurs, above the youth age bracket, the youth are more educated and their education levels are known to increase as they grow older (Schøtt et al., 2015). Youth are generally more educated than adults are because three-quarters have completed at least a secondary

education as compared to the adult population. This was indicated in this study, as only 12 per cent of respondents possessed a matric qualification or below, while 88 per cent possessed a post-matric qualification. More importantly, females possessed more degrees than males, while honours degrees among male and female respondent entrepreneurs were almost the same. Other than experience and knowledge, one of the major constructs of human capital is education.

5.3 Business Characteristics

Two thirds of all respondents indicated that their businesses had existed for more than 3.5 years. This is despite the research indicating that the largest number of venture failures are businesses that are 3.5 years and younger and that the age bracket with the largest failure rate of new businesses is 25-35 years of age (SEDA, 2018). Of the respondents, 42 per cent indicated that their businesses have been around between four months and 3.5 years, and the remaining respondents had their business for three months or less. This indicated a high survival rate of businesses, which is supported by Khumalo and Mutobola (2014) who posited that there is a consistently high rate of youth-owned businesses due to human capital; however, with higher human capital there is a positive and upward trend in business survival.

Over 40 per cent of respondents specialised in the consumer oriented service sector, such as retail, hotels and restaurants industry (14.8 per cent), entertainment (14.8 per cent), and transport and communication (10.1 per cent); while the lowest ranking respondents were in the healthcare, education and social services (3.9 per cent), and mining and construction sectors (3.9 per cent). The consumer oriented service sector, especially in technology driven economies, is known to have the least number of barriers to entry and stringent regulations that might hinder new business ventures; hence, youth entrepreneurs find them attractive to pursue (Mehari & Belay, 2017).

One of the main areas of focus of the National Development Plan (NDP) are SMMEs, which are viewed as catalysts in the country's economic growth, drivers

of innovation and job creation, as well as advancers of inclusive growth, with a target of creating 90 per cent of jobs by the year 2030 (NPC, 2011). Of the respondents, 37 per cent indicated that they employed between two and 10 employees, including themselves, while 34 per cent indicated that they employ between 11 and 50 people, and 16 per cent indicated that they had no other employees. The low numbers of employees is characteristic of the service oriented and technology driven industries, which does not utilise much labour but utilises technology driven solutions to fulfil its obligation, as indicated above (Schøtt et al., 2015).

5.4 Discussion of Hypotheses outcomes

The previous sub-sections discussed the demographic profile of the respondents in relation to the findings presented in Chapter 4, and the next few sub-sections discuss the key findings in relation to the hypotheses presented in Chapter 2.

5.4.1 Entrepreneurship education and entrepreneurial success

Ndedi and Ahmed (2013) indicated that the role of entrepreneurial education is to provide students with the necessary skills, knowledge, and motivation required in their exploration and exploitation of new ideas with regard to starting a new venture. This aids them as new entrepreneurs to become successful in starting up new ventures and seeing these through to profitability.

- *H1*: There is a positive impact of entrepreneurial education on youth entrepreneurship success in Gauteng.

The hypothesis stated that there is a positive impact of entrepreneurial education on youth entrepreneurship success for those youth who are business development beneficiaries in Gauteng. The findings were inconclusive due to analysis of the factors; variables in relation to entrepreneurship education did not meet the required value to enable further analysis to take place. In essence, the factors were all less than the minimum required value of at least 0.4. Narayan (2015) stated that entrepreneurship education has the ability to increase a

student's desire to start a new venture at some point, post them completing their university education, and therefore plays a pivotal role in instilling the passion and drive for those students to become self-employed rather than seek employment. It also encourages them to be self-sufficient, rather than be reliant on full time employment. Turner and Mulholland (2017) supported this argument; education can no longer be viewed as just a method to increase the employability of youth in an overly congested job market and cannot be viewed as a guarantee for jobs. Enterprise education allows learners to gain the confidence to start new ventures, to stand out, and give themselves entrepreneurial options. In support of this, non-profit organisations in sub-Saharan Africa have taken a view that entrepreneurship education can aid in the development of young people such that they can participate in the job market. This education should emphasise business skills, innovation, risk-taking, and managing new ventures, with the main aim of being self-sufficient and self-employed (DeJaeghere & Baxter, 2014).

Some researchers contradict this view of the impact of entrepreneurial education on enterprise success. Turner and Mulholland (2017), in their exploratory study on examining learners' attitudes towards enterprise education, indicated that the majority of learners who were tested indicated that they thought enterprise education improved their leadership capabilities and their chances of employment; they did not feel that it prepared them to be more entrepreneurial. One of challenges post entrepreneurship education is that budding new entrepreneurs are still faced with poor developing economies, difficulty in getting funding from banks, and stringent government policies that make it hard for businesses to thrive; therefore, this drives many budding youth entrepreneurs to focus more on training that will prepare them for employment opportunities (Narayan, 2015). Further to this, government fails to differentiate education programmes that focus on economic development through job creation, and those designed to reduce poverty, which in turn dilutes and creates confusion of what youth entrepreneurship policies aim to achieve. In this study, H1 could not be conclusively supported because, as indicated, the findings did not meet the required value to enable further analysis to take place.

5.4.2 BDS training and entrepreneurship success

BDS training and education influence new venture creation by ensuring entrepreneurs have the requisite skills and knowledge to start new ventures as well as instilling and stimulating entrepreneurship values such as creativity, risk-taking, and independence of entrepreneurs (Egelser & Rena, 2013).

- *H2*: There is a positive impact of BDS training on youth entrepreneurship success in Gauteng.

The hypothesis stated that there is a positive impact of BDS training on youth entrepreneurship success for those youth who are business development beneficiaries in Gauteng. Post testing the results indicated that there is a positive and significant impact of BDS training on entrepreneurship success, which meant that the hypothesis was supported. This agrees with the various studies done in the area of BDS, which indicate that training programmes whether generic or customised are necessary for new venture growth and success as they greatly improve SMMEs chances of survival (Khoase et al., 2018). Studies have shown that small business entrepreneurs have low levels of education. Skills, and knowledge of key areas of running a business, such as basic accounting, economics, marketing and cash flow management (Egelser & Rena, 2013). However, the results supported the notion that SMMEs that have gone through BDS training have a much higher chance of survival and a greater chance of revenue generation than those who have not received such training (C4G, 2018).

There have been many challenges with regard to the development of BDS providers and the government has played a pivotal role in their success; such as the DTI identifying the importance of BDS services as a strategic tool in growing small businesses (TIPS, 2019). However, some researchers have indicated that governments' involvement in creating a conducive environment for businesses to thrive might in effect be a hindrance, particularly because some ventures are highly informal and in an attempt to formalise them government policies might induce complete collapse of the venture (Khoase et al., 2018). The success of BDS does not hinge on government support alone, as some BDS service providers are private, and there is a requirement that more support is provided

by other institutions that play a role in the economy and market dynamics (Mazanai & Fatoki, 2011).

5.4.3 Entrepreneurial experience and entrepreneurship success

Mamabolo et al. (2017b) indicated that entrepreneurial experience is defined as those experiences, knowledge, and skills that an entrepreneur acquires from previous entrepreneurial undertakings, work knowledge, and managerial experiences.

- *H3*: There is a positive impact of entrepreneurial experience on youth entrepreneurship success in Gauteng.

The hypothesis stated that there is a positive impact of entrepreneurial experience on youth entrepreneurship success for those youth who are business development beneficiaries in Gauteng. The findings indicated that the relationship was positive and the hypothesis was supported despite the hypothesized relationship being insignificant. The small significance could be related to a percentage of the youth having little to no experience as business owners. This is indicated by the 2017 GEM report, which states that entrepreneurs who are between the ages of 25 and 34 are educated; however, have low levels of work experience (Singer et al., 2018). Other scholars had contradictory findings; the central expectation of entrepreneurial experience is the ability to create, explore, and exploit entrepreneurial opportunities, and managerial skills that relate to the ability to manage resources whether human or financial, as well as have the ability to execute technical requirements of the new venture (Asah et al., 2015). Other scholars indicated strongly that entrepreneurial experience is a source of good skills because those who have experience in managing their own businesses possess heightened levels of human capital and skills, as well as technical expertise and management ability to run new ventures (Adom & Asare-Yeboah, 2016). Lastly, ownership experience can also add to human capital through enhanced business reputation and better understanding of the financial sector where finances are sought (Asah et al., 2015). Table 24 summarises the conclusions of each hypothesis.

Table 25: Summary of conclusions of hypotheses

Hypotheses	Outcome
<i>H1</i> There is a positive impact of entrepreneurial education on youth entrepreneurship success in Gauteng	Inconclusive
<i>H2</i> There is a positive impact of BDS training on youth entrepreneurship success in Gauteng	Supported Significant
<i>H3</i> There is a positive impact of entrepreneurial experience on youth entrepreneurship success in Gauteng.	Supported Insignificant

5.5 Conclusion

The aim of the study was to investigate the impact of human capital factors, specifically those of entrepreneurial education, BDS training, and entrepreneurial experience. The results of the study showed that two of the three hypotheses confirmed that human capital plays an important role in the success of youth-owned businesses. The other hypothesis was inconclusive due to not meeting requirements for further analysis. These findings were important for two reasons; first, they support various studies that indicate the importance of human capital as a major factor in venture success in general and youth-driven business success in particular.

The first relationship between BDS training and business success was very strong and significant and this is primarily due to the important role that BDS service providers play in the establishment and future management of new and existing businesses. One of the main aims of the BDS is to ensure that they support, as well as measure, SMMEs and most, if not all, BDS service providers are measured on the success of different small businesses, which gives an incentive for SMME success.

The second relationship between entrepreneurial experience and business success was positive although not significant. The reason was that most respondents in the age brackets tested would have just recently finished university and would be either in the job market, or unemployed. According to the literature, the perception was that some entrepreneurs had been employed for

the longest time; however, youth entrepreneurs would have minimal working experience. This would lead to the factor being positive however insignificant.

Lastly, some scholars viewed human capital as insignificant in determining the success of youth entrepreneurship businesses, and other forms of capital such as financial and social capital were deemed important. Although it was not the aim of this study to measure competing capital variables in terms of importance, these findings validate the importance of human capital as playing a significant role in business success.

CHAPTER 6: CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

6.1 Introduction

This final chapter provides the overall summary and conclusions of the research with reference to the literature, and highlights key insights to the study. Furthermore, it briefly presents the implications, recommendations, and limitations of the study. Lastly, suggestions for future research on the study are made.

6.2 Conclusions of the Study

As indicated in this research, human capital has been important to many entrepreneurship scholars both locally and internationally because of its role and impact in the exploration and exploitation of entrepreneurial opportunities. Research has proven that entrepreneurs who have higher levels of human capital in areas such as education and those who possess entrepreneurial skills and knowledge have a better chance of successfully starting new ventures. This study looked at the impact of human capital factors on youth entrepreneurship success; specifically youth who were BDS services beneficiaries residing in Johannesburg, Gauteng. Because of the broad nature of human capital, three human capital factors were looked at, namely entrepreneurship education, BDS training, and entrepreneurial experience, and how these influence success, which was measured through revenue, number of employees, and general profitability of the company.

Three hypotheses were formulated for the study, one for each of the human capital factors (entrepreneurship education, BDS training, and entrepreneurial experience), to assess their effect on the success of ventures. BDS training was found to be significantly important in the success of ventures, entrepreneurial experience was also found to influence business success positively; however, not as significantly as BDS training. Lastly, entrepreneurship education could not be

tested for its impact on venture success. The research findings were consistent with previous literature, as presented in Chapter 2, specifically on the importance of BDS training on the success of youth-driven businesses. As indicated by Egelser and Rena (2013), BDS training influences entrepreneurship activity by ensuring that entrepreneurs have the necessary skills and knowledge to start new ventures, as well as instilling and stimulating entrepreneurship values such as creativity, risk-taking, and independence. BDS training is of particular importance, especially in the South African context, as government believes that small business play a pivotal role in the economy and are key drivers of economic growth, job creation, and the advancement of inclusive growth in the country. Furthermore, the NDP proposes that SMMEs are used for job creation, and has set a target of 90 per cent of jobs created by small businesses by 2030 (NPC, 2011). BDS training therefore plays an important role because it ensures that new business owners have the necessary skills and knowledge to start and manage their new ventures.

Even though not as significant as BDS training, entrepreneurial experience was also found to have a positive impact on entrepreneurship success. Many scholars indicated that entrepreneurial experience has a positive impact on entrepreneurs because those that possess previous work skills have a higher business survival chance than those that do not have these skills. The insignificant findings in relation to entrepreneurial experience can be attributed to the fact that youth entrepreneurs might have very little work experience; Singer et al. (2018) supported this, indicating that entrepreneurs aged between 25 and 34 years would be educated; however, they would have low levels of work experience.

6.3 Implications and Recommendations

In previous chapters, it was indicated that while there have been studies done on human capital and its various dimensions, as well as studies on entrepreneurship success, there are minimal studies that have featured the relationship between entrepreneurship success and BDS services, specifically in relation to youth entrepreneurs. This study addressed this gap in knowledge, especially in the South African context where youth unemployment is high; however, more

research is still required in understanding the dynamics and challenges of youth-driven businesses, which requires a different approach from government institutions.

Literature in SMME development in South Africa still centres around financial capital as the most important element in entrepreneurship and new venture creation and success, without much focus on the human capital element. This research indicated a significant impact of BDS training as a factor of human capital on the success of business ventures. While the importance of financial capital cannot be understated, this research demonstrated that it should not be viewed in isolation or as the prime factor to business success. Financial capital and human capital, especially BDS training, is important and these should work hand in hand to ensure success of ventures. Policy makers could therefore design future SMME policies with a clear understanding of the roles of different institutions, such as BDS service providers, in SMME development, and not solely focus on ways of funding small businesses without training entrepreneurs.

The BDS community comprised of funders, service providers, SMMEs, and investors and is continuously looking for different ways of investing and building relations with one another. There are multiple programmes that BDS providers offer to SMMEs, which are well documented and assist in the survival of small businesses, however these programmes are generic and do not focus on key business survival skills and elements of business management. Furthermore, they do not aid the entrepreneurs to build confidence and be innovative in their business offerings. The design and structure of BDS training requires changes, as it needs to include core competencies of entrepreneurs, especially youth entrepreneurs, such as financial management, building stronger business relationships, and marketing. There is also a need to structure training to focus on building self-efficacy of entrepreneurs thus building confidence.

6.4 Limitations of the Study

While the research contributes to the body of knowledge of human capital as well as the related dynamics around youth owned SMMEs, there were limitations to the study:

- The study had a defined and limited time assigned for it to be concluded, resulting in a cross-sectional research design. This leaves the possibility of a different outcome if another approach is utilised.
- The sample was specifically focused on youth entrepreneurs who were between the ages of 18 and 35, and to generalise outside of this age bracket is not advisable.
- The sample was specific to those youth entrepreneurs that were BDS beneficiaries, and not general youth entrepreneurs; thus the results might be biased if applied to all youth entrepreneurs.
- The sample was specific to youth entrepreneurs in Gauteng, the economic hub within which most business operate. It could be problematic to repeat this study in another province, especially the poorer provinces such as Limpopo or the Eastern Cape.
- Educated entrepreneurs, some with postgraduate degrees dominated this sample, which might be a challenge if generalising to other entrepreneurs.

6.5 Suggestions for Further Research

This study focused on the impact of human capital factors (entrepreneurial education, BDS training, and entrepreneurial experience) on youth entrepreneurship success of BDS beneficiaries in Gauteng. It would be beneficial, and indeed interesting, if future research could look at the following:

- A comparison of these results with youth entrepreneurs who are not BDS beneficiaries.
- A comparison of these results with other age groups of entrepreneurs who are BDS beneficiaries in the same context and location.

- A repeat study looking at different human capital factors such as formal education, experience of start-ups, parents' background, and others
- A repeat study in a different geographical location, specifically poorer provinces such as the Eastern Cape and Limpopo.
- A repeat study that encompasses all provinces in South Africa.

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APPENDIX A

Ethics Clearance Certificate

Graduate School of Business Administration
University of the Witwatersrand, Johannesburg



Wits Business School Ethics Committee
Constituted under the University Human Research Ethics Committee (Non-Medical)

Ethics Clearance Certificate

Ethics protocol number: WBS/BA693409/822

This certificate is only valid with a legitimate ethics protocol number and signed by the Researcher (below)

This certificate is only valid if accompanied by formal permission from the relevant stakeholder(s).

Project title The Impact of Human Capital Factors on youth entrepreneurship success
- A focus on Business Development Support beneficiaries in Gauteng

Investigator / Researcher Mr Ntuthuko Khoza

Nature of Project MM (Entrepr & New Venture Creation)

Decision of the Committee Approved unconditionally

Issue Date of Certificate 2019/11/20

Expiry date Date of submission of the project report

Chairperson Prof Anthony Stacey
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✉ anthony.stacey@wits.ac.za

Declaration by Researcher

One copy must be signed by the Researcher and returned to the Chairperson of the Wits Business School Ethics Committee.

I fully understand the conditions under which I am authorized to carry out the abovementioned research and I guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I undertake to resubmit the protocol to the Committee.

Signature

2019 -11- 20

Date:

APPENDIX B

Research Instrument

Youth Entrepreneurship Survey

My name is Ntuthuko Khoza a Masters student with Wits Business School specializing in Entrepreneurship and New Venture Creation (MMENVVC).

My research topic is the Impact of human capital factors on youth entrepreneurship success - A focus on Business Development Services (BDS) beneficiaries in Gauteng. Simply put, I want to find out how your entrepreneurial education, BDS training and entrepreneurship experience have assisted you in successfully starting and managing your business. The survey should take you 7 – 10 minutes.

Please note that your responses are anonymous and will be used strictly for this research purpose. You have a right to withdraw at any point during the study, for any reason, and without any prejudice. If you have any issues with the survey please do not hesitate to email me directly on 693409@students.ac.za or my supervisor Dr Jabulile Galawe on jabulile.galawe@wits.ac.za By clicking the button below, you acknowledge that your participation in the study is voluntary, you are 18 years of age and that you are aware that you may choose to terminate your participation in the study at any time and for any reason.

☐ I consent (1)

☐ I do not consent (2)

DEMOGRAPHIC DATA

Q1.2 Please Indicate your age

☐ 18-24 Years (1)

☐ 25-30 Years (2)

☐ 31-35 Years (3)

Q1.3 Please indicate your Gender

☐ Male (1)

☐ Female (2)

☐ Other (3)

Q1.4 Please indicate race applicable to you

☐ Black (1)

☐ Indian/Asian (2)

☐ White (3)

☐ Coloured (4)

☐ Other (5)

Q1.5 Please indicate your highest level of education

- ☐ No Schooling (1)
- ☐ High School Incomplete (2)
- ☐ High School (Grade 12/Matric) (3)
- ☐ Certificate (4)
- ☐ Diploma (5)
- ☐ Advanced Diploma (6)
- ☐ Bachelors Degree (7)
- ☐ Postgraduate Degree (8)

BUSINESS DATA

Q2.1 How long has this business been operational?

- ☐ Less than 1 Year (1)
- ☐ 1-2 Years (2)
- ☐ 3-5 Years (3)
- ☐ 6-8 Years (4)
- ☐ 9 Years and above (5)

Q2.2 Please tick the area your business specializes in

- ☐ Agriculture, forestry, hunting and fishing (1)
- ☐ Mining and Construction (2)
- ☐ Manufacturing (3)
- ☐ Transport and Communication (4)
- ☐ Wholesale, Motor Vehicle Repairs and Sales (5)
- ☐ Retail, Hotels and Restaurants (6)
- ☐ Business Services (7)
- ☐ Healthcare, Education and Social Services (8)
- ☐ Entertainment (9)

Q2.3 How many employees do you currently employ - Including entrepreneur ? (full and part time)

- ☐ 1-2 (1)
- ☐ 3-5 (2)
- ☐ 6-10 (3)

☐ more than 10 (4)

Q2.4 Please select the range that best describes your business annual turnover?

☐ No Revenue (1)

☐ R1 to R50 000 (2)

☐ R50 000 - R100 000 (3)

☐ R100 000 - R500 000 (4)

☐ R500 000- R1000 000 (5)

☐ More than R1000 000 (6)

Q2.5 Please indicate your SMMEs **performance** on the measures below on your last financial period?

	Declined extensively (over 20%) (1)	Declined substantially (over 10%) (2)	Declined moderately (less than 10%) (3)	Stay the same (4)	Grow moderately (less than 10 %) (5)	Grow substantially (over 10%) (6)	Grow extensively (over 20%) (7)
Estimated annual revenue (1)	☐	☐	☐	☐	☐	☐	☐
Jobs (Full & Part-time) (2)	☐	☐	☐	☐	☐	☐	☐
Estimated annual profit (3)	☐	☐	☐	☐	☐	☐	☐
Profit Margin (4)	☐	☐	☐	☐	☐	☐	☐

HUMAN CAPITAL – ENTREPRENEURIAL EDUCATION

Q3.1 How many entrepreneurial education programmes have you participated in?

☐ 1 (1)

☐ 2 (2)

☐ 3 (3)

☐ 4 (4)

☐ 5 (5)

☐ More than 5 (6)

Q3.2 What area did your last entrepreneurial education programme focus on?

- ☐ Financial Management (1)
- ☐ Business Management (2)
- ☐ People Management (3)
- ☐ Sales Management (4)
- ☐ Marketing Management (5)
- ☐ Operations Management (6)

Q3.3 What was the duration of the last entrepreneurial education programme?

- ☐ 1 - 3 Months (1)
- ☐ 4 - 6 Months (2)
- ☐ 7 - 11 Months (3)
- ☐ 12 - 24 Months (4)
- ☐ More than 24 Months (5)

HUMAN CAPITAL – ENTREPRENEURIAL TRAINING

Q4.1 How many BDS programmes have you participated in?

- ☐ 1 (1)
- ☐ 2 (2)
- ☐ 3 (3)
- ☐ 4 (4)
- ☐ More than 5 (5)

Q4.2 When did you complete the last BDS training programme you undertook?

- ☐ Before 2014 (1)
- ☐ 2014 (2)
- ☐ 2015 (3)
- ☐ 2016 (4)
- ☐ 2017 (5)
- ☐ 2018 (6)
- ☐ 2019 (7)

Q4.3 What was the duration of the last BDS training programme you undertook?

- ☐ 1- 3 Months (1)
- ☐ 4 - 6 Months (2)
- ☐ 12 - 24 Months (3)
- ☐ More than 24 Months (4)

Q4.4 What area did the last BDS training programme focus on?

- ☐ Business strategy support (1)
- ☐ Developing networks and linkages (2)
- ☐ Sales (3)
- ☐ Financial Management (4)
- ☐ Marketing (5)
- ☐ Operations (6)
- ☐ Facilities & Resources (7)
- ☐ Mentorship or coaching from business experts (8)

HUMAN CAPITAL – ENTREPRENEURIAL EXPERIENCE

Q5.1 Using a scale of 1 to 7, 1=very unhelpful & 7=very helpful. Please rate the following BDS interventions in your business progression after completing the programme?

	Very unhelpful (1)	Unhelpful (2)	Slightly unhelpful (3)	Neither (4)	Helpful (5)	Slightly Helpful (6)	Very Helpful (7)
Financial Management (Q5.1_1)	☐	☐	☐	☐	☐	☐	☐
Marketing (Q5.1_2)	☐	☐	☐	☐	☐	☐	☐
Developing networks and linkages (Q5.1_3)	☐	☐	☐	☐	☐	☐	☐
Mentorship or coaching from business experts (Q5.1_4)	☐	☐	☐	☐	☐	☐	☐

Q5.2 How many businesses do you currently own?

- ☐ 1 (1)
- ☐ 2-4 (2)
- ☐ 5-7 (3)
- ☐ 8-10 (4)
- ☐ More than 10 businesses (5)

Q5.3 How long have you operated in your current industry?

- ☐ 1- 3 Years (1)
- ☐ 4 - 6 Years (2)
- ☐ 7 - 9 Years (3)
- ☐ Above 9 Years (4)
- ☐ I Have not operated in my industry (5)

Q5.4 How many years of previous managerial experience do you possess ?

- ☐ 1- 3 Years (1)
- ☐ 4 - 6 Years (2)
- ☐ 7 - 9 Years (3)
- ☐ Above 9 Years (4)
- ☐ I have no managerial previous experience (5)

APPENDIX C

Consistency Matrix

To investigate the impact of human capital factors (entrepreneurial education, BDS training, entrepreneurial experience) on youth entrepreneurship with a focus on youth entrepreneurs who are BDS beneficiaries in Gauteng								
Sub-problem/Aims	Literature Review	Hypotheses or Propositions	Research questions	Variables(Independent & Dependent)	Relevant question on instrument	Source of data	Type of data	Analysis
Aim 1: To establish the impact of entrepreneurial education on youth entrepreneurship success of BDS beneficiaries in Gauteng	Masutha & Rogerson (2014a); Ahma & Ageba (2006); Reji (2012); Khoase & Ndayizigamiye (2018); Friedrich & Isaacs (2010); Mathibe & Van Zyl (2011)	Hypothesis 1: There is a positive impact of entrepreneurial education on youth entrepreneurship success of BDS beneficiaries in Gauteng.	1. To what extent does entrepreneurial education impact youth entrepreneurship success of youth which have been in BDS programmes in Gauteng	IV1=Entrepreneurial Education DV1 = Youth entrepreneurial success	Question 10 to 11	Survey questionnaire to be administered to youth entrepreneurs	Ordinal	Correlation Analysis Regression Analysis Descriptive Analysis
Aim 2: To establish the impact of BDS training on youth entrepreneurship success of BDS beneficiaries in Gauteng	Khoase et al., (2018); Masutha & Rogerson,(2014a); Aspen Network of Development Entrepreneurs (2018); Mathibe & Zyl, (2011); Khoase, Mutinta, & MacArthur, (2018)	Hypothesis 2: There is a positive impact of BDS training on youth entrepreneurship success of BDS beneficiaries in Gauteng	2. To what extent does BDS Training impact youth entrepreneurship success of youth which have been in BDS programmes in Gauteng	IV2= BDS Training DV2= Youth entrepreneurial success	Question 12 to 15	questionnaire to be administered to youth entrepreneurs	Ordinal	Correlation Analysis Regression Analysis Descriptive Analysis

To investigate the impact of human capital factors (entrepreneurial education, BDS training, entrepreneurial experience) on youth entrepreneurship with a focus on youth entrepreneurs who are BDS beneficiaries in Gauteng								
Sub-problem/Aims	Literature Review	Hypotheses or Propositions	Research questions	Variables(Independent & Dependent)	Relevant question on instrument	Source of data	Type of data	Analysis
Aim 3: To establish the impact of entrepreneurial experience on youth entrepreneurship success of BDS beneficiaries in Gauteng	Estrin et al. (2016); Oseifuah & Rugimbana (2010); Unger et al (2011); McDermott & Boyd (2017); Amaral et al.(2009); El Shoubaki et al. (2019), Libombo & Dinis (2015); Amaral et al (2009)	Hypothesis 3: There is a positive impact of entrepreneurial experience on youth entrepreneurship success of BDS beneficiaries in Gauteng	3. To what extent does entrepreneurship experience impact youth entrepreneurship success of youth which have been in BDS programmes in Gauteng	IV2= Entrepreneurship Experience DV2= Youth entrepreneurial success	Question 16 to 19	questionnaire to be administered to youth entrepreneurs	Ordinal	Correlation Analysis Regression Analysis Descriptive Analysis