Factors Affecting How the Youth in the Townships Use Internet to Seek Employment: Case of a Township in Cape Town

By

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Table of Contents

List of Figures

Table List

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ABSTRACT

Problem Statement: South Africa is currently facing a challenge of youth unemployment. The hardest hit are those from low income communities, as they in addition have limited access to information. The Internet has proven to be one of the ways in which recruitment is done and failure to access reduces the opportunities.

The purpose of the research: The main objective of this study was to understand how the youth living in the townships use the Internet to seek for employment. The purpose of this study is to assess how the Internet use affect the youth when searching for employment.

Design/methodology/ approach: An interpretivist approach was employed to understand how the youth seek employment. This study used a qualitative approach to collect the data. Interviews were done using semi-structured questions. Alampay (2006) Capability Approach (CA) was used as a guide to conceptualise how the youth from low-income communities use the Internet to find employment. Borrowing from the four main constructs (conversion factors, freedom, capabilities and functionings) employed by Alampay (2006) in his model, this study operationalised the Alampay (2006) CA model by adding the ICT commodities as the fifth construct. The CA was chosen as an appropriate framework for this study because the framework focuses on what humans are able to do and achieve when presented with the available ICT resources.

Findings: The findings demonstrate that the lack of resources, income, information and digital skills affected the individual capabilities to effectively use the Internet when seeking employment. The success rate in finding a job using the Internet was low among job seekers. Commodities, individual differences, social and environmental factors affected how the youth (18-34 years) from low-income communities use the Internet to find employment. In addition, crime, poor network coverage, expensive data bundles and limited access to ICT resources were among the key factors that contributed to limited use of the Internet among job seekers.

Research Contribution: This study seeks to close the gap in limited knowledge available in developing countries with regards to the use of the Internet among job seekers. Therefore, based on the study findings, this thesis has contributed towards adding value to the body of knowledge within the field of Information Systems. In addition, the findings can contribute towards assisting policy makers in solving challenges faced by the unemployment youth in developing countries when using technology to find employment.

Keywords: *Amartya Sen, Erwin Alampay, Capability Approach, Internet, Youth, Unemployment, ICT, Online job searching and application, Functionings, career portals.*

LIST OF ABBREVIATIONS AND ACRONYMS

Apps	Applications/Software
CA	Capability Approach
ICT	Information and Communication Technologies
ICT4D	Information and Communication Technology for Development
IS	Information Systems
ITU	International Telecommunication Union
NGO	Non-Government Organisation
NYDA	National Youth Development Agency
SA	South Africa
YES	Youth Employment Service
SMS	Short Message Service

GLOSSARY OF TERMS

Afrikka Tikkun, NYDA Harambee, YES, Umsobomvu Youth Fund	Are some of the youth development programme that provides education, health and social services to the youth living in low-income communities in South Africa.
Developing Countries	Refers to countries that are less developed in terms of the living standard
Disadvantaged Youth	Generally, refers to the youth with limited resources or capabilities to achieve certain functionings such as quality education and employment
Grade 12	According to the department of education, Grade 12 is the twelfth Grade or the final year of schooling within the education system of South African. Grade 12 is also known as Matric.
Mfuleni	Mfuleni is a relatively new township about 40 kilometres from Cape Town, South Africa.
Internet Job Search	The use of the Internet to search for jobs
Low-income Communities	Refers to economically disadvantaged or underdeveloped communities that are often characterised by limited resources such as unemployment, high crime/violence rates, poor houses and education system.
Mobile devices	Refers to technological tools such as smartphone, laptops and tablets.
Portals	Are web page or websites providing access to a network of connected computers
Rand	The rand is a South African Currency (R1 = $14)
School leavers	Refers to the youth who drop out of school.
Smartphones	Refers to advance mobile phones with new technological features.
Telecentre	A telecentre refers to a public centre that provides ICT services such as access to computers, Internet/Wi-Fi and other technological services.
Township	In a South African definition, a township refers to a suburb or city of predominantly occupation by people of colour, formerly designated for black people during apartheid rule.
Youth	Refers to a group of the youth who are between the age of 15 and 34 in South Africa.

CHAPTER 1

1. INTRODUCTION

The number of unemployed young people in developing countries in on the rise. In South Africa majority of the youth remain underemployed (Stats SA, 2018). Internet and cell phone use has increased among the youth. Despite access to ICT resources, many young people in developing communities are finding it challenging to harness the Internet to find employment (Chiwara et al., 2017). However, this issue is not universal as there are issues regarding access due to economic factors such as income, laws and policies (Asongu & Le Roux, 2017). Youth from low-income communities have been found to have challenges when using the Internet, for example, such limitations include lack of access to ICT resources, lack of digital skills and lack of awareness to both information and job opportunities (Krubu & Osawaru, 2011; Perucca & Sonntagbauer, 2014). Even though the city of Cape Town is ranked number one and recognised as a smart city in South Africa the city has pocket of poverty that are wrought with developing countries issues (Musakwa & Mokoena, 2018). Therefore, this study seeks to investigate how the youth in a township use the internet to seek employment.

1.1. Background

The use of the Internet has revolutionised the traditional methods of searching and applying for employment. Over the past decade, there has been an increase in Internet use among youth coming from disadvantaged communities. Traditional methods of job searching refer to a process of using magazine job advertisement, employment agencies, friends/family and career fairs to find employment (Garg & Telang, 2012). The use of the Internet has been identified as one of the leading solutions towards narrowing youth unemployment (Hjort & Poulsen, 2017). The use of the Internet presents creative ways for the youth to seek employment; for instance, job seekers can network and build relationships with potential employers or business partners (Carlsson, Eriksson, & Rooth, 2018). Despite the benefits obtained when using dedicated online career portals to find employment, there is an increasing number of the youth using social networking site such as Facebook and WhatsApp to seek employment (Longhi & Taylor, 2014; Gillwald, Moyo, & Stork, 2012; Jorgenson & Vu, 2016).

The cost to access the Internet remains one the barriers towards high Internet penetration by the youth from developing countries (Fox, Senbet, & Simbanegavi, 2016; Oyedemi, 2014). Napoli and Obar (2014) argued that even though there is growing demand to develop online resources for the youth in relation to jobs, there is a high number of the unemployed youth who prefer using the traditional means to find employment such as sending hard copies of a resume or knocking door to door asking for employment. The resistance to use the Internet may be influenced by factors such as the lack of data access, poor network coverage or lack of digitals skills (Mitrovic, Taylor, & Sharif, 2014; Mooketsi & Chigona, 2016). Low-cost smartphone devices and cheaper Internet connectivity have increased Internet consumption among South Africans (Hjort & Poulsen, 2017; Sam, 2015). The gap between the youth that are digitally literate and digitally illiterate has widened when it comes to digital competencies in South Africa (Hobson & Goldin, 2015; Ndlovu & Lawrence, 2012; Pezzini, 2014). Internet access and use have the potential to enhance and accelerate personal development while promoting economic growth and enabling people to become more self-sustainable and informed (Roztocki & Weistroffer, 2016). However, Internet access may not always be an answer to finding employment (Egdell & Graham, 2016).

1.2. Research Context

South Africa has been chosen as the context for this study. Just like other developing countries, South Africa is currently faced with a challenge of high unemployment, especially among the youth (Wilkinson et al., 2017). The researcher chose to conduct this study in a township called Mfuleni (located in Cape Town) as a case for this study. Just like any other townships in South Africa, Mfuleni remains a disadvantaged community with a growing youth population that is education, employment, or training. The reason for choosing Mfuleni as a case study was to address the issue of increasing youth unemployment in townships around South Africa. In doing so, this study objective is to understand how the youth living in the townships use the Internet to find employment.

Defining Internet: Internet is defined as a global network of connected systems that uses a Transmission Control Protocol/Internet Protocol (TCP/IP) to logically link and transfer information between the sender and the receiver (Bay, 2017). Internet consist of interconnected devices that communicate and share information over a network that has a standardised

communication protocol (Kuhn & Mansour, 2014). The Internet is described as a global system of connected components of computers such as hardware and software (Abbate, 2017). The Internet can be accessed using interconnected devices such as mobile phones, laptops, desktop computers and tablets (Smith, 2015).

Defining unemployment and employment: Unemployment occurs where a person or people do not have employment (Cloete, 2015). According to StatsSA (2015, p.2) unemployment refers to "a person must be completely without work, currently available to work, and taking active steps to find work. The expanded definition of unemployment excludes the requirement to have taken steps to find work". There are different types of unemployment among youth in South Africa such as long-term unemployment, seasonal, cyclical, frictional, structural unemployment (Cloete, 2015). Employment refers to a state of being contracted arrangement that is either paid or non-paid within a given period (Abbate, 2017; Altman, 2003). The different types of employment contracts that youth often do include fixed-term contracts, temporary and permanent work to name a few (Carlsson et al., 2018; Sakurai & Okubo, 2016).

An overview of Youth: Youth in South Africa refers to the youth between the ages of 15 and 35 years (Draper & Hofmeyr, 2015; Ekiti, 2014; Graham & Lannoy, 2016). In Europe youth is defined as people between the ages of 16 to 25 years of age (Campos, Arrazola, & De Hevia, 2014). There are three different stages that characterise youth; the first include the education stage 15-19 years, second is the growth (working) stage 20-25 years, and lastly, the matured (experienced) stage 26-29 years (Mariana-Cristina, 2014). Youth refers to young people under the age of 35 years.

1.3. Problem statement

Youth unemployment remains high in South Africa with no signs of going down (Graham & De Lannoy, 2016; Posel, Casale, & Vermaak, 2014). Despite youth policy changes and expansion of strategic youth programs over the years, youth unemployment remains very high and growing (Wilkinson et al., 2017). In South Africa, the youth remain uninformed about potential employment opportunities presented the online platforms (Chigona et al., 2009; Sam, 2015). Graduate unemployment among youth with national diploma's and degrees has increased in the past few years, especially among black South Africans (Baldry, 2016). Nearly 50% of the youth

population in South Africa is under the ages of 30, the majority are digitally proactive, urban and mobile (Deniz & Geyik, 2015). Due to the lack of skills, majority of the youth from previously disadvantaged communities in South Africa have fewer chances of finding long-term employment (Shankar, Cooper, & Koh, 2016; Sharabi & Simonovich, 2017). Literature has shown that the majority of youth without unemployment are more vulnerable to social challenges than those who have jobs (Mlatsheni & Leibbrandt, 2011; Wilkinson et al., 2017). van Deursen and van Dijk (2013) stated that youth who are unemployed with lower levels of education spend more time using on social media platforms instead of searching for employment.

Historically, the legacy of apartheid continues to shape and impact the current youth generation after 21 years of democracy in South Africa (Baldry, 2016). Despite huge expenditure towards the South African education system, the quality of education remains poor (Graham & Mlatsheni, 2015; Stevens, 2006). The South African democracy that was built from the apartheid foundation also impacts youth flexibility in creating or finding employment within the current economic system (Cloete, 2015; Gerrit Beger, Sinha, & Pawelczyk, 2012). The public sector and the private sector have struggled to come up with long-term ICT solution that will create affordable means for the youth to have Internet access when seeking job (Fox et al., 2016). Youth in South Africa continue to be excluded from decision making when it comes to issues affecting the youth (Green, Li, et al., 2012). Despite the technological advances and improved access to the Internet, youth are not taking advantage of the resources to search for jobs and information, instead, use the Internet to access social media and entertainment (Deniz & Geyik, 2015). The pressure towards the government to create decent and well-paying jobs for the youth both locally and internationally is increasing, both the educated (graduates) and school leavers are finding it difficult to secure permanent employment (Lucini, 2016; Rocheska, AngeleskiI, Nikoloski, & Mancheski, 2016).

1.4. Research objectives and Research Question

The purpose of this research arises from the realisation that most of the youth in South Africa are unemployed and uninformed. The general objective of this study was to how the youth from the townships use the internet when searching for employment. To achieve the objective of this study, the main research questions employed to guide and answer the problem statement are as follows:

How do the youth from a previously disadvantage township use the Internet to seek employment?

In order to explore the research question, the study main question was broken down into sub-questions:

- What are the reasons the youth from low-income communities use the Internet to search for Jobs?
- What are the challenges affecting the use of the Internet among the youth seeking employment in low-income communities within developing countries?

1.5. Research Method

The Capability Approach (CA) was used as a guide to explain the factors affecting the use of the Internet among youth seeking employment living in Mfuleni. In doing so, the CA framework by Alampay (2006) was adopted to assess how individual differences, social and environmental factors that affected the capabilities and actual functionings of the job seeker when using the Internet. The CA emphasis is towards human development and the framework is highly committed to social injustice as well as inequality (Sen, 2003). Clark (2015) emphasises that the CA purpose is not based on how much people are able to generate but assess the effects and capabilities the Internet has towards improving the individual functionings. In addition, Bisimwa et al. (2018) described the CA framework as an important framework to assess the basics of development among people from developing countries.

The research data was collected using semi-structured interviews in mid-2018. The data was analysed using thematic analysis. 30 interviews were conducted with youth between 18 and 34 years of age participated were selected as the study sample. Due to ethical reasons, even though youth age in South Africa is between 15 and 34 years old, for this study the researcher decided to only interview youth who are older than 18 years and below 35 years of age.

South Africa was chosen as the sample country for this study. The context for this study is based in townships and Mfuleni was chosen as the case. Just like many communities in South Africa, Mfuleni community has similar attributes that can be found in other townships located found in cities such as Durban and Johannesburg. Mfuleni is an example of a township in Cape Town that was purposefully selected because the community has many young people (youth) who are unemployed. In addition, there is a high rate of youth unemployment and is an example of a

previously disadvantaged community. The researcher was therefore guaranteed that participants to the study would provide the information required for the study. South African townships face challenges of youth unemployment rates in the world (Oyedemi, 2014).

This chapter outlines an overview of this research paper and the chapter presents the study introduction, the research background then the rationale for the selected case. This will be followed by the problem statement and research methodological approach adopted for this study. Chapter 6 will also outline the study research objectives and the research questions.

1.6. The Study Chapters

This thesis consists of six chapters and a brief summary of each chapter is outlined as follows:

Chapter One	**Introduction:** discusses the introduction, background of the study. The chapter outlines the research problem, motivation, and importance of conducting the research within the South African context.
Chapter Two	**Literature review:** outlines a summary of literature over the past ten years in relation to the use of the Internet among youth seeking jobs in developing countries.
Chapter Three	**Theoretical framework:** this section outlines and discusses the research framework (CA) adopted for this study. The chapter lays out the motive to use the selected framework
Chapter Four	**Methodological approaches**: the chapter presents and discusses the research methodology. **Research Data collection/Analyses:** this chapter outlines the key research information collected for this research data analysis. This section also summaries the research data analyses.
Chapter Five	**Findings:** presents the empirical findings from the analysis of data and reflects on the results and discusses their theoretical, policy, and practical implications.
Chapter Six	**Study Discussion & Conclusions:** the chapter discusses & provide a summary of the study findings, drawing from study key findings. This chapter presents the study conclusion, as well as the research contributions, limitations and future research recommendations have been clearly stated and outlined.

CHAPTER 2

2. LITERATURE REVIEW

2.1. Introduction

This chapter reviews current studies that focus on the use of Internet among job seekers within the developing countries in the world. The section will outline how youth in developing countries access and use the Internet when job seeking. This will further present some of the challenges and benefits outlined in the literature using the Internet when looking for employment.

The literature review in this research was informed by the need to understand the dynamics of using the Internet for job searching purposes by the youth in impoverished communities in South Africa. The purpose of this chapter is to review studies in the areas of Internet use for employment purposes and Internet access in developing countries at a broader level.

2.2. Youth Employment and Unemployment

The harsh reality of youth unemployment in South Africa remains a course for concern. According to StatsSA (2018), South African youth unemployment rate remains one of the highest in the globe, with more than 50% of the youth unemployed. In addition to the youth unemployment crises in South Africa is that majority of the youth that have jobs or employed for a short period of time are often paid low/minimal wages that are not sustainable in a long run. The South African education system and the private sector are often blamed for current youth unemployment crises. Shankar et al. (2016) argue that the problem is not the private sector but the lack of skills remain the core problem for the unemployed youth (Shankar et al., 2016).

Both developing and developed countries, the number of youths who are neither employed nor in education or training continues to increase (Egdell & Graham, 2016; South Africa Statistic, 2015). Since the 2008 global recession, companies have been cutting job rather than increasing capacity (Hobson & Goldin, 2015). Due to weak and unstable economies globally, companies have not been able to cater to the increasing demand for jobs (Baumann, 2016). In the past fifteen years, unemployment has largely affected the youth. The underlying knowledge that the youth already have is the fact that the majority will not have a better life (International Labour

Office, 2017). As seen from Figure 1 youth unemployment remains high globally. For instance, the number of youth without jobs from both the developed and developing countries remains alarming.

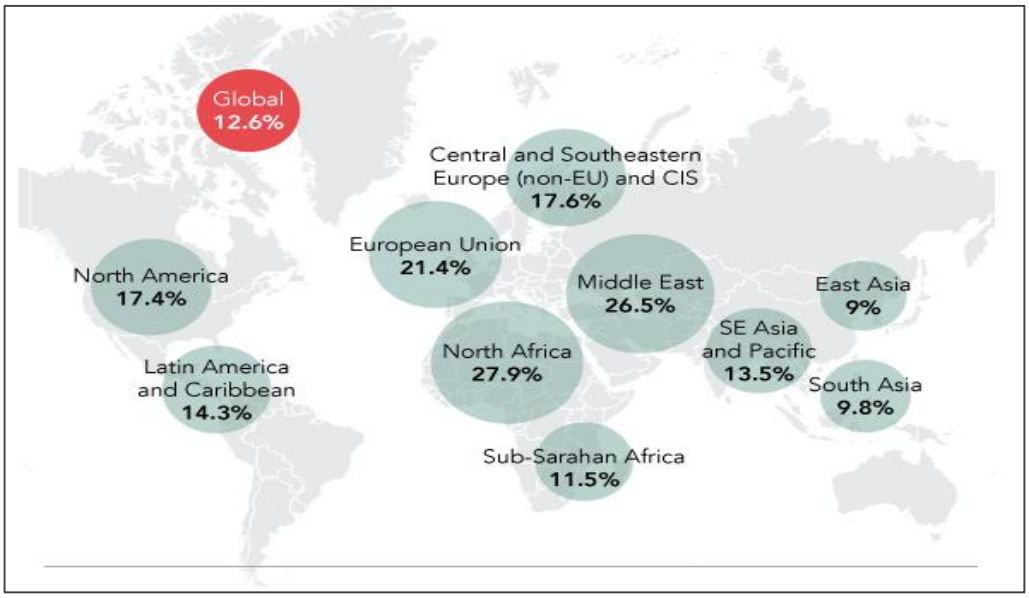

Figure 1: Global Youth Unemployment (World Economic Forum, 2017)

The state of youth unemployment was more than 12% in 2017 (International Labour Office, 2017). The current youth generation faces a risk of living in poorer conditions in comparison to their parents (World Economic Forum, 2017). Even though Sub-Saharan Africa low unemployment rate when compared to Latin America, Middle East, and North Africa, the majority of the youth from Africa live under extreme poverty (Hjort & Poulsen, 2017; Isaacs & Hollow, 2012).

2.2.1. The Impact of Youth Unemployment

In the past 15 years, youth unemployment in South Africa has increased. Cloete (2015) stated that as much as unemployment causes poverty, poverty also causes unemployment. The impact has not only affected those coming from previously disadvantaged groups but those with education (Baldry, 2016). Due to limited job opportunities, youth with qualifications are now forced to settling for low-income to find employment (Shankar et al., 2016). High unemployment rates in South Africa have led most of the youth without formal employment to search for jobs that are outside of their qualifications and training. Some of the youth have not only given up

hope in finding employment. In addition, youth have also become frustrated with the lack of employment opportunities. Without employment, the youth fall victims of social issues such as involvement in criminal activities (Government_Gazette, 2015). To overcome frustrations, the youth often use drugs to escape and cope with the stresses of unemployment (Isaacs & Hollow, 2012). In the long run, high levels of unemployment impact the South African economy negatively (StatSA, 2018). For example, the number of people with skills will decrease, resulting in low productivity and threatening to the welfare of the developing countries (Kaushik & Lòpez-Calva, 2011).

2.2.2. Youth Development Programs in South Africa

Finding employment has become competitive, especially among the youth from developing countries (Green, Li, Owen, & de Hoyos, 2012b). Graham and Mlatsheni (2015) stated that the key challenges that face the youth in South Africa include the issue of the youth not engaged in employment, education, or training (NEET). Roztocki and Weistroffer (2016) argued that most of the government programs often fail to produce intended results due to incompetency and monitoring. In South Africa, there are currently no studies that have monitored youth program successes and failures (Graham & Mlatsheni, 2015).

The South African government is aware that Internet is the source of information that can be used by youth to find employment especially given the high number of youth with access to mobile internet. To reduce unemployment in South Africa, the government invested billions of South African Rands (equivalent to 14.5 US dollars) to reduce youth unemployment through youth programs (Graham & Mlatsheni, 2015). Youth employment programs such as the Youth Environmental Service (YES) are some of the online youth programs introduced by the government to confront the challenge of youth unemployment in South Africa (Youth Employment Service, 2018). Unlike other youth programs in South Africa, the Harambee Youth Employment Accelerator seeks to bridge the gap between employees and employers (Graham & Mlatsheni, 2015).

In South Africa, the Youth Employment Service (YES), the National Youth Development Agency (NYDA), the South African Youth Development Organization (SAIDO) and Vuka'zenzele are amongst the few government Internet-based portals aimed at improving job employment

opportunities for the youth (Graham & Lannoy, 2016; Morgan, 2013). A number of youth programs in South Africa have been operational for years, however there are limited studies that monitor and report on youth program benefits and challenges (Graham & Mlatsheni, 2015). Apart from the million spent towards youth unemployment programs, the government remains criticised for lacking the vision and innovation to reduce the levels of youth unemployment in South Africa (Jorgenson & Vu, 2016; Shankar et al., 2016). Solution For Youth Employment (S4YE) and the African Union Youth Division are some of the global institutions that invest in youth programs (Blumel, 2015; Pezzini, 2014; UNESCO, 2018).

2.3. Internet usage and access.

Youth in developing countries, especially in the African continent have adopted mobile Internet as an alternative tool to solve to achieve functionings. The prevalence use of the Internet among youth from the African continent seeking jobs has increased over the decade (Dillahunt, Bose, Diwan, & Chen-Phang, 2016). While majority of the youth from disadvantaged communities use the Internet to search for a job, traditional job searching methods are frequent. The use of the Internet has increasingly become popular among job seekers (Green et al., 2011). Over the years, online job searching engines have developed and the advanced tools have improved the functionality and ease of use for job seekers (Baker & Fradkin, 2017). Some of the online career portals functionalities include filtering options and the ability to store personal data and files using the cloud services (Dillahunt et al., 2016; Mang, 2012). There are more than 2.4 billion active Internet users around the world who use Internet services daily (Giglia & Binns, 2014).

In South Africa, the Western Cape government introduced Smart Cape telecentres in 2001 to provide access to the previously disadvantaged communities within the Western Cape. Despite the access to free Internet, majority of the youth using the Smart Cape centre are not using the centre to uplift their skills and income. Challenges such as limited access to Internet connection have led to frustrations among youth using the Internet to seek for jobs (Hobson & Goldin, 2015).

The Internet has developed into a multifaceted tool that enables individuals to access and achieve a vast range of activities (Goodwill Community Foundation, 2013). The adoption and use of mobile Internet has increased in the developing countries (Sam, 2015). Youth from developing countries use the Internet to achieve certain goals and functionings. For example, the youth use

the Internet to communicate, download, explores and share information (Hale, Cotten, Drentea, & Goldner, 2010). Youth from developing countries consume a high percentage of data streaming online video tutorials to acquire knowledge (Kaliisa & Picard, 2017). To access the Internet, youth use mobile devices and computers with an Internet connection or mobile data (Lucini, 2016; Sam, 2015). Other sources of the Internet for the youth to connect when job searching include government telecentres, home broadband and school Internet/Wi-Fi (Beard, Ford, Saba, & Seals, 2012). Internet cafés are also used by youth to search for online jobs and to use the Internet the users pay a fee and get given access to the ICT services (ITU, 2014).

The Internet enables the current youth generation to access online information that has the potential to afford an individual with capital enhancement, training and additional job markets (Chigona et al., 2011; Graham & Mlatsheni, 2015; Shankar et al., 2016). Internet services offered by the government such as free Wi-Fi and Internet access in communities around South Africa are often characterised by low Internet speed or restricted time of usage per person a day, for example, users are offered 250Mb of data a month for free or 45 minutes to use a computer in a telecentre (Chigona et al., 2011).

2.3.1. Internet Penetration in South Africa

In both the developed and undeveloped countries, more than 70% of the youth between the ages of 15-24 have access to the Internet (ITU, 2017). Internet figures from the Internet World Stats stated that Internet penetration in South Africa for the year 2018 was 53.7% out of the total population of the country as seen in Table 1 (Internet World Stats, 2018). The overall Internet penetration in South Africa has increased from 26 million in 2014 to 30.8 million in 2018 (Internet World Stats 2018). In South Africa, more than 80% of the youth have access to the Internet (Arthur Goldstuck, 2017; ITU, 2017). Internet penetration in developing countries within Africa and Asia is below 40%. Countries such as Kenya, South Africa and Nigeria have one of the highest Internet consumption rates on the continent (Hjort & Poulsen, 2016). On average youth in developing countries spend an average time of five and ten hour's day/week, either surfing the Internet, doing research or socialising (Deniz & Geyik, 2015; Giglia & Binns, 2014).

Table 1: Africa Population & Internet Penetration by Country (Internet World Stats, 2018)

Rank	Country	Population	Internet Users	Internet penetration (%)
1	Kenya	50,950,879	43,329,434	85.0 %
2	Mauritius	1,268,315	803,896	63.4 %
3	Seychelles	95,235	67,119	70.5%
4	Tunisia	11,659,174	7,898,534	67.7%
5	Libya	6,470,956	3,800,000	58.7%
6	Morocco	36,191,805	22,567,154	57.3 %
7	**South Africa**	**57,398,421**	**30,815,634**	**53.7 %**
8	Nigeria	195,875,237	98,391,456	50.2%
9	Cape Verde	553,335	265,972	48.1%
10	Zimbabwe	16,913,261	6,796,314	40.2%

Global statistics showed that more than 46% of youth penetrated Internet usage using mobile phones (GSMA, 2016). As highlighted in Table 1 Kenya at 77.8% and Mauritius at 62.7% are some of the countries with high rates of Internet penetrations within African (ITU, 2014; ITU, 2017). In South Africa, the Western Cape has the highest Internet penetration, at 75% and in second place in the Gauteng province at 55% (Arthur Goldstuck, 2017). On average youth in South Africa spend an average time of 5 and 10-hours per day/week, either surfing the Internet, texting or communicating via social networks (Deniz & Geyik, 2015). The South African Internet infrastructure remains one of the best among developing countries. However, despite the quality of the Internet infrastructure, remote areas along with previously disadvantaged communities experience unreliable Internet connection. In South Africa, the quality and speed of the network coverage largely depend on the services provided by the network provider (Dube, 2014).

2.4. Internet Adoption in Developing Countries

The youth population in Africa currently stands at 226 million people (Lucini, 2016). Even though the majority of the youth have access to mobile services, only 27% of the total youth population have access to the Internet data connection (Graham & Mlatsheni, 2015; Lucini, 2016). Regardless of the location, place and time, the Internet affords the current youth generation the ability to access more job opportunities that were previously difficult to reach (Green, Maria, & Li, 2012).

Mobile phones and telecentres are the common ICT tools used by the youth when searching for information in relation to jobs through the Internet (Green, Maria, et al., 2012; Oyedemi, 2014). “Internet access offers lower levels of functionality and content availability; operates on less open and flexible platforms; and contributes to diminished levels of user engagement, content creation, and information seeking” (Napoli & Obar, 2014, p.2). High quality Internet access is expensive and restricted for the majority of the youth coming from low-income communities, (Gillwald et al., 2012; Hobson & Goldin, 2015). Despite the poor ICT infrastructure in many African countries, Internet usage remains growing among the youth (Mooketsi & Chigona, 2016).

2.5. Dynamics Employed When Job Searching

Depending on the resources and access to the Internet, job seekers use different methods to search and find employment. For instance, online employment platforms enable users to upload and save resumes using online services (Green et al., 2011). In some instances, the use of the Internet is often used along with the traditional methods of searching for jobs to apply or respond to job listing they saw while using the Internet (Chiwara et al., 2017; Kuhn, 2013).

2.5.1. Traditional versus Online Job Search

Historically to search for employment people relied on job advertisement which was also time-consuming (Khan, Hussain, Shah, Iqbal, & Shafi, 2016). Family and friends also played a big role when it comes to informing and sharing information about job post (Sharabi & Simonovich, 2017). Besides using the online job advertisement, company recruitment department announce via newspapers, billboards and to other third-party networks when looking for qualified employees with relevant attributes needed for a job (Carlsson et al., 2018; Garg & Telang, 2012). To send job applications, job seekers either use the online or the traditional methods to find jobs (Tso, Yau, & Cheung, 2010; Wilson, 2010).

After the post-war boom in the 1950s, white-collar companies started using professional resumes to hire employees. Then in the early 1960s, the Internet was introduced. However, it was not popular and widely used by the average job seekers. Over the past two decades, the online job searching methods become an option of choice for the majority of traditional job

seekers (Sam, 2015; Tso et al., 2010). The popularity of social media has also encouraged companies to use social media networks to attract potential employees using platforms such as LinkedIn, Facebook and Twitter to name a few (Graham & Mlatsheni, 2015; Hoye, Hooft, & Lievens, 2009; Posel et al., 2014). Social media has played a key role for online job seekers, who use the social media platform to connect and communicate with a job recruiter at minimum cost (Feuls, Fieseler, & Suphan, 2014; Sharabi & Simonovich, 2017). Finding jobs has become harder for the youth and for many jobs seekers it has become a situation of whom you know and how connected you are (Garg & Telang, 2012).

Individual circumstances such as age, experience and knowledge influence how job seekers search for employment. Youth from developing countries search for employment using both formal and informal searching methods. Formal job searching methods involve searching for jobs through established processes. For example, a job seeker will normally apply and go for the interviews before getting hired (Blomer, 2015). As highlighted in Table 2 the informal job searching method involves searching for employment through a network of friends and former employees (Sakurai & Okubo, 2016).

Table 2: Overview of formal and informal job searching sources (Blomer, 2015, p4)

Formal Job Search Sources	Informal Job Search Sources
• Contacting employment agencies	Social network sites
• Contacting employment offices	Networking via social media platforms
• Contacting company personnel offices	Contacting and/or networking with former employees
• Inquiring television/radio/newspaper advertisements	Contacting and/or networking with friends
• Internet postings	Contacting and/or networking with relatives who have a connection with the selected organization
• Visiting job sites	Contacting former company employees
• Submitting applications	Walk-in applicants
• Recruiters' campus visits	
• Campus/university placements	

2.5.2. Different Channels of Job Seeking

Job seekers use different channels to search for employment and a majority of these seekers are using both the Internet along with the traditional search channels (Kuhn & Mansour, 2014). The use of paper media such as newspaper and job posts among job seekers still remains common and widely used (Faberman & Kudlyak, 2016; Posel et al., 2014). However Internet usage among job seekers has become the most common channel used (Green, Maria, et al., 2012; Kuhn & Mansour, 2014). Table 3 outlines some of the different methods used by job seekers, the list includes both online platforms and offline job searching methods (Roubler, 2016).

Table 3: Methods of Job Seeking (Roubler, 2016)

Methods	Description of the method
LinkedIn	The LinkedIn platform is by far the most effective modern international networking site for both new and professional job seekers.
Networking	Jobs can be found through Meeting and networking with the right people in events and functions.
Job Search Engines	Job seekers use different web portals to search for employment using professional online job searching engines such as Jobs Indeed, Career 24...etc. The job engines platforms also allow users to filter data and to upload & store files when applying for jobs using the internet.
Gumtree	Unexpectedly, more job seekers are using Gumtree platforms to advertise personal skills/qualifications for potential employees.
Newspaper	The traditional/old-fashioned method of searching for jobs was through flipping the papers and circling job opportunities that are printed.
Online Process	In the digital technological spaces, the current youth generation is increasingly using the online jobs platforms to seek for job searching.
Company website and social media	Company websites are often the first place to search for job seekers who are searching for specific jobs. Or job seekers can follow the company social media pages such as Twitter and LinkedIn to get notifications about the coming news on the website page.
Social-Media	Social media platforms have become popular among job seekers, due to low cost, flexibility, effective and faster communication between employee and employers. Jobs seekers and recruiters use social media to exchange information via communication tools such as LinkedIn, Facebook, Twitter, WhatsApp and Gumtree.
Jobs Referrals	Jobs Referral (Family, Friends & colleague) is one of the effective methods used within close relationships.
Door to door attrition	Is a traditional method used by jobs seekers where an individual or a group search for jobs by knocking door to door to asking for jobs.

The Internet job searching method remains common and widely used among job seekers (Chiwara et al., 2017). The use of the Internet has enabled more people to gain access to information that was difficult to access thirty to forty years ago (Jorgenson & Vu, 2016).

2.5.3. Steps for an Internet job search

Applying for a job is a process that involves preparation CV, browsing jobs, sending a job application, responding to emails and phone calls. Prior to using the Internet, there are key steps that the users normally go through in order to access the various online job application (ITU, 2014; StatsSA, 2015). Figure 2 lists some of the processes involved when searching and applying for employment.

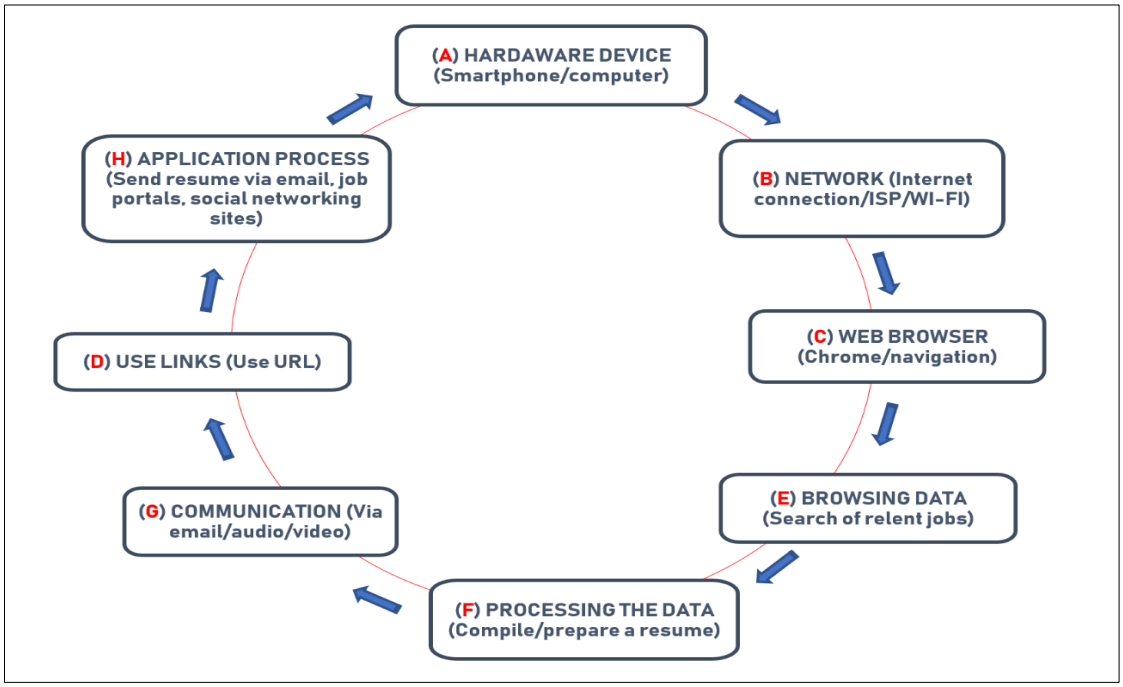

Figure 2: Steps towards Internet Use (Goodwill Community Foundation, 2013).

Below are the steps outlined by the Goodwill Community Foundation (2017) when people use the Internet to search for jobs online:

a) The first step involves the use of digital devices that are connected to the Internet and has a user interface (e.g. smartphone, laptop).
b) Connect to Wi-Fi or Internet service provider.
c) Use a basic web browser such as Google Chrome and Firefox to navigate on the site.
d) Use website links to access web pages.
e) Use a search engine such as Google to type key works.
f) Read and process the information found to improve knowledge & preparing a resume.

g) Use communication tools to send and share files via emails or social networking platforms.
h) Send a resume or use Skype for job application. Goodwill Community Foundation (2017).

The process of applying for employment involves youth searching for information using their mobile phones (Blomer, 2015; Yafi, Nasser, & Tawileh, 2015). Once done, then create personal resumes that are later sent to the employers either using online career portals as well as using email and social media to communicate and send job applications (Sakurai & Okubo, 2016).

2.6. The Effects of Youth Unemployment in South Africa

2.6.1. The statistics on youth unemployment

According to the South African government, there is a high percentage of young and unemployed people seeking for employment. The South African youth unemployment rate in 2018 stood at 52.8% (Statistics South Africa, 2018). Youth unemployment and graduate unemployment among the youth has increased, therefore creating pressure for the South African government (Baldry, 2016). Unemployment in South Africa among youth is high compared to other developing African countries (Fox, Senbet, & Simbanegavi, 2016). The current global youth unemployment rate is 13.1% (Lucini, 2016). StatsSA highlighted that the youth unemployment rate for the youth between the age group of 15-24 years has risen to 52.2%, and for the youth aged between 25-34 the rate is at 35.5% (Amra, 2018; StatsSA, 2015).

2.6.2. The social and economic impact of youth unemployment

Long-term unemployment and socio-economic challenges have been identified as one of the main contributors to the increase in social exclusion among the unemployed youth (Hobson & Goldin, 2015). The lack of quality education and work experience have also been identified as some of the contributing factors that increase the risk of long-term unemployment for the youth in South Africa (Feuls et al., 2014). Young women are far more affected by social issues among youth compared to male counterparts. Dependency on Social Welfare has risen in the past decade, as a result, the majority of the unemployed youth women have children that are under the social grant from the state. While on the other hand male youth stand on the side of the road to get piece jobs, such as plumbing and woodwork in order to support their families. Those who are unable to find sustainable employment, end up committing crimes that lead to criminal

records which ultimately removes the freedom and ability to get formal employment. Unemployment, therefore leads to youth involved in crime, teen pregnancy and disengagement from society (Fox et al., 2016). The youth challenges mentioned above do not only lead to low economic growth but poverty that is generational.

2.7. The Use of Internet for Seeking Employment

The Internet affords job seekers with a wider range of choices and benefits, such as job educational advice, additional job opportunities, and multiple search possibilities as well as low-cost access to information (Shahiri & Osman, 2015). New and experienced job seekers do not only use the Internet to search for jobs. Youth have been found to use the Internet to search for information on how to prepare for a job interview. For example, the career portal assists job seekers on how to create a professional resume and a cover letter, therefore improving chances of employment (Suvankulov, Lau, & Chau, 2012). Job seekers use different channels to search for employment and majority of the people are using both the Internet along with the traditional search channels (Kuhn & Mansour, 2014). Majority of the studies revealed that Internet use among job seekers has become the most common platform used when searching for employment (Green, Maria, et al., 2012; Kuhn & Mansour, 2014). However, studies from the past literature argued that online processes of seeking jobs via the Internet may be inferior compared to other traditional processes of searching for employment (Suvankulov et al., 2012).

2.7.1. Reasons the Youth use the Internet for Employment

For job seekers, the use of the Internet is often influenced by the scalability, capabilities and flexibility of searching and applying for employment. In the past two decades, the majority of the youth job seekers in the developing countries use and find the Internet as an alternative medium to effectively search and apply for jobs (Blomer, 2015; Yafi et al., 2015). Table 4 are some basic reasons youth people use the Internet to find employment:

Table 4: Reasons for using the Internet to seek jobs

Theme	The reasons
Access	**The First** reason is to gain access to information about jobs. Google, Yahoo and MSN are some of the common search engines utilised by youth job seekers using the internet
Scalability	**The second** reason is the ease of use: professional websites enable users to categorise, filter and group jobs according to own preferences.
Efficiency	**The third** reason, ability to submit resumes to the potential employers using emails or online platforms.
Communication	**The Fourth** reason: Internet use enables faster communication and feedback
Data storage	**The fifth** reason is about efficiency; the internet affords the job seekers to store personal information and files on the cloud.
Cost-effective	**The sixth** reason is that the internet is cost effective.

2.7.2. The benefits of using the Internet to find employment

Literature indicates that the use of Internet over the past decade has enhanced the way in which job seekers search for employment (Oyedemi, 2014; van Deursen, van Dijk, & Helsper, 2014). Internet benefits for job seekers include; reduction on time and money, exposure to wide range of online job resources, access to information, convenience and scalability "The use of the Internet enables individuals to identify a larger number of opportunities for education, training and employment over a larger geographical area at a lower cost and in a shorter time" (Green et al., 2012, p. 24). ICT improvements over the years have enabled the job searching portals with advanced capabilities such as improved user experience, functionality, artificial intelligence and personal job preferences (Mang, 2012). Figure 3 stipulates that Internet as an enabler has the potential to enhance productivity, knowledge, innovation, financial income and business opportunities (Deloitte, 2014).

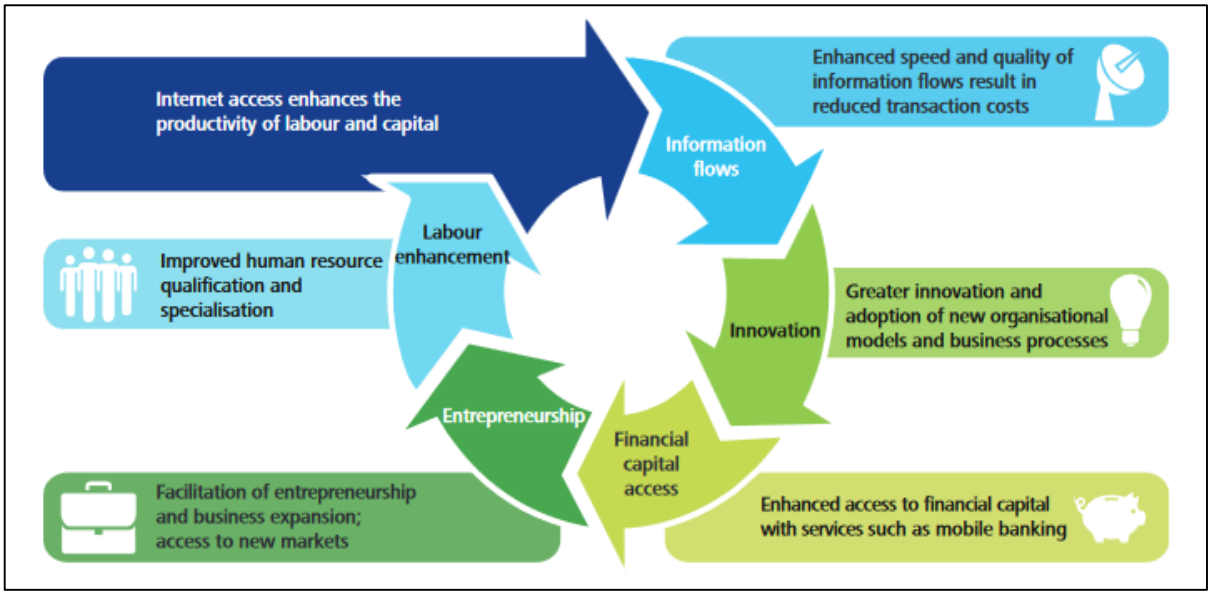

Figure 3: How the Internet enables economic growth (Deloitte, 2014, p. 3).

Green et al. (2012) outlined that online job searching portals assist job seekers to create and store information that was on paper to the cloud using employment searching engines. The Internet has afforded inexperienced job seekers the opportunity to acquired knowledge about company culture and jobs requirements in advance (Dillahunt et al., 2016). "The reason the Internet has such a profound impact on the job matching process involves more than the wider selection of job opportunities, better search possibilities, and cheaper access to information" (Mang, 2012, p. 2). The advanced searching tools provided by the online job searching engines afford the job seekers the chance to effectively search for employment opportunities without travelling long distances (Green et al., 2012).

2.8. Factors Affecting the Youth from Effectively Searching for Employment

Access to the Internet is one of the major challenges facing the majority of the youth living in low-income communities in developing countries (United Nations, 2013). For the majority of the unemployed youth, due to expensive mobile data, Internet access and consumption become challenges when using the Internet to apply for employment (Walls, Santer, Wills, & Vass, 2014). Despite the reduction in Internet prices, the cost to access to the Internet remains one of the barriers towards high Internet penetration by the youth from developing countries (Fox et al., 2016; Oyedemi, 2014). The inability to use the Internet is predominantly characterised by factors

such as limited access to mobile data, poor network coverage and infrastructure (Mitrovic, Taylor, & Sharif, 2014; Mooketsi & Chigona, 2016).

In addition to the challenges, the majority of South African youth are not engaged in skills development programs, in employment, in education, or nor training (Blumel, 2015). Thus resulting in unskilled youth having limited competencies to effectively use Internet resources when seeking employment (Chib, May, & Barrantes, 2015). Literature shows that although there is an increase in Internet skills obtained through the exposure of social media, there is a high volume of youth who lack the digital skills needed to search and create a professional resume using online tools (Green, Li, Owen, & de Hoyos, 2012b; Smith, 2015; Wilkinson et al., 2017). The risk of posting personal information online exposes youth to online scams. The growing concern about cybercrime and false job advertisement has contributed to a reluctance to use the Internet to search or apply for employment (Brenčič, 2014).

Gender divide among youth within developing countries remains high when it comes to Internet use and access (Dixon et al., 2014). Based on the historical and cultural setting, the majority of women from low-income communities were excluded and had limited exposure to technology (Sundari, 2015). "The proportion of women using the Internet is 12% lower than the proportion of men using the Internet worldwide" (ITU, 2017, p. 3). Table 5 on the following page provides a summary of the challenges affecting the use of Internet among job seekers in the developing countries.

Table 5: Summary of the Challenges affecting Internet use when job searching

Individually	Socially	Environmentally
• People with no sources of income are unable to finances some of their personal needs. • The level of digital skills & knowledge affects how an Individual can effectively use the internet. • Due to lack of training and quality education, young people have limited ICT skills. • With limited access to information, the majority of the youth are not exposed to knowledge •	• Due to social exclusion & gender divide young women had limited exposure to technology. • Culturally internet uses to find employment is still not a common process in some of the deprived communities. • Limited local ICT support systems & service. • Internet Privacy concerns result in a reluctance to using the internet. • Peer pressure from friends also influence the use of the internet	• Poor internet/ICT infrastructure impacts effective use. • Majority of the underprivileged communities do not have the basic financial means to improve access to ICT resources for the unemployed. • In some of the poor communities, there are issues of crime affect and impact how & when young people use the internet.

2.9. Finding Research Gaps

This research study has been approached with a purpose to contribute towards the knowledge when it comes to the use of the Internet among youth seeking jobs within previously marginalised communities. There are many online articles and reports in South Africa that are published based on the Internet use among youth unemployment in the country, however there are academic publications that discussed the use of the Internet among the youth to find employment in previously disadvantaged countries.

Identified Gaps in Literature: There are a limited number of publications focusing on the use of the Internet to search for employment among youth coming previously disadvantaged areas (Mariana-Cristina, 2014). Youth being understood as those between the age of 15 and 34 years of age (Department of Labour, 2010). Majority of the academic studies produced in the developed countries have already written about youth and how thy use of ICT to search for employment. Academic publications produced from the developing countries only discuss Internet and job searching among youth as separate entities. For example, one study will address youth unemployment among youth, while the other study will talk about internet use among youth without linking both. There are limited publications discussing youth job programs, policies or successes stories and failures of using the Internet to find employment. Even though Internet enhances and provides more access to job opportunities for the youth, there is limited evidence from the literature to prove Internet effectiveness towards finding employment (Mariana-Cristina, 2014).

2.10. Chapter Summary

In summary, literature reviews show that Internet usage patterns vary and depend on household income as well as the available Internet resources (Hjort & Poulsen, 2017; Meeker, 2015). The Internet has revolutionised how youth seek and find employment using different online job platforms such as LinkedIn and career sites amongst others (Jorgenson & Vu, 2016; UNESCO, 2018). Youth unemployment remains high in South Africa (World Economic Forum, 2017), especially in previously disadvantaged communities such as Mfuleni.

In development studies, youth from disadvantaged areas, have limited access to basic resources, therefore are unable to fully exploit the Internet to search and apply online. Literature has

highlighted that the use of Internet has afforded the youth a chance to search and download information using digital devices (Blumel, 2015; Sivarajah, Irani, & Weerakkody, 2015). When it comes to using the Internet to find employment, benefits appear to outpace the challenges. Social media networking sites are often used by the youth to share and advertise skills or qualification to online to job recruiters. Majority of the ICT solution do not scale and reach out to the poor, ICT solution seem to benefit mostly the educated and ignoring the illiterate (Khan et al., 2016; Sharabi & Simonovich, 2017). Technological illiterate job seekers are sometimes discouraged to use online job platforms due to limited resources (Khan et al., 2016). Digital literacy among youth from low income communities is lower than the average youth in developing countries (Gerrit Beger et al., 2012).

CHAPTER 3

3. THEORETICAL FRAMEWORK

3.1. Introduction

This chapter presents the theoretical framework that guided this study's approach. The study is using Alampay's (2006) CA to understand how the youth use the Internet to seek for a job in the context of the townships. The CA theoretical framework stresses the importance of social human development (Clark, 2005), therefore the CA was deemed as a suitable theoretical framework to address the research objectives as well as answering the study questions. Other CA theories that were considered included the Choice Framework by Kleine (2013) and the Capability Approach Framework by Hatakka (2011).

3.2. Capability Approach Overview

The CA is a moral and normative framework that focuses on social functionings and capabilities that people need in order to achieve certain functionings (Egdell & Graham, 2016; Sen, 1999). Amartya Sen's framework stresses the importance of peoples freedom towards making choices they value the most (Kleine, 2011). The CA is concerned with people's capabilities, for example looking at what people are effectively able to do and achieve (Zheng & Walsham, 2008). Based on Amartya Sen's 2003, 1999, 2000 CA, a number of researchers have used and modified Amartya Sen's concept as an alternative approach towards the human development through the use of ICT (Hatakka, Thapa, & Sæbø, 2016; Nyemba-Mudenda & Chigona, 2018). Amartya Sen's CA pertains to choices, meaning it "involves both the processes that allow the freedom of actions, decisions and the actual opportunities that people have, given their personal and social circumstances" (Sen, 1999, p. 19).

3.3. The Capability Approach Application for ICT

The theoretical framework by Alampay (2006) consisted of four constructs, starting with 'Individual Differences', 'Freedom, Capabilities' and lastly 'Realised Functionings' as shown in Figure 4. Alampay used CA framework to analyse socio-demographic differences when it comes to access and use of ICTs in the Philippines. Sen's CA model according to literature can be used and applied to access ICT for social development (Alampay, 2006b).

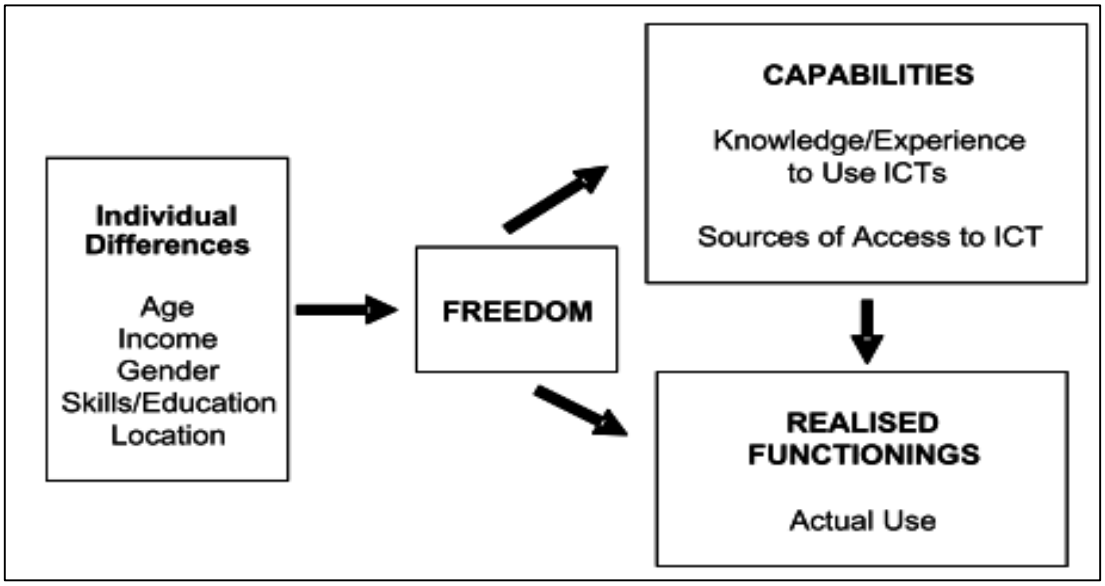

Figure 4: The Capability Approach Applied to Access to ICTs (Alampay, 2006, p. 15).

Alampay (2006) adopted and applied Sen's CA to analyse how access to ICT can have impact on development. In doing, Alampay's model did not address the commodities (ICT) used to achieve the realised functionings. Therefore, to accommodate the nature of this study, the researcher modified and operationalised the CA framework to address ICTs resources needed to achieve the functionings. By operationalising Alampay's framework, this study now consists of **five constructs**: Commodities, Conversion Factors, Freedom to use, Capabilities, and Functionings (Goerne, 2010) as shown in Figure 5. The commodity construct will be borrowed from this framework and added to Alampay (2006) capability approach. The reason to adopt the commodity construct is to address the ICTs resources that individuals used to achieve the functionings (Chigona & Chigona, 2010; Goerne, 2010).

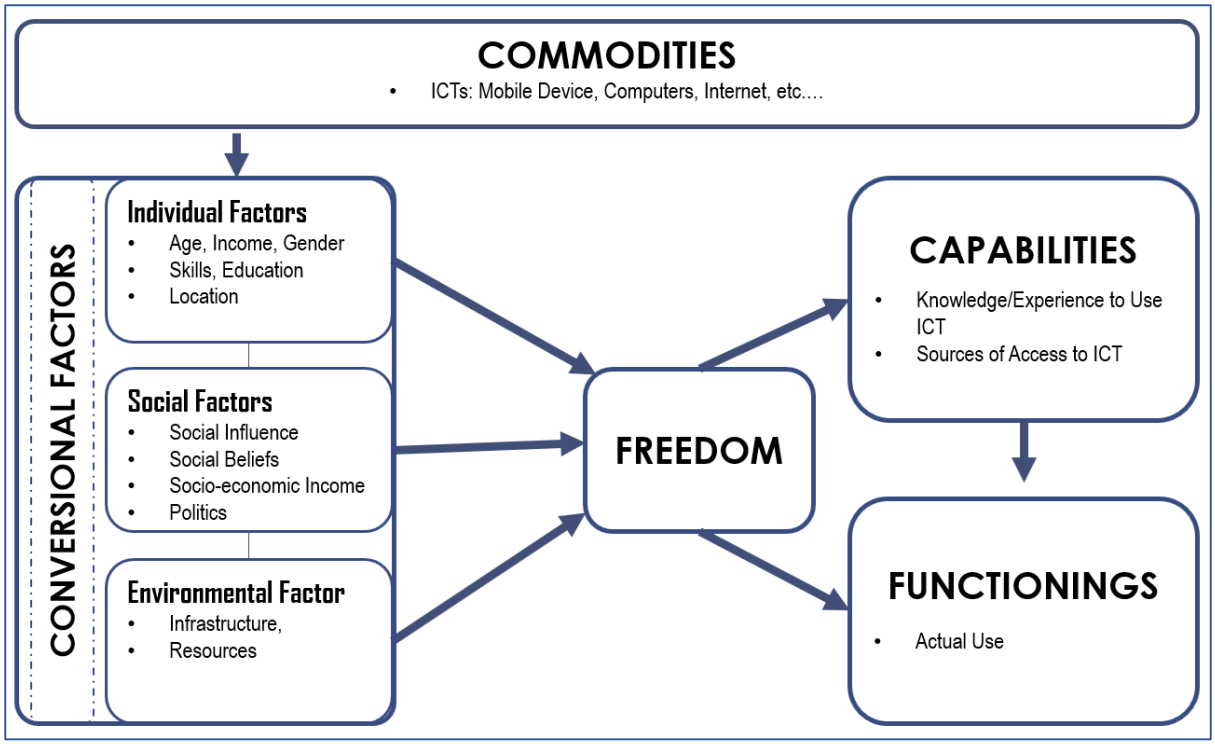

Figure 5: The Operationalised Capability Approach Applied to Access to ICTs.

Functionings and capabilities are the main concepts of the CA (Hatakka et al., 2016, Sen, 2003). Capabilities are a set of functionings that an individual is able to choose to achieve the actual objectives (Zheng, 2011).

3.4. Capabilities

A capability is defined by Hatakka et al. (2016) as individual freedom to achieve a set of functionings. Capabilities refer to what people are able to do and achieve (Sen, 2003; Sen, 1999), on the other hand, capabilities do not necessarily refer to resources, but actual opportunities (Johnstone, 2007; Robeyns, 2016). An individual capability depends on a combination of multiple functionings that a person has the potential to achieve (Egdell & Graham, 2016; Gigler, 2004; Sen, 1999). However, Zheng and Walsham (2008, p. 4) argued that "It should be noted that in order to create conditions to develop capabilities, some capabilities will mainly require financial resources and economic production, but for others, it will also involve institutional settings and political". In order to effectively use the Internet resources, a person needs to be economically stable, educated, skilled, knowledgeable, experienced and exposed to ICT tools (Alampay, 2006b; Hatakka et al., 2016; Sen, 1999).

3.5. Functionings

Functionings are things that individuals value the most, for example being healthy or applying for a job (Chigona & Chigona, 2010). Functionings refer to a process or a position in which an individual has realised an achievement or has fulfilled their own expectations (Verd & Andreu, 2011; Zheng & Walsham, 2008). Egdell and Graham (2016) stated that the individual functionings are a subset of a capability that an individual may be able to do and become. Functions, capabilities and freedom have been used interchangeably (Alampay, 2006b). "Functionings is an achievement, whereas a capability is the ability to achieve" (Chigona & Chigona, 2010, p. 5). The two terms functionings and capabilities are interrelated, but each differs in meaning: "Functionings are, in a sense, more directly related to living conditions, since they are different aspects of living conditions. Capabilities, in contrast, are notions of freedom, in the positive sense: what real opportunities you have regarding the life you may lead" (Sen, 1987, p. 36). From having capabilities, individuals have the capacity to make own choice about their ideal functionings (Egdell & Graham, 2016).

In summary, the CA framework is directly concerned with what people are effectively able to do and to be, considering the resources to which they have access to. Amartya Sen's capability framework stresses the importance of focusing on how individuals achieve their capabilities, functionings and freedom (Chigona & Chigona, 2010). Therefore, the extent in which individuals can achieve the capabilities and functionings depend on conversion factors: firstly, personal (gender, age & health conditions), social (social norms, politics) and lastly, environmental factors such as resources, infrastructure and climate (Egdell & Graham, 2016; Zheng & Walsham, 2008).

3.6. Commodities

Commodities are goods and services (Nyemba-Mudenda & Chigona, 2018), resources needed to achieve a functioning. For instance, commodities can be money, education, mobile devices, computers, laptops (Egdell & Graham, 2016; Smith et al., 2011; Zheng & Stahl, 2011). To achieve the needed functions, the conditions required are not always dependent on income but involve established social and political setting or structures in place. Goods and services are not the only factors affecting people's capabilities, social and environmental factors affect and impact peoples

capabilities (Robeyns, 2005). As much as the availability of commodities and social factors remain important, they are not the decisive factors towards freedom to achieve functionings (Robeyns, 2005).

3.7. Conversion Factors

Conversion factors are categorised in CA literature as personal, social, and environmental factors (Robeyns, 2005), conversion factors influence the relationship that exists between commodities and functions in CA (Hatakka et al., 2016). One of the key strengths of Amartya Sen's CA is that the framework is flexible and it allows individual differences and external factors to be incorporated in the research methodology and analysis (Hatakka et al., 2016). The conversion factors have a combination of three characteristics that encourage or hinder individual from achieving functionings (Nambiar, 2013; Robeyns, 2005). The factors include individual differences, social and environmental factors that influences and affect how individual youth use the Internet to seek jobs (Robeyns, 2005). The three characteristics identified from the conversion factors are explained as follows:

Individual differences: Amartya Sen's CA framework argues that individual capabilities play a crucial role in how people are able to use available resources (Alampay, 2006b; Robeyns, 2005). Amartya Sen's CA focus on the interrelationship that exists between ICT resources, individuals and external (Alampay, 2006b). As shown in Table 6 the individual characteristics such as the individual age, gender, skills, location, level of education and income impact how an individual can convert capabilities into functions (Robeyns, 2005).

Table 6: Individual differences that affect capabilities and functionings

Individual Characteristic	Description
Age and ICT use	Many the youth are digitally active and are more motivated to use ICT. Based on literature ICT users are not the same group of people
Gender and ICT use	Literature shows that when it comes to ICT usage, there are huge differences between male and female.
Skills and ICT use	In order to effectively use ICT, computer literacy is important. People with ICT skills are at an advantage when it comes to using ICT.
Location and ICT use	The location or distance to access ICT affects individual usage. For example, if the location if far, a person might be reluctant to travel long distance.
Education and ICT use	The educated people are expected to have more digital skills than the less
Income and ICT use	Majority of the unemployed people often Access to ICT largely depends on the availability of money and resources

Alampay (2006) states that it is important to understand the factors that affect individuals from achieving the functionings they value the most. In order to convert human agent capabilities into achieved functioning, there are a number of external factors that influence and impact an individual from achieving the potential functionings (Nambiar, 2013; Nielsen & Axelsen, 2017; Zheng, 2009). For example, an individual with a post-graduate degree may qualify for a job post, but may not get employed due to external competition (Nielsen & Axelsen, 2017). Robeyns (2016), stresses that conversion factors are not the only limiting factor when it comes to achieving functions and capabilities, factors such as policies, social and cultural norms could hinder people from achieving actual functionings.

Social factors: are characterised by social structures such as social-cultural, political setting, as well as family and friend networks (Nambiar, 2013; Osman, 2018). People's behaviour and ways of doing things are often shaped and influenced by the type of communities they come from (Robeyns, 2005). For example, social factors are classified as norms that directly or indirectly affect, govern and impact on how people live and use available ICT resources (Hatakka et al., 2016; Zheng, 2009). The effective use of ICT to access Internet among youth from the historically disadvantaged background may depend on the **environmental factors** such as the location,

political setting, weather patterns and the quality of infrastructure (Robeyns, 2005; Zheng, 2009). The external factors influence and impact the youth directly or indirectly.

3.8. Freedom

At the core of the capability approach framework lies freedom (Johnstone, 2007; Zheng & Stahl, 2011). Amartya Sen (1999) outlined that freedom remains the basic building block to the development of individuals. Freedom enables individuals to make decisions towards the choices in life they find a reason to value (Kleine, 2011; Verd & Andreu, 2011). Freedom is the process of developing and the choice that people make are dependent on personal circumstances and also based on the availability of choices (Hatakka et al., 2016). The environment and circumstance affect and impact individual freedom and capability to access resources (Egdell & Graham, 2016; Zheng & Walsham, 2008). The individual freedom to achieve functionings and capabilities depend on the personal conversion factors (Zheng, 2009). Conversion factors such as age, gender, income and environment enable an individual to make decisions that could lead to attainable functionings (Alkire, 2005).

Amartya Sen's CA focuses on functions that an individual is able to do and achieve (Zheng & Stahl, 2011). It should also be noted that not all capabilities will lead to functions (Robeyns, 2016). For example, factors such as the individual preferences and decision making have an impact on potential achievements (Zheng, 2009). Access and impact of technology could lead to positive achievements for an individual, and could also lead to negative outcomes for the other (Hatakka et al., 2016). Sometimes having many choices to choose from could lead one to achieve unintended outcomes (Sen, 2003).

3.9. Reason for selecting Alampay's Capability Approach

The CA was chosen as an appropriate theoretical framework for this study because the framework focuses on social reality and human development when using ICT (Zheng & Stahl, 2011). The CA framework focuses on the individual choices, opportunities or freedom instead on the achievements (Robeyns, 2016). The CA framework evaluates the relationship process that exists between the commodities or ICT resources an individual can dispose of (Goerne, 2010).

Secondly the framework assesses how the conversion factors affect the individual freedom to use the available capabilities to achieve the realised functionings (Zheng & Stahl, 2011). The CA has been used to analyse external factors such as social policies and environmental factors that affect the use of ICT. Therefore, since this study aims to understand how the youth in low-income communities in South Africa use the Internet. The CA has been identified as a suitable framework to address the study objectives.

The CA provides an overview of the factors and actions that an individual may go through to achieve the functionings. The CA framework evaluates the choices an individual has given the availability of options and opportunities. The opportunities can either enable or limit the individual from using available ICT resource to achieve the intended functionings (Robeyns, 2016). The CA offers a holistic view of what an individual is able to achieve from available resources. *"The CA offers a useful perspective on employment activation as it draws attention to freedom of choice, motivation, what individuals value, and their access to resources"* (Egdell & Graham, 2016, p.3). The core focus for Amartya Sen's CA is based on what the people are able to do and achieve given their capabilities when it comes to ICT (Chigona & Chigona, 2010; Robeyns, 2005).

In the past decade, the CA framework has become influential among social studies within the field of Information Systems when it comes to human development through ICT and ICT4d (Hatakka & De, 2011). The CA framework remains widely used within social sciences as a theory of human development (Nielsen & Axelsen, 2017; Zheng, 2009). CA is also adapted among ICT researchers aiming to empower and develop humans through the use of ICT (Nielsen & Axelsen, 2017). The CA does not necessarily focus on commodities, but emphasises on human freedom and ability to do and achieve available opportunities (Sen, 2003). The CA three-constructs that is conversion factors, capabilities & functionings employed in Amartya Sen's framework model had a huge influence on the choice and selection of a theoretical framework (Alampay, 2006a). Amartya Sen's CA has been praised by scholars for refocusing and broadening the information based on the human evaluation (Clark, 2005).

3.10. Studies that Applied CA in ICT4D

In the past few years, several studies from the information System field of study have adopted the CA model. Other some studies in the literature have operationalised Amartya Sen's CA framework to help address both the frameworks limitation and its alignment of technology and human development (Alampay, 2006; Zheng & Walsham, 2008; Chigona & Chigona, 2010; Hatakka & De, 2011; Smith et al., 2011). Human development remains at the core of Sens CA. Majority of the studies that used CA focused on the fundamental features of Amartya Sen's framework such as Capabilities, that led to functionings (Hatakka et al., 2016; Zheng & Walsham, 2008). The CA framework has been applied and used in both developing and developed countries (Alampay, 2006a; Tshivhase et al., 2016). A list of studies that adopted the CA framework are presented in Table 7.

Table 7: Examples of studies that applied CA in ICT4D

Author	*Usage of San's Capability Approach*	*Research Context*	*Research Findings*
Alampay (2006)	The study analysed people's capabilities and their actual usage of ICTs through assessing the impact of individual differences towards capabilities & functionings.	Philippines	Mobile phone usage, mainly on personal is still important for development as it shapes social capital and strengthening networks between individuals
Zheng et al. (2008)	CA was applied to analyse and unpack the relationship between technology and social exclusion in the e-society as capability deprivation		Recommendations: a different space for evaluating development from ICTs should be considered Various
Chigona and Chigona (2010)	Used Sen's CA to assess pedagogical use of ICT in schools	South Africa	The findings show outlined that personal, social and environmental factors affected the educators potential capabilities to use the ICTs in schools.
Smith et al. (2011)	"Applied the CA to review what capabilities can be expanded from the use of mobile phones."		
Hatakka and De's (2011)	Operationalised Sen's CA to study the use and developmental impact of Internet recourses on 34 university students in Sweden who came from developing countries	Students studying in Sweden from Developing Countries in Africa, Middle East & East Europe	
Thapa et al (2012)	Building collective capabilities through the use of ICT in Nepal:	Nepal	Social capital led to collective action. There is a complex and mutually reinforcement of relationships between individual capabilities and collective
Adaba & Rusu (2014)	E-trade facilitation in Ghana: a capability approach perspective.	Ghana	E-trade facilitation through GCNet has given improved the opportunity and freedom for people to make efficient choices when lodging import and exports declarations electronically with a single document.
Aricat (2015)	Sen's CA was used to investigate usage practices for mobile ecosystem among low-skilled migrants in Singapore.	-	
Hatakka et al. (2016)	Aims to understand the role of ICT in development using Sen's CA to propose a new framework for ICT4d.	-	Proposed more work to be added on the currently operationalise choice framework by Kleine, 2013.

3.11. Critics of CA Framework

Amartya Sen CA theory has been widely used and celebrated for its focus on human development. In many cases, the CA has been criticised for its lack of clarity and contrasting viewpoints when it comes to the relationship between the framework constructs (Goerne, 2010; Zheng, 2009). For instance, the CA offer's little understanding with regards to the relationship between technology and social development (Zheng, 2009). Amartya Sen's CA is often criticised of being individualistic, rather not looking a collective group of people (Goerne, 2010). Robeyns (2005) stated that even though Amartya Sen's CA focuses on individualism, it does not rely on ontological individualism. For example, the framework looks at social and environmental factors (Robeyns, 2005). The CA framework has been criticised for having limited or incomplete functionings. For instance, the operationalisation of the framework is necessary when applying the framework to a different study context such as the use of technology and social development (Kleine, 2010; Zheng & Walsham, 2008). Alampay (2006) warned that the CA is a complex framework to operationalise when pairing technology with human development.

Robeyns (2016) added that the CA does not clearly outline the differences between the capabilities and functions. Alkire (2002) outlined that not all multidimensional analyses are capability analyses. Even though many improvements have been added to the original CA concept, the theory has somehow become unclear with many different descriptions (Goerne, 2010).

3.12. Summary of the Chapter

This study has adopted Alampay' CA framework. The CA model has been widely used in social studies focusing on human development. In the past few years, the CA has been commended for its core focus on human development and addressing social challenges through the use of ICT (Heeks, 2010). The CA framework assesses the individual capabilities and freedom to achieve the intended functionings. The main concepts of the CA framework include commodities, conversion factors, freedom, capabilities and functionings. Despite its popularity, the CA framework has received its fair share of criticism from literature. To mitigate the limitation, several studies from both developing and developed countries have operationalised CA framework to help address the model weaknesses when it comes to ICT and social development.

4. RESEARCH METHODOLOGY

4.1. Introduction

This thesis followed qualitative principles to address its research objectives. This chapter presents the research methods employed to guide the study objectives in answering the research questions. This pertains to the techniques or steps for collecting, processing, and analysing research information. Some of the common methods employed when collecting data include interviews, surveys, observation, focus groups and document analyses (Wang & Hannafin, 2005). Research approach employed will be discussed in detail starting with the research philosophy, approach, data collection methods, ethics and possible limitation of this study.

4.2. Research Paradigm

Research studies within the field of information system have a number of research methodologies to choose from when conducting research. Interpretivism, positivism and critical research are some of the commonly used paradigms in ICT4d research studies (Bernard, 2006; Myers & Klein, 2011; Zheng & Stahl, 2011). A research paradigm is a social construct shared among researchers about how research problems should be addressed (Hevner & Chatterjee, 2010; Myers & Klein, 2011). Interpretivists believe that social reality is subjective and interpreted through multiple realities such as shared meaning (Bernard, 2006; Gomez, 2013) while positivists believe that there is only a single reality that can be measured and research should not be subjective but objective and free from external influence (Geldof, Grimshaw, Kleine, & Unwin, 2011; Zheng & Stahl, 2011). Critical research uses critical thoughts that aim to create democracy by addressing inaccurate social beliefs and systems such as political, ethical and cultural claims (Gomez, 2013; Myers & Klein, 2011; Zheng & Stahl, 2011). This research will adopt an interpretivism methodology.

The interpretivism methodology emphasises that humans create meaning through socially constructed methods (Goldkuhl, 2012; Saunders, Lewis, & Thornhill, 2007). Therefore, the interpretivism approach assumes that in order to gain a deeper understanding when assessing

how the youth use the Internet when seeking jobs, a researcher must interact and be involved through the processes of gathering data (Goldkuhl, 2012; Gomez, 2013). An interpretive method of research is often deemed suitable for studies that interview participants about their experiences when using information systems tools (Gomez, 2013; Saunders et al., 2007). This study used a case study to assess factors affecting the use of the Internet among youth residing in Mfuleni. Case studies can be defined as a social phenomenon that is carried out within boundaries of a case, such as a case focusing on individuals, groups, communities or countries (Duncombe, 2007; Egdell & Graham, 2016; Kleine, 2010).

4.3. Qualitative Approach

Qualitative research methods are primarily used for exploratory research (Khuan & Krauss, 2015). Qualitative research helps researchers understand human social interactions (Bisimwa, 2017). The approached is used to understand a social phenomenon through human interaction (Anney, 2014). In qualitative studies data can be collected using interviews, publications, text and audio (Masset, Mulmi, & Sumner, 2011). Qualitative studies can be conducted using the positivist, interpretivist or critical research (Osman, 2018). While quantitative methods can reveal the what or to what extent in a study, qualitative methods can explore the why and how things are done in certain way (Bernard, 2006). Quantitative research methods do not allow the research participants to explain or provide meaning behind choices made when answering the research questions. In addition, due to the nature of quantitative methods that use structured questions, the researcher may not be able to interpret the collected data to explain complex issues.

Due to the nature of this research, this study adopted a qualitative research method. The research question seeks to understand how the youth from low-income communities in South Africa use the Internet to seek employment. Here the qualitative research methods provides the researcher with an opportunity to interpret and make sense of people experiences within the context of the study setting.

The researcher is aware that qualitative studies have limitations. For example, data collection process can be highly subjective (O'Reilly, 2012) and data analysis can be time consuming

(Alshenqeeti, 2014). To mitigate bias, the researcher used the triangulation method to validate and support the interpretation of the findings (Jäntti & Hotti, 2016). Other methods used to ensure trustworthiness was the use of validity and reliability (Kumar, 2019).

4.4. Data Collection

In this study, primary data was collected using face-to-face interviews. The two-way communication helped the researcher acquire meaningful information during interview processes. Due to the nature of this study, the research data was collected using face-to-face interviews. The face-to-face interviews afforded flexibility during the interview process. For example, in some instances I was able to elaborate and interpret the study research questions from a different viewpoint. In addition, during the interview process the interviewer was able to keep the participant focused, thus data gets completed in short.

The case study was conducted using semi-structured interviews to allow flexibility and the freedom to expression during the interview process. The adoption of a semi-structured method enabled the researcher to have free-flowing conversation depending on the participant's answers and feedback. Semi-structured interviews allow the researcher to ask follow-up questions (Blomer, 2015), and this then helps the interviewer acquire deeper meaning and information (Chigona & Chigona, 2010).

The interview questions were divided into four sections. The first section asked questions that were related to the demographics, the second section consisted of commodity questions. The third section had a question about conversion factors, the fourth section had questions about capabilities and functioning. There was also a comment section where participants could freely express their minds as well as proving suggestions in relation to personal experiences and challenges encountered when using the Internet to find employment. Recording devices such as a mobile phone and recording devices were used as data collecting instruments. The researcher used paper and pen to capture some of the key points raised by the research participants.

4.4.4. Pilot study

Few months prior to the study research interviews, the researcher conducted a pilot study to test the study research instrument. Outcomes and feedback, assisted the researcher to address and align some of the research questions in accordance with the study framework. Once the pilot study was conducted, necessary changes were made to improve the research question instrument.

4.5. The Profile of Mfuleni and Youth

The research site chosen for this study is in Cape Town in a community called Mfuleni. Mfuleni is among the communities with high levels of unemployment, low economic growth and growing crime rates in South Africa (Statistics South Africa, 2016). Mfuleni is home to more than sixteen thousand households, with an estimated population of more than fifty thousand registered people (Census, 2011; Youth Explorer, 2016). According to Stats SA (2016), the population in Mfuleni is more than 52 000 people, see Figure 6.

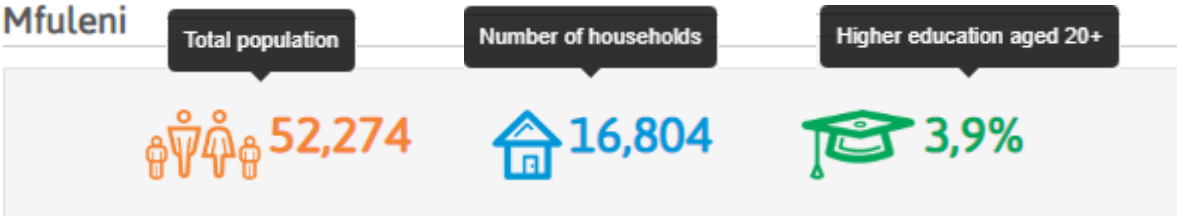

Figure 6: Mfuleni Stats (Youth Explorer, 2016).

Mfuleni is located next to a suburb called Bluedowns and it also not far from Khayelitsha and Delft townships. The Mfuleni region is one of the townships located in Cape Town that are largely occupied by black South Africans. The Mfuleni population is made up of different ethnic groups: Black people are the dominant race ant 95%, coloured people are at 3%, and the remaining 2% is made up of the Indian/Asian, White people and the international people residing within the community members Stats SA (2011). Youth are unable to secure sustainable jobs due to lack of skills and qualification (Schöer. et al., 2014; van der Merwe, Ngalo, & Redelmeier, 2018). Unemployment leads to serious consequences, impacts individual well-being, emotionally and economically (Feuls et al., 2014).

Table 8: Population groups

Group	Percentage
Black African	95,9%
Coloured	3,0%
Indian/Asian	0,1%
White	0,2%
Other	0,8 %

When it comes to education, there is a large group of the youth with a matric qualification or either dropped out. Wilkinson et al. (2017) stated that majority of the youth from impoverished background often drop out of school both while in high school and when studying towards a college and a university qualification. Only about 4% of the people from age 20 and more have higher education qualification, see Table 9 below on the far right.

Table 9: Highest Qualification

Group	Percentage
No Schooling	1,8%
Some Primary	11%
Completed Primary	4,9%
Some Secondary	49,1%
Matric	29,3%
Higher Education	3,9%

As stipulated by Stats SA (2016), Figure 7 highlighted that the dominant age group for both male and female in Mfuleni, were the youth between the ages of 35 and 20 years of age (Infonomics South Africa, 2003). The youth population in Mfuleni in 2016 was recorded at 53.3 % of the youth between the ages of 15 and 34 years (Stats SA, 2016).

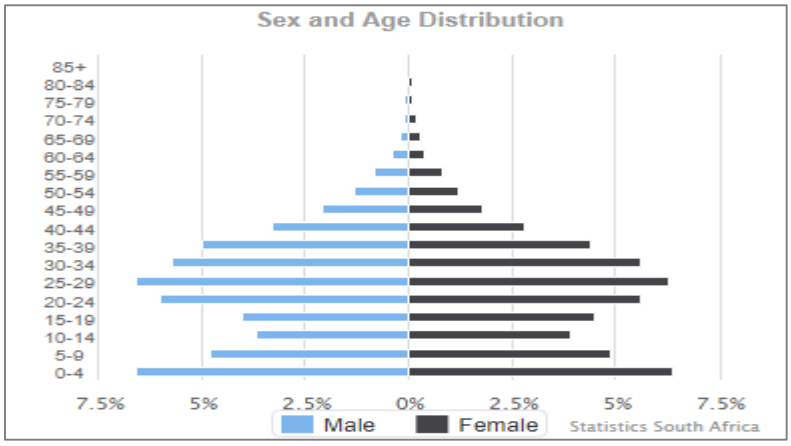

Figure 7: Sex and Age Distribution

Figure 8 shows that the average household income in Mfuleni reflects the disparities in income levels and high unemployment among families and the unemployed youth (Statistics South Africa, 2016).

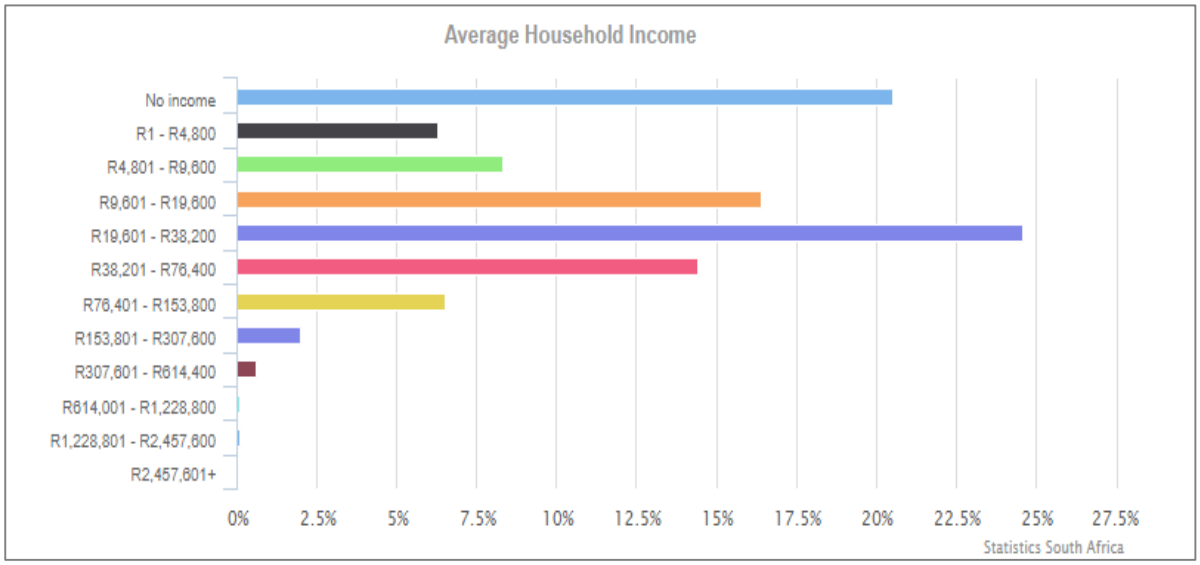

Figure 8: Average Household Income

Figure 8 also shows that more than 20% of the community members from Mfuleni are low-income earners, and majority earn very low-income that is not more than R100 000 thousand ($7000) (Statistics South Africa, 2016). Graham and De Lannoy (2016) highlighted that the lack of employment in South Africa, forces the youth to work for low paying jobs that are offer salaries that are below the national minimum wage benchmark.

Youth unemployment in Mfuleni continues to grow and has exacerbated socio-economic challenges for the youth in the area (StatsSA, 2015; Youth Explorer, 2016). The youth in Mfuleni continue to be faced with socio-economic challenges such as high unemployment, skills shortage and low income. Uneducated youth in the township also have greater chances of being unemployable (Graham & De Lannoy, 2016; Youth Explorer, 2016). Since the global recession in 2008, the South African economy did not recover in order to generate sustainable job opportunities for the younger generations (Faulkner, Loewald, & Makrelov, 2013; StatsSA, 2015).

Mobile devices such as smartphone and tablets are some of the most commonly used digital devices within low-income communities in South Africa (Graham & De Lannoy, 2016). In 2016, Nearly 60% of the youth had access to the Internet, up by 10% from the last census in 2011 (Youth Explorer, 2016). Even though majority of the youth have smartphones, data access and affordability remain a challenge for many the youth in Mfuleni. To access the Internet, the youth in townships use technological devices such as smartphones and telecentres to access the Internet (Abbate, 2017; Garrido et al., 2012).

Internet Infrastructure in Mfuleni: The Internet connection in Mfuleni is among the slowest and inconsistent when it comes to Internet speed connections (Hjort & Poulsen, 2017). People residing in rural areas and disadvantaged communities in South Africa often experience inconstant network connection speed. The quality of network connections in South Africa largely depends on the locations setting. For example, previously disadvantaged communities do not have quality ICT infrastructure, compared to the developed suburbs in South Africa (Chapman, Slaymaker, & Young, 2003; Mooketsi & Chigona, 2014).

With the high unemployment rate in Mfuleni, many people are unable to afford to buy mobile data or to visit local Internet café to browse the Internet (Abbate, 2017; Kuhn & Mansour, 2014). Therefore, to alleviate lack of access to ICT resources for the previously disadvantaged communities, the City of Cape Town implemented a pilot project called Smart Cape (Infonomics South Africa, 2003) aimed at improving access to ICT (Chigona, Lekwane, Westcott, & Chigona, 2011)

4.6. Sampling technique

Sampling refers to the process of selecting a target population. A research sample varies from one study to another. For example, sample can be characterised by a few selected individuals or a group(s) of people from a given total population of people living within a community (Borgers & Hox, 2000). For the purpose of this study, the researcher adopted a purposive sampling technique to select the study respondents. Purposive sampling is widely used in qualitative research to select a sample based on the researcher knowledge about the study and population (Ramorola, 2013). Purposive sampling also known as a selective technique heavily relies on the judgement of the researcher to investigate units to be studied (Tongco, 2007).

The target **population** for the study consisted of youth between the ages of 18-34 year old. This study population consisted of 30 face-to-face interviews within a period of four months. In terms of the demographics: both male and female youth took part in this study. It is also important to note that the youth who participated in this study were either unemployed or employed but still seeking other jobs were featured in this study. Majority of the participants in this study used Smart Cape as their main internet sources. The study participants were selected based on the following criteria: location, age group, education level, and literacy skills and access to ICTs. For more detailed see Table 10.

Table 10: Selection criteria for youth living in the township

CRITERIA	DETAILS
Location	Mfuleni
Age Group	Youth between the ages of 18-34 years
Employment Status	(Un)employed
Online Job Seeker	Using the Internet to search for jobs
Internet Access	Must have used the Internet to search for jobs prior to the research interviews
Medium	Smartphone, tablet, laptop, telecentre (Internet Café, Smart Cape).
Digital Skill	Ability to use ICT (semi-skilled users)
Education Level	School leavers, completed high school, diploma, degree

4.7. Research Timeframe

The research scope and time allocated to conduct and complete a study is critical. Cross-sectional and longitudinal studies are used interchangeably depending on the study objective (Lindenmayer et al., 2011). Cross-sectional studies are used within a specific point in time, while longitudinal studies are prolonged over a period of time (Rindfleisch, Malter, Ganesan, & Moorman, 2008). This study adopted a cross-sectional approach to collect the research data. The collection of the data done between 2017 in December and 2018 August.

4.8. Data Analysis Methodology

For the purpose of this study, thematic analysis was adopted to guide the analyses of the collected data (Braun & Clarke, 2006). The benefit of using thematic analysis in research is that the method allows flexibility when dealing with the analysis of data that is complex (Braun & Clarke, 2006; Sam, 2015). According to Braun and Clarke (2006) thematic analysis is a straightforward technique that is limited by the type of data that the researcher outlines. The direction of qualitative research stance taken by the researcher is predetermined by the choice of the epistemological stance taken (Bernard, 2006). The Six Phases of thematic analysis as outlined by Braun and Clarke (2006), were used to illustrate the process followed during the development of this research study. Table 11 present the stages that a researcher can use to process the analysis of qualitative data.

Table 11: The Six Phases of thematic analysis by Braun and Clarke (2006).

Phases	***Description***
Phase one	**Familiarising yourself with your data**: this implies that as a researcher it important to engage, read and comprehend the data pattern and themes of your research.
Phase two	**Generating initial codes:** begins when the researcher is familiar with data and is able to pull out pattern and ideas that are relevant and interesting.
Phase three	**Searching for themes:** This process begins when the researcher is in the process of identifying different codes into potential themes.
Phase Four	**Reviewing themes:** Once the themes have been identified, then the reviewing and refining process of the themes starts (adding & removing)
Phase Five	**Defining and naming themes:** at this stage, the researcher defines and refines the themes into clearly defined what each theme represents
Phase Six	**Producing the report:** When all the themes have been carefully analysed and defined, then come to a process of writing a report that represents analyses that are accurate and validated.

Thematic analysis was used to evaluate and understand the important data gathered from the study interviews. In doing so, the researcher was able to work on the emerging patterns and concepts that were identified from the respondents. Once analysed, the findings were transcribed using NVIVO as at the main transcribing application. All interviews were transcribed and saved on NVIVO application to facilitate the coding process. The NVIVO was used to categorise, analyse the data into meaningful insights (Altuna & Lareki, 2015). The research findings produced the patterns to be analysed. The collected data for this study was used to develop the research findings as well as the conclusion. Since this study is qualitative, it is important for the researcher to ensure trustworthiness in the data findings. To ensure trustworthiness in qualitative studies, researchers have realised the importance of data validity and reliability to measure the quality and accuracy of their research findings (Golafshani, 2003).

4.8.1. Data Validity

Data validity refers to a method employed in ensuring the data used in a study is accurate and credible (Chen, Huang, & Davison, 2017). Validity in qualitative research measures accuracy and rigour (Bernard, 2006; Saunders et al., 2007). Data validity in qualitative research highly depends on sampling (Bernard, 2006). It is important not to only focus on validity, but to include reliability in order to balance and unify the two methods that overlap each other (De Bruin, 2010).

4.8.2. Data Reliability

Reliability, on the other hand, is a technique used to analyse and ensure that the research findings are consistent throughout (Morgan, 2013; Saunders et al., 2007). Data becomes reliable once it has been tested with consistent results from multiple researchers using different techniques (Bernard, 2006; De Bruin, 2010). The reliability of the analysed data should be monitored for the purposes of promoting credibility and consistency when it comes to research policies (Baumann, 2016; Bernard, 2006; Chapman et al., 2003). To ensure reliability, the researcher analysed and checked the data detailed notes. To increase the credibility of a study, triangulation can be adopted to help investigate multiple sources of information (Nowell, Norris, White, & Moules, 2017).

4.8.3. Triangulation

Triangulation is a process of collecting information from multiple sources for the selected study (Saunders et al., 2007). Triangulation is defined by Chib et al. (2015) as a technique used by researchers to cross-validate research findings. According to literature, the process of triangulating the research data is often regarded as good practice (Centeno, Cullen, Kluzer, & Hache, 2010). Triangulation in this study was achieved by using data collected from the two youth agencies in Cape town that are involved in youth development programs. Saunders et al. (2007) outlined that the triangulation method is useful when analysing multiple formal interviews findings. The collected data between the youth agencies and job seekers was later compared to assess the credibility of the findings. As a result, triangulation ensured consistency during the process of the findings. Steyn and Johnson (2011), stated that triangulation helps minimises biases, and Dube (2014) added that the method also enhances the research data findings and outcomes.

4.9. Research Ethics and Approval

Research ethics is an important element of the research studies that govern the process of involving a human being as objects of research and data collection (Saunders et al., 2007). The permission to conduct this study was first obtained from the Department of Information System through the research ethics committee from the University of Cape Town. Even though all the research participants were over the age of 18 years, each participant that took part were first informed about the study objective and aims.

The consent form that was issued to each participant, informed users about the privacy and protection of their personal information. A consent form a document that is used as a form of an agreement, that the interviewee needs to read and sign (agree or decline to participate) before proceeding with the interview process (O'Bannon & Thomas, 2014). Participants were also informed that they may choose not to answer the question they are not comfortable with and they may also withdraw from the study at any given time should they wish to stop. Before conducting the interviews, each participant was informed that the collected data will only be used for research purposes. In order to protect the individual identities of the participants, pseudonym such as *participant 1, 2, 30,... etc* were used as pseudonyms. Permission to record was also requested prior to the interview.

Before conducting the interviews the study participants were asked for consent with regards to the use of a recording device. participants in this study all agreed to be recorded. All the respondents in this study were informed in advance of their freedom to both participate or discontinue at any given time.

4.10. Possible Research Limitations

Research limitation can either be external or internally influenced (Bernard, 2006; Charoensuk, Wongsurawat, & Ba, 2014). It is therefore important to highlight and explain possible research limitations that may have a negatively impact a study (Bernard, 2006). Below are some of the research limitations for this study:

- Finding a minimum sample size of 30 people for the interviews was a challenge. Due to finding few people will be interviewed, the study researcher was then forced to find youth who were attending telecentres to access the Internet.
- Due to limited finances the researcher could not travel to other communities or provinces). In my future studies, the researcher will apply for funding in advance.
- Transcribing large amounts of data was time-consuming and resulted in not meeting the planned timescales.

If given a second chance, the researcher will be more mindful of the time and in addition, do the research planning and approach smarter.

4.11. Summary of the chapter

The chapter discussed the research methodological approach used in this research. The study used an interpretivism approach to analyse the data obtained from the study participants. The triangulation method was adopted to help mitigate researcher bias of the study findings.

5. RESEARCH FINDINGS

This chapter discusses the findings of the study after application of thematic analysis to the empirical data. The chapter will start by introducing the demographic profile of the participants in section 5.1. Section 5.2 presents the ICT Commodity used as a Capability. 5.3 will discuss the capabilities associated with Internet use among job seekers and 5.4 will outline the realised functionings. 5.5 discusses the Factors Affecting Potential Functionings among Internet Job Seekers. 5.6 will outline the conversion factors affecting the freedom to use the Internet. 5.7. Then present the challenges affecting the use of the Internet and 5.8 will outline the types of online platforms adopted when job searching. 5.9 will then provide a summary of the empirical findings.

5.1. Identified Research Themes

To visually represent the themes from the collected data, a *word Cloud frequency* was used to highlight the themes. Figure 9 represents the *word tag cloud* that outlines the words in different sizes. The appearance of the words is greatly influenced by the frequency of words used by the participant, for example the larger text represents the highest used words, while smaller text represents the least common among the participants. The use of the word cloud help to provide rapid and a holistic visualisation of the main dominant themes from the study.

Figure 9: Research Word Cloud Frequency

Some of the top keywords that were extracted from the data analyses are listed in the research world cloud**.** As illustrated in Figure 9 the character ***Internet*** was the dominant theme from the data, followed by the word ***jobs***. The word ***Centre*** which represented telecentre in this study was the third-highest term used from the collected data.

Table 12 represents the summary of the study initial codes that were generated from the comments made by the study participants.

Table 12: Summary of the data finding Results

	Category	Initial Codes	Response Descriptions
Conversion Factors	Individual Factors	Internet access	*I used my phone to access the internet*
		Internet Affordability	*Purchasing Power (Data or Digital Devices.*
		Impact of using the Internet	*The internet is more efficient and faster*
		Internet usage patterns	*I use the internet on my phone only when I have data*
		Lack of Data	*With limited data you can't seek employments using the internet.*
	Social Factors	Community influence	*Based on my knowledge, I think Internet use among people in Mfuleni is Influence by friends or relatives.*
		Local Community Digital policy	*Internet access for the poor needs to be increased*
	Environmental Factors	Local Internet Café	*Internet cafés are not cheap & people only use internet café's for printing, creating a CV, or sending Fax and email.*
		Role of the Crime	*I am unable to effectively use my phone, due to the high crime rate*
		Internet connection Network	*Internet connection via phone is very poor*
		Mobile Data Cost	*Mobile data is not affordable; hence we can't use the internet in our mobile devices or at home.*
		Wi-Fi	*Locally, we don't have free Wi-Fi hotspots with free access. Available ones are private.*
Capabilities	Access/Knowledge/Experience to use ICT.	Success rate	*It is hard to find a job using the internet*
		Internet usage	*I am limited in what I can do with internet.*
		Internet usage cost	*Mobile data is expensive*
		Internet literacy	*Digital skills average*
		Experience(months/years)	*It's been few years, but I still lack digital skills*
		Internet consumption(time)	*Very low due to limited resources*
Functionings	Actual Use of ICT	The effects of the Internet	*Is a 50/50 situation*
		Access to multiple jobs	*Since using the internet to seek employment, I am now able to search for many jobs using career portals.*
		Ability to search for information	*Internet enable us to access more jobs & also improves digital skills for job seekers*
		Telecentre	*To access the internet, I always to the Smart Cape telecentre or Afrika Tikkun Services.*

5.2. Demographic Profile of the Respondents

The demographics in Table 13 represent the characteristics of the youth that took part in this study. From the total of 30 youth respondents, 18 were male and 12 were female. 60% of the participants were between the ages of 18-24 years. At the age of 18, ideally grade 12 learners will be 18 years old: yet half of them are very second grade 12 learner that are older than 18. Ten percent of learners across all grades were three or more years outside the age-grade norm. Majority of the youth only had a Grade 12 qualification. 76.6% of the youth from both genders were unemployed. 40% had an income of less than R2000 per month, while 20% had no monthly income, see Appendix A for more data.

Table 13: Individual Characteristics of Selected Youth

Youth Demographics		Quantity
Gender	Male	18
	Female	12
Age Group	18-24	18
	25-34	9
	Prefer Not to say	3
Education level	School Leaver	3
	Matric/Grade 12	16
	Diploma	6
	Degree	5
State of Employment	Employed	7
	Unemployed	23
Average Monthly Income	R0-R2000	12
	R2000-R5000	7
	R5000-R15000	5
	No Income	6
Total Participants		**n=30**

Youth respondents characteristic in this study ranged from school leavers, matriculants, with higher education students, graduates and labourers (part-time/contract). The pressure to secure jobs with no specialised degree qualification remains a challenge for the youth seeking employment. For instance, in this study majority of the job seekers were forced to search for low wage jobs such as customer services at a call-centre or as restaurant attendants, sale marketers or truck drivers.

5.3. ICT Commodity Used by the participants

In terms of ICT commodity ownership and use, the findings showed that youth from Mfuleni reported having ownership of mobile devices, such as smartphones, laptops and tablets as a medium to access information. Brands used included Samsung, Huawei, LG on smartphones and laptops from Dell, Toshiba and HP. Other means of accessing information were through communal telecentres within the community such as Smart Cape and Internet cafés. Functionality and features of the digital devices played an important role in how they used their digital devices to apply for jobs using the Internet.

From the 30 participants in this study, about 28 people used the Smart Cape centre as an alternative to search and apply for job opportunities when they needed more data. While 93% used their mobile phones to either search, respond or send emails. About 50% of the youth who participated in this study had access to laptops. Although 93% of the participant owned smartphones, only 26% could afford to buy data every week. When mobile data ran out, the majority used free resources provided by the Smart Cape centre.

Based on the findings presented on the bar graph, desktop computers from the Smart Cape telecentre were used by majority of the youth to access Internet to edit files, download files, media and send job applications. Mobile phones came second as the most used device for job applications. About 50% of the youth who participated in this study had access to laptops which were used as a substitute for their mobile phones. Tablets and desktop computer were the least used technological devices from the preferred digital devices used by job seekers in Mfuleni, see Figure 10.

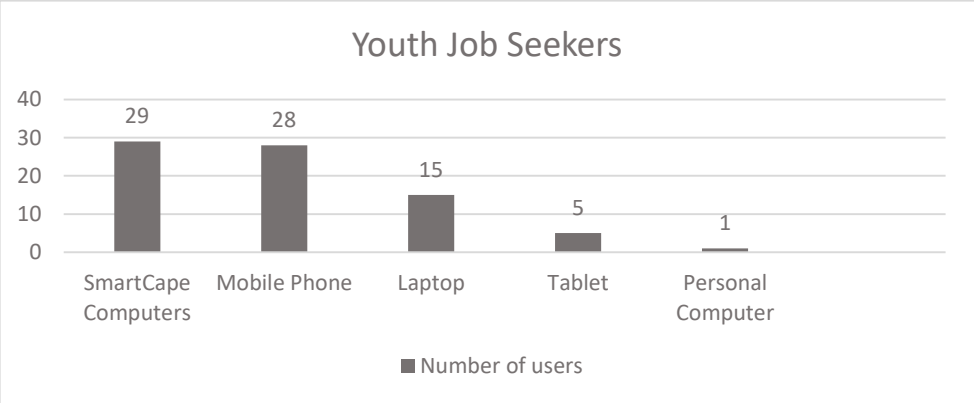

Figure 10: ICT Commodities adopted by participants

Despite ownership of mobile devices, most of the youth used the Smart Cape telecentre more than any other technological tool when job seeking. It is important to note that even though the majority of the youth in this study stated they unemployed, half had laptops. This was an interesting finding, in a sense that laptops are not cheap devices.

Table 14 on the following page outlines some of the ICT resources used by the youth from Mfuleni when seeking jobs.

Table 14: Tangible commodities used to access the Internet

Digital Device	What they use	Reason to use
SmartCape Computers	- Internet - Desktop Computers - Printers	- Access Free internet - Searching & downloading information, Read, Save, Send resume/documents/application. - Type Resume & Forward Resume - Low-cost Printing - Send & Receive messages via emails/social media
Mobile Phone	- Mobile Data/ Internet/ Wi-Fi connection. - Mobile Apps - Job Application Apps - Voice & Video Call - Notifications - Router hotspot	- More efficient (typing, reading & editing) - Edit, view and respond to email notification *(only if there is Data)* - Searching for information, Read, Save, Send documents/application. - Mobility and ease of use. - Send & Receive messages via emails/social media *(only if there is Data)*
Laptop	- Mobile Data/ Internet/ Wi-Fi connection. - Microsoft Office Tools (e.g. Word doc) - Editing. - Voice & Video Call - Skype - Job application/tools - Wi-Fi connection	- Access internet via Wi-Fi or Mobile Data - More practical and efficient - Searching /downloading information *(only if there is Data)* - Mobility & ease of use. - More practical than a phone & Tablet - Work online & Offline: Type Resume when at home - Save, send documents/application *(only if there is Data)* - Send & Receive messages via emails/social media *(only if there is Data)*
Tablet	- Mobile Data/ Internet/ Wi-Fi connection. - Microsoft Office Tools (e.g. Word doc) - Editing application/tools -	- Larger screen. - Access to mobile Data & free Wi-Fi. - Bigger screen size for (Reading & editing documents) - Efficient searching /downloading information - Enable job seekers to type & forward resume when at home *(only if there is Data)* - Mobility & ease of use. - More practical than a phone - Send & Receive messages via emails/social media *(only if there is Data)*
Personal Computer	- Microsoft Office Tools (e.g. Word doc) - Editing application/tools	- More practical and efficient (typing, reading & editing) - Send & Receive messages via emails/social media *(only if there is Data)*

Smart Cape: Is a telecentre that provides free Internet access to community members and the centre was a predominant option used by job seekers in Mfuleni as the source of the Internet. The reason to use the telecentre was due to free the ICT resources available for the community members to use. Registered Smart Cape Library users have the benefit of using the centre resources with little cost, meaning printing services are below average market prices. Internet and Wi-Fi are free at the centre, users use some of the resources daily at no cost. Along with **Smart Cape** telecentre, **smartphones** and the **laptops**, where some of the used digital devices by the job seekers living in Mfuleni to access Internet. Respondent 13 provides the reason for visiting the centre and gives the maximum allowed time to use the Wi-Fi for free:

"…My laptop does not have access to the Internet, therefore to access the Internet I go the Smart Cape centre, where I have free- Wi-Fi for 30min a day" [Respondent: 13].

The **tablet devices** and **desktop computers** were the least used digital devices in Mfuleni. Five of the participants owned and used tablet devices, while only one participant from the interviews owned a computer desktop machine.

"…Since, my smartphone has a small display screen, I prefer to use my tablet to search and apply for employment." [Respondent: 10].

"…To Access and apply for jobs I normally use free resources from the SmartCape, for example I come to the centre at least 3 times a week to search for information or send job application or check my emails for feedback" [Respondent: 13].

"…Smart Cape is the only centre where we can get free Internet access, but the problem is that we are overcrowded and this makes it hard to effectively use the resources" [Respondent: 26]. As highlighted in the literature, Smart Cape users often complain about the lack of resources in the facilities (Chigona et al., 2011).

Mobile phone: The mobile smartphones with access to the Internet were the commonly used digital devices used among job seekers. This was also found to be the case in other studies, that in developing countries mobile phones are used as an alternative digital device to view and read the large-size text (Shimray, Keerti, & Ramaiah, 2015). The smartphones enabled users to communicate efficiently and effectively with potential employers. Mobile phones as are part of

the culture of mobile reading have increased access to information (Mark West & Han Ei Chew, 2014). *"…To access my emails and apply for jobs, I buy mobile data" [Respondent: 9]*

"…Even though my smartphone screen display is small, I can still edit, view and send job applications" [Respondent: 30].

It can be argued that access to ICT resources benefit job seeker, however for those without access to mobile reading are seriously disadvantaged as this is the preferred mode of accessing information. Job seekers acknowledged that the Internet plays a crucial role when job searching. For example, the majority of online job seekers identified the Internet as an enabler towards gaining access to valuable information. The Internet has also been regarded by youth job seekers as a tool that presents them with additional job opportunities compared to the traditional method of searching for jobs. This is in line with some of the studies from the literature that Internet affords job seekers with unlimited capabilities. For example, job seekers can search for employment opportunities in other countries using digital means.

5.3.1. Non-physical commodities used to access the Internet

In this study, the participants used a different set of online web portals and mobile applications to access information about jobs. The application tools used were either web job searching engines. Besides web portals, mobile apps designed for job seekers were also adopted among jobs seekers. Table 15 below summaries some of the commodities adopted by job seekers.

Table 15: Intangible commodities utilised by job seekers

Application Type	What they use	Reason to use
Online job Search Engines	- Career24 - Jobs Indeed - Gumtree - LinkedIn - Facebook - Twitter	- "Jobs searching websites allows me to filter job types" - "To apply for jobs, I use job websites such as Job indeed." - "To search for employment, I normally use about 5 websites: - Indeed, - Career24 - LinkedIn - Gumtree, but not that much - Some I search or upload my profile" - "I sometimes use Twitter; what I like about Twitter is since each company has their own call centre you just DM (Direct Message) the company or someone within the company and you get instant feedback - "sometimes I will go through social media like Facebook searching and contacting people for jobs."
Mobile Phone Apps	- Career24 - Jobs Indeed - Gumtree - LinkedIn	- "To search for jobs on my phone, I use a job app like **Indeed** I can't train or **LinkedIn."**
Editing Applications	- Microsoft Software - Third party software tools - LibreOffice	- "To type or edit my resume, I use Microsoft Office 360" - "Once done with my CV, I send files in an Adobe reader, because in a pdf format the information cannot be changed or edited." SmartCape centre has a document tool something similar to Microsoft Word but is different.

The Microsoft Office tool was the preferred application to create and edit resumes. Due to the popularity of the online platforms, Careeer24, Jobs indeed and Gumtree were some of the highly adopted online platforms to seek for employment among youth.

5.4. Capabilities associated with Internet use among job seekers

This section will outline the capabilities achieved when using Internet among youth from Mfuleni when job searching. The identified capabilities were specified according to the participant's actual achievement accomplished when using the Internet. By using the Internet to find employment, job seekers managed to save time and financial resources. The capabilities realised from this study included; the capability to search for jobs, the capability to apply for jobs, the capability to gain knowledge, the capability to be socially connected, the capability to improve digitals skills and confidence and lastly the capability to save on financial costs. Below

are some of the main capabilities that the youth managed to achieve when using the Internet to find job.

5.4.1. Capability to search for jobs

Traditionally youth physically travelled and approached companies to search for employment opportunities. Access to Internet affords youth to search for jobs online using different career portals. To search for jobs, the majority of the youth either used mobile phones and computers with Internet access. The findings show that to minimise expenses, the majority of the respondents realised that instead of travelling and printing personal resume, it was more efficient to use the Internet when searching or applying for employment. When asked about the use of the Internet, one of the respondents provided the following explanation:

"...I prefer, using the Internet, because it cost more to go physically to submit a CV copy to the potential employer." [Participant: 1]

To search for job opportunities, the youth used information literacy skills such as using keywords to effectively find information. For example, respondents stated that when searching for jobs, they first looked at requirements such as educations and skills needed as well as the location of the job. The location was very important when searching for jobs because they needed to take into consideration the cost of travelling expenses.

"...When job searching, the Internet enables me to filter options, such as selecting a location for a preferred work area" [Participant: 2]

Google search engine and social networking platforms were also common among those who were not familiar with dedicated job searching engines.

"...To apply for jobs, I use job websites such as Job indeed, Gumtree, job search." [Participant: 1]

5.4.2. Capability to apply for a job

The Internet afforded job seekers to apply for different types of employment using their smartphones and digital devices such as laptops and desktop computers. Access to the Internet

also helped job seekers to get more job opportunities that were previously limited by distance. Some of the professional job searching engines that were used by youth included LinkedIn, Jobs Indeed, Career24, Rapid Jobs and government portal.

"...the other benefits include saving money because you don't have to travel to the job place." [Participant: 13].

The lack of economic growth and employment opportunities influenced the type of jobs youth applied for when job seeking. For example; due to desperation, pressure and need for a source of income, the majority of the respondents searched for temporary, contract and permanent jobs. Based on the responses provided by the research participants, it is evident that the Internet is effective as it enables the youth to apply and reach out to additional job opportunities using social media platforms and online job search engines. The majority of the youth in this study preferred temporary work while others wanted to further their studies while working part-time or on contract.

"...It doesn't matter whether it's part-time or full time I just take the one that comes first" [Participant: 5, 13]

Based on the responses provided by the research participants, it is evident that the Internet is effective as it enables the youth to apply and reach out in additional job opportunities using social media platforms and online job search engines. The majority of the respondents in this study preferred temporary as some wanted to further their studies while working part-time or on a contract.

5.4.3. Capability to search for information

In addition to the ability to use the Internet when job seeking, youth were able to improve interview skills and knowledge. For instance, job seekers learnt how to compile a professional resume. In addition, job seekers learnt how to prepare for an interview (to do's & not to do's). The knowledge gained helped the youth improve their confidence levels.

"Learn about the company in advance or watch tips online on how to do the interviews. Once done then you get some confidence because now you have a bit of a background as well as the knowledge." [Participant: 11]

The use of the Internet among job seekers from Mfuleni revealed that the Internet plays a key role in helping job seekers find the information needed when seeking employment. The collected findings highlighted that all respondents in this study used the did not only utilise the Internet to search for jobs online, but used traditional job searching methods in parallel. Respondent (4), outlined that:

"...Even though I still use the traditional ways of searching for jobs (visiting companies, look at the job posting, word of mouth), I use the Internet to search for jobs that are far from Cape town city." [Participant: 4]

The findings in this study also showed even though youth still used traditional methods to search for information and jobs, some acknowledged that the Internet was an effective method to search for jobs due to efficiency and rapidness. For instance, respondent 19 stated:

"...Personally, I feel like the digital method was more effective and faster." [Participant: 19]

Although Internet use remains favourable among job seekers, this study revealed that finding employment remained challenging. As pointed out by the study participants the success rate to find employment was low among job seekers.

5.4.4. Capability to be socially connected

To search for jobs the youth from Mfuleni search using different platforms such as social media and job search engines. Online job searching engines allowed job seekers to filter jobs based on qualification, locations and efficiency from home. Social media platforms such as Gumtree, Facebook and WhatsApp were among the cost-effective tools used to search for employment.

"...the type of websites that I used to search for jobs include Gumtree, sometimes I use Facebook and WhatsApp groups" [Participant: 14]

The use of social networking platforms to find informal employment among youth from low-income communities has gained popular (Sakurai & Okubo, 2016).

5.4.5. Capability to save on financial costs

Within Mfuleni it was evident that the Internet affords the youth to apply for jobs that they could have not have been able to reach due to distance and cost of travelling. The use of the Internet also afforded youth to save on printing cost when submitting resume to companies.

"...By using the Internet, I was able to cut on costs such Taxi fares and printing hard copies" [Participant: 15]

5.5. Benefits Associated to the Use of The Internet when Job Seeking

The data analyses showed that the Internet emerged as a crucial ICT tool among job seekers. For instance, participants indicated that the Internet is more efficient compared to the traditional method of job searching (van Deursen, Courtois, & van Dijk, 2014). The respondents in this study stated that the use of the Internet helps reduce travelling cost and time (Smith et al., 2011).

"...When it comes to the benefits, I will say the reason why I use the Internet is that in the olden days you had to have money then you use that money to travel around but these days you can always go online and apply for jobs without having to go physically. [Participant: 21]

Through the adopting of the Internet, youth from Mfuleni were able to apply for jobs that were previously challenging to reach due to limited access to ICT and financial resources. Internet provided youth with a wide range of job opportunities. Youth can now prepare in advance on selected companies before the interview takes place.

"...The benefits of using the Internet of that jobs get posted online and there's more information on how to apply for the jobs when using the Internet." [Participant: 9]

The youth believed that the Internet process for job application was faster, cost-effective and helped improve knowledge (Faberman & Kudlyak, 2016). This showed that the Internet had a positive impact towards on empowering the youth. Others mentioned that the traditional process of applying for jobs was also faster and more effective than the online process when searching and apply for jobs. The capability to use and access the Internet led and afforded the respondents in this study seeking employment to achieve curtain functionings.

5.6. Realised Functionings

A 'functioning' pertains to a set of achievements that an individual is able or can manage to do with available resources for example what he or she manages to do or to be. The youth from Mfuleni seeking jobs had a variety of different capabilities needed to achieve the desired functionings. For example, achieving certain functions either depended on individual skill, access to resources and knowledge. The realised functionings obtained through Internet access and use when job searching included the ability to save on finances, search for multiple job opportunities, access to information as well as personal development such as improved knowledge and digital skills as well as cost-saving techniques.

"...In using the Internet, I was able to save on travelling expenses." [Participant: 5]

"...In using the Internet, I am able to research the jobs and googling interview tips or information on how to prepare for an Interview." [Participant: 3]

5.6.1. Access to a wider job market

The findings revealed that job seekers were able to search and get access to other job markets opportunities available via online platforms and search engines. Internet enables both the unemployed and employed youth to actively search for employment resourcefully. Compared to the traditional method of applying for employment, job searching through the Internet afforded the youth from Mfuleni seeking jobs to access jobs that offer low to medium-high paying class jobs located around Cape Town. In addition, job seekers were able to find jobs opportunities located in different cities within a short period of time. Despite the reluctance to travel to other provinces, youth from Mfuleni were able to search, filter information based according to desired job markets within the country. This is in line with Mang (2012) that online career portals enable job seekers to filter and choose career options according to individual needs. Individuals with a qualification or better skilled or experienced had superior searching capabilities to find information relating to jobs.

***"...**compared to the traditional methods of searching for employment, the Internet allows us to apply for many job opportunities that are outside of the Western Cape**"** [Participant: 4]*

5.6.2. Improved knowledge & confidence

The findings suggest that job seekers managed to improve knowledge on how to prepare quality resumes as well as on how to prepare for job interviews. The respondents stated that the Internet allowed them to learn about the organisations they were interested in. For example, job seekers in this study read and gather information such as the company objectives, vision and culture. The Internet consists of different portals helping and providing job seekers with information on how to answer and ask questions in a job interview. By gaining the relevant knowledge about the job processes, the research participants were able to acquire the job interview techniques which later added confidence in the youth.

The study findings highlighted that the use and access to the Internet enabled job seekers to get access to additional information and job opportunities. The Internet also enhanced communication between the employee and employer, for example, communication through the emails. The mobile phone played a crucial role in alerting job seekers to check and respond to emails coming from a potential recruiter

"*...There is more information available online*". [Respondent: 9, 22]

For example, job seekers learnt about the 'do's and don'ts' of preparing for a job interview process. Youth participants were asked to provide feedback about their experiences in using the Internet to find employment. With limited resources such as income and information some of the potential functionings such as applying for jobs or a source of income was sometimes a challenge. However, despite the challenges encountered by job seekers when searching for employment, the findings demonstrated that they have the desire and willingness to use the Internet when seeking jobs. The following were some of the responses:

"...in terms of success rate, I have not been employed from all those companies that I applied for" [Respondent: 21]

5.6.3. Improved digital skills

The more the youth spent time searching for a job using the Internet, the more knowledge they gained. Knowledge and skills are learnt through experiences and transferred information. The

learning process on how to use mobile devices is acquired through trial and error, meaning youth from Mfuleni learnt how to use the Internet via social media.

"...To use the Internet to apply for jobs I would say since people are exposed to smartphones they know how to use WhatsApp and Facebook I will say based on that exposure and experienced people I know how to use the Internet. For example, someone who is exposed to social media also knows how to navigate when using the Internet." [Respondent: 20]

Majority of the participants in this study did not undertake or receive training on how to use the Internet effectively when searching for jobs, the development of digitals skills was in most cases based on self-learning or influence from the environment.

5.6.4. Efficiency on limited resources

Based on the study analyses, it has been realised that conversion factors have an impact on how individual job seekers achieved actual functionings. The common actual functionings achieved by job seekers in this case study included efficiency when it comes to cutting the cost and time involved in applying for jobs, especially for the unemployed youth with limited resources. Majority of the youth strongly stated that by using the Internet they were able to save on resources such as money and time. Internet use afforded the youth to save on traveling expenses.

"...Using the Internet to find jobs afford us with convenience because we are able to save the money that we already do not have" [Respondent: 11]

5.6.5. Socially connected

The study has identified that job seekers did not only use search engines to seek employment, but were also socially connected through social media when searching for jobs. Social media platforms afforded the job seekers to effectively communicate and share information about employment opportunities with friends or family members using Facebook, WhatsApp and Gumtree. Social media use among job seekers was crucial towards strengthening potential active job relationships and networks. Despite being economically disadvantaged, youth from Mfuleni were able to use their mobile devices to actively connect, share information and facilitate communication via an affordable process through social media.

"...Mostly of the jobs are posted on Facebook, sometimes on WhatsApp for example, if a company has vacancies available, the person working in the company will sometime fist post the jobs on social media... and if you are interested in your reply to the post." [Respondent: 17]

Job seekers in this study sometimes used Facebook and Gumtree to find employment. For instance, youth used social media platforms to either inform relatives that they needed employment. Or used social media to get hold of the job recruiters. Or job seekers used social media platforms to share information about job advertisement/post to friends and relatives to help populate the list of available job offers posted by either private companies or government jobs post.

5.7. Dynamics Affecting Potential Functionings among Internet Job Seekers

The identified potential functionings were one way or another constrained by conversion factors, see Table 16. For example, the job seekers choices to convert the potential functionings into realised functionings were hindered by factors such as limited income, limited information, limited access to affordable mobile data, limited digital skills and training, limited technological resources as well as poor network coverage and ICT based infrastructure.

Table 16: Summary of the dynamics affecting potential functionings

	Theme	Description
A	**Limited Purchasing power**	According to the study participants, mobile data cost affected access and use of Internet to find employment. Wit limited sources of income, youth find it challenging to get access to the ICT resources.
B	**Limited information**	With limited access to information and internet, majority of the job seekers from previously disadvantaged communities are not informed or educated about available job opportunities. Participants stated that there are no effective structures to effectively communicating with youth using ICT tools such as *social media* to engage with young people on issues affecting the jobless.
D	**Limited digital skills**	With limited active online youth platforms aimed at assisting the unemployed get digitally skilled and computer literate, majority of the job seekers from disadvantaged communities are unable to take advantage of the technology when seeking employment.
E	**Poor ICT Infrastructure**	The poor network connectivity discourages youth from effectively using the internet to search for a job. The mobile network infrastructure in Mfuleni remains fairly developed with a slow and unreliable internet connection.
F	**Limited Access to ICT Commodities**	The lack of supportive ICT tools for youth did prevent some job seekers from using the internet to apply for jobs. For the youth job seeker without ICT devices at home, traveling to a local telecentres is one of the ways to access ICT resources.

5.8. Conversion Factors Affecting Freedom to use the Internet

Based on the key finding from the study, the following were some of the major factors that affected the effective use of the Internet when job searching such as inadequate digital skills, lack of access to data, limited resources and crime. Table 17 presents how conversion factors affected the youth freedom to use the Internet when searching for employment.

Table 17: Conversion factors affecting the freedom to use the Internet

Theme		Example of Comments
Individual Differences	Age	*"I started using the internet to search for jobs after completing school. That was in 2017, and I was 18 years last years"*
	Income	*"...Mobile Data is expensive for us"*
	Gender	*"Everyone has equal access to a computer, we all get 45minute allocated", most of the men spend more time on the computers because they have more than one login sessions that they use per day.*
	Inadequate Digital skills	*"...Even though I have been using social media for some time now, my digital skills are not advance, I hope I had the necessary skills to effectively use the internet to my advantage, not only for social media."*
	Education	*"I only have matric/Grade 12 certificate, and it makes it hard to apply for a job because online most of the job post has a diploma or degree as a minimum requirement"*
	Location	*"I travel by taxi, I spend R8 twice...go and coming back and It's too far, without money I can't come to the Smart Cape"*
Social Factors	Social Beliefs	*"...Even though I use the Internet to look for jobs, I still believe that the traditional process is more effective than the* online process"
	Economic	*"...It's tough getting a job because we are not aware of the opportunities, I rely on word of mouth, jobs board post, a referral from family members."*
	Political	*"Government needs to play a role in providing the locals with affordable access to data"*
Environmental Factors	Infrastructure	*"There is only one centre in Mfuleni with free resources, but yet there are many people who come to the centre, it will better if the government can build more centres to accommodate demand."* *"...Since I do not always buy mobile data, it is hard to search for information"*
	Resources	*"here at the SmartCape Centre, we only We have 5 computers working, hence the queues"* *"Not happy about the network, it's always slow"*
	Crime	*"If you have a smart phone, or a laptop or a tablet, you can't just use or carry the devices freely, because you get robbed quickly."*

5.8.1. Individual Differences affecting Internet Use

The research findings revealed that individual factors contributed to the freedom to use the Internet when seeking jobs. The personal factors influence how the person's capabilities in using the ICT resources result to functioning**.** The respondents age had impact on how the youth from Mfuleni used the Internet to seek jobs, for example the older youth had better chances of generating income compared to the younger youth group. The income levels affected Internet

use among jobs seekers. Youth that could access and buy mobile data where more digital-savvy than the youth who did not have the means to access Internet data or Internet Café.

"I learnt how to use the internet while I was doing in High School (grade 10), and this helped me learn how to use the Internet at an early age. Now I am studying so that I can have a qualification that will help me find a job" [Respondent: 2].

Gender and Age: In this study, 60% of the participant were male, while 40% consisted of females. The age group for this study was between the ages of 18 and 34 years old. As shown in Table 10 the majority of the youth job seeker that took part in this research are between the ages range group of 18 and 24 years. Regardless of age and gender, access to commodities depended on the availability of resources. However, in this study the results showed that males tend to use the telecentre resources more than the females. This was due to most of the men having more than one accounts that were used when the initial session ends. Between male and female the capability to search for employment depended on the skill, access to information and resources. Crime had an impact on how the youth used Internet, for example participant 2 stated that:

"...*As a female when using the local telecentre, one must leave early, because it is dangerous to walk back home when its dark*"

Unemployment and Income: With high levels of unemployment in South Africa, nearly 76% of the youth who participated in this study were unemployed. The findings revealed that 40% of the participants had an income ranging between R 0 and R2000. Unemployment had affected individual use and access to the Internet when job searching. With limited income, the study participants were unable to purchase enough mobile data to browse the Internet using their mobile devices when seeking employment. With many the youth out of employment, the freedom to pay for mobile data or an Internet café were limited by financial income resources. As a result, the unemployed youth who are unable to buy or afford to pay for Internet services, therefore, rely on free Internet services provided by the government centres such as the Smart Cape and the NYDA.

"...*I only have Matric (grade 12) and I used to work but now I am unemployed and I can't afford to buy mobile data, hence I always visit the Smart Cape centre to search for job using the free Internet*" *[Respondent: 8]*

Skills/Education: Based on the study findings, regardless of the gender and age the use and influence to use Internet depended on social influences such as a friend, family members as well as the level of education. The youth that went to tertiary or high learning institutions such as colleges and universities were more equipped with digital Internet skills than those who only had Grade 12/matric/standard 10. For example, it is compulsory for all first-year learners attending colleges and universities in South Africa to undergo computer learning courses aimed at improving digital skills. In this study, the educated youth demonstrated effective use of the Internet when job searching, for example, digitally skilled and experienced job seekers managed to explore and find the information available online faster.

"...*My highest educational qualification is grade 12," [Respondent: 6]*

Location: Regardless of the place, the youth who had mobile data on their smartphones were able to use their smartphones to effectively check emails, search and edit documents saved inside the mobile device storage archives. Youth that could not afford data to browse and download information, travelled long distances to access facilities with Internet services. The average travelling distance from home to the telecentres was one to two kilometer in both directions. In some cases, depending on the weather, some of the job seekers traveled by minibus taxis to reach the telecentres. Apart from individual factors, the social and environmental factors indirectly contribute and influence how an individual can uses Internet to seek for jobs.

"... *My travelling distance from home is about 20 minutes in one direction," [Respondent: 18]*

"... *Weather conditions also play a role, for example when it rains I can't go the Telecentre." [Respondent: 2]*

5.8.2. Social Factors Affecting Internet Use

Social Beliefs: Social factors such as public opinion, and government policies are some of the key socio factors that have an impact and hinder youth from using the Internet efficiently. Responses from the research finding have highlighted that friends and family members also

influence and affects how an individual search and find employment. Even though there is high usage of mobile data among youth, the study participants stated that "*the use of the Internet to search for jobs was not common in the community especially among older people"*. Culturally, some of the respondents in this study learnt how to use the Internet through close friends and family members.

Socio-Economic landscape: Unemployment in Mfuleni is high and the majority of the youth in the community do not have quality education (Statistics South Africa, 2016). There is a large percentage of youth in Mfuleni who lack the basic necessary digital skills needed to effectively utilise the Internet to gain economic power. It is therefore difficult for the unemployed youth in the townships to have access to the Internet resources and mobile data when they have limited income (Mashile, 2016).

"*…The traditional method is faster, and effective than the online method because you get to meet the employer in person than over the email."* [Respondent: 7]

Youth participants stated that in Mfuleni there is low economic growth and due to financial constraints, it becomes challenging to travel when seeking employment.

Political Setting: Respondents highlighted that in order to help improve access to ICT, the government needs to invest more in infrastructure. Majority of the youth in Mfuleni are not employed and they need to be supported by the state when it comes to accessing basic resources. In the entire Mfuleni community, thousands of the unemployed youth rely on Internet and queue for hours waiting for their turn to access limited Internet resources available at SmartCape centre. A few years ago, one of the common Internet cafés in Cape Town called Silulo Ulutho Technologies was closed due to low turnout rates from the locals. Due to lack of money, people opted for free resources. On the other hand, Internet service providers in South Africa such as MTN, Telkom, Vodacom and Cell-C were highly criticised by the youth for fixing prices of mobile data.

"*… The government also need to be involved for example the supposed to be a portal that is free for the youth to access so talk to Vodacom and MTN to provide free services to the unemployed youth to access the Internet*." [Respondent: 14]

Community policies and norms affect individual freedom to use the Internet freely. For example, the study participants highlighted that when using the Internet at Smart Cape centre there are rules and regulations that affect how an individual uses the ICT resources available at the centre. On the other hand, to use the free Internet resources available from the Smart Cape centre, users are first requested to produce a library membership card. The policy to access and use the Smart Cape centre resources such as the Internet, Wi-Fi and printing services, users need to be first registered. Once registered each user gets 45 min a day to access and use the centre resources. Without the library membership card and registration, users cannot access the computer and Wi-Fi services provide for free at the centre. In addition, the Smart Cape centre allowed all members of the community with the library membership card are given equal opportunity to use the centre resources.

"*... the problem is that the 45mins provided here at the centre is not enough, for example last week I could not submit my application due to time limits.* [Respondent: 7]

5.8.3. Environmental factors affecting Internet use

External factors such as the infrastructure, weather patterns and service provider network affected and impacted the individual capacity and freedom to use the Internet towards finding a job. Environmental factors that often impacted the use of the Internet when job searching among youth in Mfuleni included, poor Internet connection, lack of affordable Internet telecentres, slow Internet/network connection and lack of free available Wi-Fi hotspots. Research finding outlined that the job seekers in this study where not happy with the quality of the network is poor. For example, the respondent stated that one of the biggest challenges when using the Internet was the issue of distance travelling from home to the telecentre (Smart Cape). Majority of the youth from Mfuleni walked and travelled an average time that is between 5 – 20 min from home. Due to long-distance travelling, youth job seekers are often discouraged to use the facilities. Some of the respondents argued that it will be better if:

"...It's a challenge to access internet sometime, because of the poor network." [Respondent: 18]

"...The government could build new additional Smart Cape centres around Mfuleni, to help ease the travelling time and cost." [Respondent: 1]

ICT Infrastructure: The ICT infrastructural factors that affected the effective use of Internet among youth seeking employment in Mfuleni included unreliable Internet and Wi-Fi connection and poor Internet network connection. The research respondents highlighted that in Mfuleni regardless of the Internet service providers (such as MTN, Vodacom, Telkom, Cell-C) that one uses, Internet connection remains unstable and unreliable. Majority of the respondents were highly critical with the issue of networks services, stating that in many cases, it is sometimes impossible to effectively browse and search for information online due to poor the network.

"...Depending on the location, sometimes the network connection for my mobile phone works fine, depending on the location, as a result, it becomes challenging to browse the Internet to either search or download watch videos online" [Respondent: 21]

Internet speed is also one of the biggest obstacles that prevent youth from using mobile devices to access the Internet. When asked for comments on the network issues, mobile phone users expressed desires for improved signal and connection for better usability. On the other hand, job seekers that could not afford mobile data requested that government should either subside mobile data or provide them with 500 megabytes of mobile data daily to assist the unemployed get access to information.

"...*When doing serious things or when I want to browse the Internet to apply for jobs, I do not use my phone as it is very slow and I can easily run out of data without doing what I need."* *Added... Even though Smart Cape has long queues and network issues, I still prefer going to the centre, because there at least I can manage to complete tusk."* [Respondent: 6]

Access to Resources: Access to resources remains a huge challenge for job seekers. On the other the poor quality of services in the community also hinders and discourages Internet use among job seekers. For instance, the lack of mobile data and high Internet cost, reduces the freedom to effectively use the Internet among job seekers. Majority of the participants are unemployed and therefore unable to afford quality Internet data that is sustainable. Even though job seekers did purchase data, maintaining the purchasing of mobile data for job seekers was a challenge. In

order to overcome the challenge, the majority of the unemployed job seekers in Mfuleni opted to use the free available resources provided by Smart Cape centre.

"...*Data bundles are* expensive, *hence we come to the SmartCape centre when I need to access my emails or search for jobs or information that I need."* [Respondent: 17].

The Mfuleni Smart Cape centre is only equipped with 5 computers available for a community of more than 52 000 community members. The limited resources in the Smart Cape Centre such as computers have made it challenging for job seekers to use the centre. For example, job seekers using the Smart Cape centre, including community members often complain about lack of services such as disconnected Wi-Fi and malfunctioning desktop computers. Computers in the centre are not only slow but limited in terms of access and use. Respondents stated that due to the demand of the free resources, the centre allocates equal sessions per day to all its users.

"...P*er day each user is given 30minute worth of data to use via Wi-Fi"* [Respondent: 10].

"...250Mb's worth of data to use. Job seekers highlighted that the time given daily is very limited as most of us are unable to complete a job application and data gathering on time, the systems cuts you out while working and you lose progress and data." [Respondent: 19]

The participants stated that it is difficult to access and use the Internet via their smartphones due to the cost of data. In the past five years, there have been calls from social movements and celebrities to address the issue of expensive mobile phone data in South Africa (Business Insider, 2019).

Crime affecting the use of the Internet: Due to the high unemployment rate in Mfuleni, youth end up involved in crime. Mobile devices such as laptops, smartphones are easy targets for criminals. Using a smartphone or an expensive mobile device during the day has become challenging for the people living in Mfuleni. For instance, people are often robbed of their valuable belonging at any time of the day. Holding a valuable device has become risky for many community members in Mfuleni. The unsafe environment due to high crime levels has also

impacted the freedom to use the Internet among youth seeking employment in Mfuleni.

"…when it comes to crime is not safe and you can't just use your phone you need to be aware of your environment." [Respondent: 16]

In Mfuleni the youth hide their mobile devices when travelling, meaning one must search for a safer area to be able to use their devices or be at home. Youth participants also mentioned that when the mobile phone rings, one needs to be cautious of the surroundings before using the device. Eventually, some of the youth left their smartphones at home due to the fear of getting robbed. Females were the most vulnerable as they were an easier target compared to males. Majority of the youth did not use phones while travelling even if there were incoming call or messages, unless they were in a safe space.

5.9. Challenges Affecting the Use of Internet

The study findings revealed that despite access to Internet resources, the majority of the job seekers had limited access to the Internet. This study shows that Internet use among youth living in Mfuleni, is largely affected by the availability of resources. For many of the participants, the lack of ICT resources also impacted the effective use of the Internet. Participants in this study used telecentres as an alternative to access the Internet when seeking employment. In the townships there are both private and public telecentres providing prepaid and free Internet services (Chigona et al., 2011; Cheng, Ma, & Missari, 2014). The study participants using the Smart Cape were not satisfied with the ICT services provided by the centre, stated that almost every week the server providing Internet is off-line and that affected use and access. On the other hand, some of the job seekers stated that the daily 45-minute time allocation was not enough for one to complete some job application processes (Chigona et al., 2011). To overcome the challenge of limited use of Internet at the Smart Cape Centre, majority of the youth had access to an additional account from friends and family members that they used in order to have access to a second session when the initial section runs out.

"…To access the Internet, I always to the Smart Cape telecentre or Afrika Tikkun Services." [Respondent: 3]

Beside slow Internet and network connection, limited data access along with lack of sustainable finances also affected when and how the youth participants accessed the Internet. Mobile data in South Africa remains expensive and luxury for youth without adequate income. Social media plays a huge role when it comes to affording the poor with affordable use of services with lower Internet rates.

"…Mobile data is not affordable; hence we can't use the Internet in our mobile devices or at home." [Respondent: 3]

Internet trust issues also prohibited youth from effectively using the online process. For example, some of the participants were concerned about their personal information posted online. Apart from physical crime from the community, cyber-crime remains one of the major concerns that the youth raised in this study. The female participants were more worry about the scams that are often posted online, pretending to offer legitimate jobs.

"*…The only issue with the Internet is cyber-crime and scams*" [Respondent: 9]

"I used to use Facebook, but these days they are scams you can't trust the people who post all the jobs." [Respondent: 22]

The local network from different services providers was also not reliable, because the connection signal will either be low or out of service. All the mentioned issues contributed to frustrations among youth and contributed to the lack of trust towards the use of the Internet when job seeking.

The Impact of Online job searching Engine: Frustrated online job seekers also raised their concerns with respect to the usability of the online searching engines or websites. The youth stated that some of the portals are user-friendly, however, the majority are not simple to use as one needed to first get familiar with web portal user-interface. The other pertinent issue was the inability to save progress on some of the sites, which resulted in losing progress each time the user was disconnected from the network. The lack of skills on how to effectively search and apply for jobs using the Internet has led to poor outcomes.

"*…My online job search success rate is very low."* [Respondent: 30]

5.10. Types of online platforms adopted when job searching

The findings indicate that the youth from Mfuleni use a different type of online platform to search and apply for jobs. Indeed, Career24 and Gumtree were some of the common job platforms that majority of the youth from Mfuleni used when job searching for jobs. Social media platforms such as Facebook and WhatsApp were also used by youth to communicate and share job opportunities. Facebook was also used by youth to searcher organisation with jobs offers. Youth agencies such as Harambee, NYDA, Afrika Tikkun and Smart Cape that have online resources aimed at assisting the unemployed youth from previously disadvantaged communities by providing the necessary support needed in order to improve skills and chances of finding employment.

5.11. Summary of the Chapter

The chapter discussed the study finding in the context of the CA framework. The results demonstrated that the Internet somewhat benefited the youth, for instance, the study respondents managed to improve knowledge and skill. The Internet also afforded the youth the ability to search and apply for employment using fewer resources. On the other hand, due to limited resources the majority of the youth had limited access to the Internet for job searching. Table 17 outlines the conversion factors, capabilities and functionings based on the respondents feedback. Individual differences that influence and affect an individual capability to achieve or access commodities.

6. DISCUSSION OF THE FINDINGS

6.1. Introduction

The objective of this research was to assess and understand some of the contributing factors affecting the use of the Internet among youth seeking employment in the context of resource-deprived communities in South Africa. This study employed qualitative research principles to answer the research question. The context of this study was Mfuleni, a township located in Cape Town. The purpose of this chapter is to interpret the significance of the study informed by the findings of the investigation. This chapter presents three sections. In doing so the sections discuss the study findings and comparing the outcomes with the existing literature. The first section presents the introduction of the chapter. The second section presents an overview of the research findings based on the study objectives and answers to the research questions. The last section discusses the research contributions followed by the research limitations and ending with the recommendations for future research.

6.2. Overview of Internet use among Developing Countries

This research used the CA framework to analyse and explain how the youth uses the Internet to find employment. Unemployment among youth living in low-income communities is high (Cloete, 2015). With limited resources and income, the majority of the youth from developing countries are forced to use the Internet to seek and access information about employment (Egdell & Graham, 2016). Internet use plays an important role in helping the youth get access to job opportunities. For example, Internet use among youth presents potential functionings. On the other hand, Internet use affords the youth with convenience and efficiency when seeking employment using online resources and career portals (Khan et al., 2016).

To address the research objective, the research questions were as follows:

How do the youth from a previously disadvantage township use the Internet to seek employment?

Sub-questions:

- What are the reasons the youth from low-income communities use the Internet to search for Jobs?
- What are the challenges affecting the use of the Internet among the youth seeking employment?

The research objectives are discussed in this section.

6.2.1. How do the youth in townships use the Internet to seek employment?

The youth from Mfuleni use the Internet as an alternative method to seek and apply for employment. In doing so, it was found that when seeking employment using the Internet, the youth use smartphones, tablets and desktop computers. Hjort and Poulsen (2017) stated that mobile devices enabled job seekers in Africa to access and use the Internet to search for employment. The local telecentres such as Internet café and the public telecentres as an alternative to the mobile Internet data. This is in line with the report by ITU (2014) that stated that youth from low-income communities seeking employment use telecentres and mobile phones to process the job application processes. Local telecentres in Mfuleni enabled the youth to access desktop machines that are connected to the internet as well as a connection to Wi-Fi hot-spot. Wallet and Melgar (2015), argued that limited access to ICT resources limits the number of users.

In using the Internet to apply for employment, the youth in this study stated that they first search for the job that they qualify and interesting. The next step was to check the company culture, as well as the information about the organisation. Some of the participants also checked the location of the job and if satisfied then draft a new resume or modify an existing resume to meet the job requirements. Once the resume was completed the job seekers either attached a resume letter using emails contacts or send the resume as an attachment using online career portals and social media platforms to potential employers or relative as referrals. This was also the case in a study by ITU (2014) where youth used emails to communicate with job recruiters.

Career portals and social media platforms such as Career24, Jobs Indeed, Gumtree and Facebook were used by the participants to conveniently search for employment using advance career portal services. Sam (2015) concurred that the marginalised youth with limited resources use

social media networking portals as cost effective tools to communicate and network with potential employers. Internet use affords youth from developing countries with convenience and efficiency when seeking employment using online resources and career portals as argued by Sam (2015). Khan et al (2016) in their research on tackling unemployment using ICTs hint at youth as the main victims of poverty and poses that using the Internet the youth find a convenient and efficient way of applying for jobs.

6.2.2. What are the reasons the youth from low-income communities use the Internet to search for Jobs?

Drivers that influenced job seekers in this study to use the Internet as a medium to search for employment included convenience, efficient process of applying for jobs. Job seekers that do not have sufficient means to travel and purchase mobile data, use the Internet as an alternative instrument to seek employment (Ebaidalla, 2014). Affordability, availability and convenience were identified as the main drivers of Internet use among youth from the townships:

- **Affordability**: Internet affords people the ability to access information and at the same time it also enabled the youth to save on finances.
- **Availability**: Internet is available 24/7, job seekers can search at any time of the day.
- **Convenience**: Internet access also helps youth to save both time and money resources. Job seekers do not have to spend time and money travelling.

The process of searching for employment using traditional methods has become hard and unsustainable for the youth coming from low-income communities. As highlighted by Mtsweni and Burge (2014) Internet use increases the chances of finding employment among youth from disadvantaged communities with limited access to financial resources. Similar to the other studies in literature, the use of the Internet did not only increase the chances of employment among youth, but exposed the youth to additional job opportunities (ITU, 2014). However, Chiwara et al. (2017) warned that youth should not only use the Internet to apply for a job but use the traditional methods in parallel to increase chances of employment. The online career portals facilitated and enhanced how youth job seekers create, process and store personal resumes when using the professional job searching portal services (Kuhn & Mansour, 2014; Mang, 2012a). The advances in smartphones and mobile apps have greatly influenced the

adoption of the Internet among youth seeking employment. For instance, the ability to get notification, view and send emails instantly is one of the reasons the job seekers from the townships use the online process to find employment. Khan et al. (2016) concurred that illiterate job seekers use their smartphone features to communicate, read and share information using mobile apps.

The use of the Internet as highlighted in this study has the capability to empower the poor. Chiwara et al. (2017) argued that even though the method of using the Internet to search and find employment is uncommon among youth located in the townships, the younger generation are increasingly adopting the Internet and online career portals to find employment.

6.3. Realised functionings when using the Internet to find employment

In terms of the realised functionings, the youth were able to achieve several capabilities when searching for employment**. C**apabilities can be closely linked to the individual functionings (Robeyns, 2005). In this study, the use of the Internet increases the chances of finding employment. The use of the Internet somewhat enabled the youth to search for employment opportunities effectively when compared to the traditional method of finding work. Depending on the individuals capabilities, the outcome of the functionings can be either potential or realised (Nyemba-Mudenda & Chigona, 2018). From the individual level, there were numerous opportunities generated by the Internet. For example, participants using the Internet to find employment were able to search for employment from a large pool of job opportunities available through the online portal. Through using mobile devices with an Internet connection, job seekers from the townships achieved some of the following functionings: networking with potential employees, gaining information, downloading/uploading files, editing personal resumes, sending/receiving communication using emails and social networking platforms (Sam, 2015).

Youth were able to search and apply for jobs using different online career portals and mobile apps designed to assist job seekers to find employment. The findings show that the use of the Internet when searching for employment did not only afford youth to search and apply for jobs, but the Internet use helped individuals improve personal capabilities such as digital skills and knowledge. Using the Internet to access job opportunities appears to be the most effective, efficient and cost-effective method of searching for employment among youth living in low-

income communities. The study findings indicated that the youth using the Internet managed to save on financial costs such as travelling fairs and printing resumes (ITU, 2014; Yu, 2017).

The study highlights that the Internet played a crucial role in advancing the individuals confidence, knowledge and digital skills among the low skilled youth. In addition, the use of the Internet opened possibilities that were often limited by distance and access to resources income (Alampay, 2006a). The research outcomes indicate that the youth from the townships use the Internet as an alternative tool to their traditional methods of searching and applying for jobs. This is in line with other studies in the literature that stated that the Internet enables the youth to work efficiently and productively when searching for employment (Blumel, 2015; van Deursen, Courtois, et al., 2014). Other realised functionings for the youth when seeking employment included the ability to create online job profiles and storing personal files on the professional searching engines. Literature outlined that the online job searching engines provide job seekers with capabilities such as automation, storing information, updates on new matching job post as well as filtering options (Kuhn & Mansour, 2014; Mang, 2012a). Through using the Internet, the majority of the youth managed to prepare and learn more about job culture and company information through the company portals and Google search engine.

6.4. What are the challenges affecting the use of the Internet among the youth seeking employment?

It was found in this study that the lack of income, access to internet, knowledge and limited digital skills hindered effective use of Internet among youth living in low-income communities. For example, income difference affected how and when the youth could search for jobs. According to literature, the lack of income, access to ICT resources and being excluded from Internet resources leads to frustrations (Bisimwa, Brown, & Johnston, 2018). Other barriers that hinder majority of the youth from using the Internet effectively when seeking jobs include high cost to access Internet data, poor network coverage, limited digitals skills and lack of awareness. As pointed out in literature limited access to financial, educational and material resources affected how resources can be converted into potential functionings (Hatakka et al., 2016). Chiwara et al. (2017) agreed that the lack of employment results into limited access to resources such as income and mobile data disempowered the youth from achieving the potential functionings. The study participants lacked the necessary qualifications and skills needed to

compete for employment in the job market. Thus, the majority of job seekers had a low success rate in securing long term employment.

When it comes to the educational background of the youth, the majority of the job seekers from the townships come from schools where technology was not perceived as part of education. With limited knowledge, illiterate job seekers are unable to take advantage of online resources when job seeking. As stipulated by other studies in literature, the youth from low-income communities had limited training on how to effectively use ICT tools to take advantage of the online resources (Hjort & Poulsen, 2017). The lack of ICT skills has been acknowledged as one of the contributing factors to limited use of Internet among job seekers from the townships.

On the other hand, cyber-crime remains one of the major concerns among youth using their personal information to apply for jobs using online platforms. The findings from the study participant indicated that cyber-crime, as well as the online scams that mislead job seekers. Feuls et al. (2014) highlighted that there is often discomfort among Internet job seekers when they have to store their contacts details online.

As discussed in chapter 5, research participants did not have the luxury to afford excessive mobile data, therefore majority of the job seekers in this study relied on free resources provided by the public telecentre. Youth with limited ICT resources depend on the public telecentres proving free access to Internet resources (Ramadani, Kurnia, & Breidbach, 2018). The finding indicated that in a day, the Smart Cape centre provides youth with Internet access that is limited to 30min for the Wi-Fi and 45 minutes for desktop computers. Job seekers that used telecentres to access web portal were in many cases affected by the limited time allocated per session. The lack of job offers often discourages the youth from using the Internet to find employment. Other studies have highlighted that long term unemployment leads to low self-confidence in using the Internet to find employment (Young Enterprise, 2016).

In this study, the use of the Internet presented the youth with potential and achievable functionings. The use of online resources to find employment increased the chances of getting employed. However, finding employment using the Internet is not a guarantee, therefore success depended on other factors such as individuals attribute and characteristics. Other research studies have shown that there is little evidence that reveals that the use of Internet has

successfully helped the youth find employment more easily (Ebaidalla, 2014). However, effective use and access to Internet depended on the availability of ICT commodities and conversional factors.

The study found that **personal factors** emerged as some of the leading factors that impacted the effective use of Internet among job seekers. Factors such as income, skills and education influenced how the youth used the Internet (Helsper, van Deursen, & Eynon, 2016). When it comes to **social factors**, the study found that the majority of the youth ability to use the Internet was somehow influenced by close relatives or friends. Social beliefs such as cultural influence shaped how people use the Internet in low-income communities (Helsper et al., 2016; Nyemba-Mudenda & Chigona, 2018). **The environmental factors** such as high crime rates and lack of infrastructural development affected how and when youth could use their mobile devices to access the Internet when seeking employment (Graham & Mlatsheni, 2015). This study revealed that due to high levels of crime in the townships, majority of youth were unable to carry and use their mobile devices effectively when travelling in public spaces. One of the factors that contribute to the lack of access to ICT resources is the poor infrastructure within developing countries (Kaliisa & Picard, 2017; Sam, 2015). To access the Internet when applying for employment, the youth were forced to travel long distances.

The findings show that despite the circumstances and the challenges to access the Internet, to some extent the majority were still able to get connected using social networking sites to seek for employment. In this study, the use of Internet afforded and expanded the opportunities for the youth to find employment. However, given the conditions, not all youth seeking employment benefited from using the Internet. For instance, some of the job seekers had limited digital skills therefore, did not have the freedom to search and apply for employment using online resources (Dillahunt et al., 2016). The respondents highlighted that based on the number of job applications sent over a period, only a few job interviews were achieved. To achieve the needed functionings such as finding employment was largely depended on the individual capabilities, freedom of choices, access to information and the availability of ICT resources (Egdell & Graham, 2016).

6.5. The possible contribution of this research

This study made two contributions, one towards theory and the other towards policy setting. *The study primarily contributes to the literature about the use of Internet for job searching purposes. In the global South, this will be beneficial for researchers to obtain insights about job searching activities for youth. The findings in this study can be used by policymakers, non-profit organisations and the private sector to pinpoint the gaps and challenges affecting the youth from disadvantaged communities when using the Internet to search for employment.* This study has shown that the use of the Internet to seek employment has the potential to contribute to self-development among youth in developing countries. Therefore, it remains important for decision-makers to ensure that external challenges such as social and environmental factors that hinder youth from effectively accessing the Internet are addressed and solved.

In the developed countries there are many studies discussing the impact of technology among job seekers. However, there is limited academic knowledge focusing on the challenges facing youth from developing countries when it comes to the use of Internet among job seekers. Therefore, in addressing the gap, this study has contributed to the creation of new knowledge within developing countries when it comes to the use of the Internet among the youth seeking employment in low-income communities. To demonstrate, this research revealed that the use of the Internet improves the process of applying and searching for employment. On the other hand, factors affecting the uses of the Internet were addressed in detail in chapter 5. In addition, this study shows that the adoption of the Internet among youth has afforded job seeker to acquire knowledge while advancing personal digital skills and competitiveness when applying for employment. Having outlined both the realised functionings and challenges of using the Internet to seek employment among youth, the study findings can contribute towards policy formulation and implementation when it comes to making and addressing the role of Internet access among youth unemployment in developing countries.

In addition to the projected research contributions, below are some of the areas on development that need to be at the forefront of innovation when developing solutions for youth unemployment:

- Adaptive Youth Policies focusing on the alignment of ICT4d and job creation.

- Development of free online career portals for the poor (strictly focusing on jobs)
- Expansion of ICT focus innovation centres providing:
  - Free Training centres(centres or online-based).
  - Affordable Internet platforms aimed at youth development
- Education Development (Digital skills)
- Active Management support (monitor & Report)
  - More productive IMBIZO's (A forum for discussion of policy).

Having addressed both benefits and challenges the youth come across when using the Internet to seek employment, it is critical for youth policymakers to ensure youth programs are monitored and evaluated. Because by assessing and analysing the effectiveness of online youth programs, decision-makers will be afforded with data to identify gaps and solutions toward job creation.

6.6. Research Limitation

The identified limitations included limited time, potential bias toward data collection and research findings/outcomes. Given the time and resources, this research could not achieve all the plans as stipulated in the research design. In addition, due to the nature of qualitative studies, principal researchers are often subjective in how they conduct research outcomes (Bisimwa et al., 2018; Krosnick & Presser, 2010). As such, there could be bias to the study findings. For instance, due to challenges of finding the appropriate participants as planned, the researcher was forced to approach youth entering the Smart Cape telecentre to search for employment using the free available ICT resource to access the Internet.

From the 30 participants who took part in this study, 75% of the study participants frequently used Smart Cape centre to access the Internet when job seeking. While the other 25% used their personal devices to access and apply for jobs when using the Internet. Further, the sample of this research was only limited to Mfuleni. To some extent, some of the participants may not have been honest with their responses due to lack of trust and fear of distributing personal information. This can also be linked to a lack of belief and trust in social studies.

The use of the CA framework by Alampay (2006) guided the researcher's approach to conducting this study. However, due to the complex nature and modification of the CA framework and how

it links to technology, the CA framework might not be the paramount framework for studies that adopt and use technology when it comes to the development of the human livelihoods.

6.7. Recommendations & Suggestions for future research

Based on the outlined limitations, future research should be conducted in multiple communities within provinces or countries, this could help improve the richness of the research findings. On the other hand, using comparative analyses between different classes such as race, gender, location as well as between the rich and poor could also improve the research outcomes and value of knowledge. In this research it has also emerged that there is high demand for ICT resources within previously disadvantaged communities, therefore future studies can also focus on policy setting and framework development towards improving Internet access for the poor. In addition, as part of millennium development goal Youth participants mentioned to solve the problem of lack of access to Internet, *the respondents in this study proposed that government should establish active online youth platforms with a specific focus on the unemployed the youth to access the Internet free of charge when searching or applying for jobs.*

It is important to have a collaborative effort from both the public sector and the private sector also need to design cost-effective online resources that offer such user-friendly career portals to accommodate the needs of the job seekers who are unable to afford mobile data to access information available via the Internet. To add to this request by the study respondents, other research studies can also focus on the development of cost-effective mechanisms to enable the youth to gain access to the Internet. Another alternative could be studies focusing on mobile ICT4d telecentres to help towards reaching out and making Internet access available to remote communities.

6.8. Research Conclusion

This thesis assessed factors affecting the use of the Internet among job searchers in low-income communities in South Africa, using Mfuleni as a case. Alampay's CA was selected as a suitable framework for this research. The study demonstrated that the freedom to achieve the potential capabilities depended on factors such as commodities, personal factors, social factors and environmental factors all of which affected how the youth achieved their actual functionings when seeking employment. The study finding revealed that youth from low-income

communities used the Internet as an alternative method of searching, learning and applying for employment. The finding showed that despite the challenges to access the Internet, participants in this study were able to utilise a variety of the available ICT resources to find employment. In closing, this study has identified that the use of the Internet increased the potential functionings among youth living in low-income communities when searching for employment. However, this study can safely conclude that the Internet method afforded the youth with convenience when searching for employment. However, due to limited digital skills, knowledge, education and access to the essential technological resources, the majority of the participants in this study achieved limited functionings. use does not guarantee the success of finding employment. Therefore, it is important for future research to look at youth programmes focusing on ICT skills development.

[Words: 24716]

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8. APPENDICES

8.1. Appendix A: Sample table for Participants Details.

Table Below show difference between (Un)Employed Participants when it comes to gender.

Pseudonym	Currently Employment?	Gender
Participant (1)	NO	Male (M)
Participant (2)	NO	Male
Participant (3)	YES	Female (F)
Participant (4)	YES	M
Participant (5)	YES *(contract)*	F
Participant (6)	NO	M
Participant (7)	NO	M
Participant (8)	YES	M
Participant (9)	NO	F
Participant (10)	NO	M
Participant (11)	NO	F
Participant (12)	NO	F
Participant (13)	NO	M
Participant (14)	NO	M
Participant (15)	NO	F
Participant (16)	NO	M
Participant (17)	YES *(Temporary)*	F
Participant (18)	NO	F
Participant (19)	NO	M
Participant (20)	NO	F
Participant (21)	NO	M
Participant (22)	NO	F
Participant (23)	NO	M
Participant (24)	NO	F
Participant (25)	YES	F
Participant (26)	NO	M
Participant (27)	YES	M
Participant (28)	NO	M
Participant (29)	NO	M
Participant (30)	NO	M

8.2. Appendix B: UCT ethics Approval

Please note: The ethics approval below contains a modified research title.

Faculty of Commerce

Private Bag X3, Rondebosch, 7701
2.26 Leslie Commerce Building, Upper Campus
Tel: +27 (0) 21 650 4375/ 5748 Fax: +27 (0) 21 650 4369
E-mail: com-faculty@uct.ac.za
Internet: www.uct.ac.za
@Commerce_UCT **UCT Commerce Faculty Office**

01/06/2018

Mr Khaya Kunene
Department Of Information System
University of Cape Town

REF: REC 2018/005/037

Dear Khaya Kunene,

The Use of the Internet among the Youth seeking employment: Case Study in Emfuleni Township, Cape town

We are pleased to inform you that your ethics application has been approved. Unless otherwise specified this ethical clearance is valid for 1 year and may be renewed upon application.

Please be aware that you need to notify the Ethics Committee immediately should any aspect of your study regarding the engagement with participants as approved in this application, change. This may include aspects such as changes to the research design, questionnaires, or choice of participants. The ongoing ethical conduct throughout the duration of the study remains the responsibility of the principal investigator.

We wish you well for your research.

Modie Sempu
Administrative Assistant
University of Cape Town
Commerce Faculty Office
Room 2.26 | Leslie Commerce Building

Office Telephone: +27 (0)21 650 2695/4375
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"Our Mission is to be an outstanding teaching and research university, educating for life and addressing the challenges facing our society."

8.3. Appendix C: A letter of Introduction

Department of Information Systems

Leslie Commerce Building
Engineering Mall, Upper Campus

OR

Private Bag X3 - Rondebosch - 7701
Tel: +27 (0) 21 650 2261 Fax: +27 (0) 21650 2280
Internet: http://www.commerce.uct.ac.za/informationsystems/

Request to conduct research and interview participation consent form

Dear Sir/Madam,

In terms of the requirements for completing a Master's Degree in Information Systems at the University of Cape Town a research study is required.

The researcher, in this case Khaya Kunene, has chosen to conduct a case study entitled "**Factors Affecting How the Youth in the Townships Use Internet to Seek Employment: Case of a Cape Town Township**". The objective of the research is to understand how the youth in Emfuleni in use Internet when seeking Jobs. This research has been approved by the Commerce Faculty Ethics in Research Committee

Your participation in this research is voluntary. All information will be treated in a confidential manner and used exclusively for the purpose of this study. No individual names will be recorded or published. You will not be requested to supply any identifiable information, ensuring anonymity of your responses. You can choose to withdraw from the research at any time for whatever reason, in accordance with ethical research requirements.

The data will be collected through face-to-face interviews with one individual per session. The interviews will be conducted in public spaces or telecentres. The interview per individual will take between 25-35 minutes. If you are willing to participate in this study, kindly sign the attached form and return to me at your earliest convenience.

Should you have any questions regarding this research, please feel free to contact me on **071 1468 665** or email: KNNKHA003@myuct.ac.za

Your participation in this study would be greatly appreciated, but is entirely voluntary.

Sincerely,

Name and surname [Khaya Kunene]

Signature removed to avoid exposure online

Researcher \ M.Com Student, (UCT)
Department of Information Systems
University of Cape Town
Email: knnkha003@myuct.ac.za

Supervisor (Wallace Chigona)

Signature removed to avoid exposure online

Research Supervisor
Department of Information Systems
University of Cape Town
Email: wallace.chigona@uct.ac.za

8.4. Appendix D: Consent form

RESEARCH PARTICIPANT CONSENT FORM

I, _____, consent to participate in the research on **"*Factors Affecting How the Youth in the Townships Use Internet to Seek Employment: Case of a Cape Town Township*"**

I am aware that participation is voluntary and that I may choose to withdraw from this study at any time, should I choose to do so.

_____ _____

Signature Date

8.5. Appendix E: Consent form for organisations

Consent form for organisations: Permission to Conduct Research Study

Dear Madam/Sir:

I am writing to request permission to conduct a research study at within or around the premises of you building. I am currently enrolled in the University of Cape Town, and am in the process of writing my Master's Thesis paper. The study is entitled:

"Factors Affecting How the Youth in the Townships Use Internet to Seek Employment: Case of a Cape Town Township".

I am planning to interview youth who are randomly coming to browse Internet within your facilities.

If approval is granted, Interviews will take an estimated time of 25 to 35 minutes per participant to complete. This will be volunteer to participate, and the participants will be given a consent form to sign. The survey results will remain absolutely confidential, anonymous and the premises used will not be disclosed.

Your approval to conduct this study will be greatly appreciated.

If you agree, kindly sign in the section below. Alternatively, kindly email a signed letter of permission on your institution's letterhead acknowledging your consent and permission for me to conduct this survey/study at your premises.

MY EMAIL: *knnkha003@myuct.ac.za* | ***CALL:*** *071 1468 665*

Signature: _____ Date: _____

8.7. Appendix F: Interview Questions Guide

The Research questions adopted for this study are as follows

❖ *DEMOGRAPHICS*

1. Name*(optional)*: _____
2. Age*(optional)*: _____
    a. 18 - 24
    b. 25 - 35
    c. More than: 35
3. Gender*(optional)*: _____
4. Race*(optional)*: _____
5. Highest level of education?
6. Are you Employed/Unemployed?
7. What is your average income per month? *(optional)*

❖ *JOB SEEKING*

8. What type of jobs are you looking for?
9. What type of contract (temporary or permanent) are you looking for?
10. How many years of working experience do you have?
11. Between the processes of online *job application* versus the traditional ways of applying for jobs which process do you prefer using and….*Why*?
12. When comparing online *job application* to the traditional ways of applying for jobs, which process between the two do you think is efficient?….*please explain your reason*

❖ *ICT ACCESS*

13. How do you access/use Internet?
14. What ICT device do you have?
15. What device do you use when searching for jobs online?
16. If you use your phone/tablet to answer (quest: 9), how much data do you buy a month?
17. Where do you go to access ICT?
18. How many different facilities do you use to access the Internet, *(please name them)?*
19. Do you normally PAY for the ICT services?
20. Does your community have free hotspot Wi-Fi access zones?
21. Does your community have telecentres where you get access to Internet?
22. How far are the facilities from your where you stay (home)?
23. How long do you travel to access the Internet?

1. How do you Read/send emails?
2. How do you get the email notifications?
3. How many times a week/month do you check you emails?
4. On average, how many resumes do you send a month/year using the Internet?
5. On average, how many hours per day do you spend on the Internet?
6. Besides searching for jobs online, what else do you use the Internet for?
7. How did you learn how to use Internet?

❖ *ONLINE JOB SEARCHING*

24. What program/application do you use for applying for work?
25. Why do you think are the main reasons for people to use Internet when job searching?
26. What influenced you to use Internet to search for jobs?
27. How did you know that Internet can be used to search for jobs?
28. How informed are you about online job searching?
29. What do you think are the basic skills needed in order to use Internet effectively…please list a few?
30. When did you start using the Internet as a tool for jobs searching?
31. How often do you browse the Internet to search for jobs?
32. Please explain, how do you apply for jobs using the Internet?
33. How many websites do you use when you search for a job online?
34. Which key words do you use to search for jobs?
35. What is the mode of communication do you prefer using when responding to the possible employer?

❖ *SOCIAL FACTORS ONLINE JOB SEARCHING*

36. In this community do you think people are informed about online job searching?
37. Do you think people are computer literate/skilled in this community?
38. What do your friends and family think about searching for employment online?

❖ *ENVIRONMENTAL FACTORS*

39. How satisfied are you about the quality of Internet connection in this community?
40. How many time have you seen someone getting robbed a phone in this community?
41. What factors in your environment affect your use of the Internet?
42. How satisfied are you with the quality of services/facilities provided by the Internet service providers in your area?

❖ *CAPABILITIES*

43. How do you get the information you are looking for when you search for jobs online?
44. What do you think about the use of Skype/Video calling for a job interview?
45. Through using the Internet, what are you able to do when searching for jobs using online resources?
46. How has the Internet to improve the searching process to find employment?

❖ *FUNCTIONINGS*

47. How would you describe your satisfaction with the quality of the Internet in your area?
48. What steps do you take after applying for a job online?
49. Which method of online job application do you prefer to use and why?
50. What has been the impact of using the Internet for job-searching on your success?
51. What are the benefits of using the Internet when searching for jobs?

❖ *EXPERIENCES/CONCERNS/CHALLENGES*

52. What do you think can improve the process of applying for a job online?
53. What types of challenges do you face when using the Internet to search for jobs?
54. What do you find to be the biggest problems you experience when in using the Web?