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Assessing the Influence of Mobile Internet in Aiding Job Seeking for lower-Income Earners in Alexandra, Gauteng - South Africa

Moholi, Bonolo

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Assessing the Influence of Mobile Internet in Aiding Job Seeking for lower-Income Earners in Alexandra, Gauteng - South Africa

A

Research Report

by

Bonolo Moholi

(Student number: 1946313)

A research article submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, in partial fulfilment of the requirements for the degree of Master of Business Administration

Supervisor: Mr Terence Singh

Johannesburg, 2021

Protocol number: WBS/BA1946313/107

DECLARATION

I, **Bonolo Moholi** declare that this research article is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the Graduate School of Business Administration, University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.



Signed by Bonolo Moholi at Midrand, Johannesburg 2021.

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- Research Instrument
- Ethical Clearance

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LIST OF ABBREVIATIONS

BoP	Bottom of the Pyramid
LSM	Living Standard Measure
PEJDG	Pietermaritzburg Economic Justice and Dignity Group
ICASA	Independent Communications Authority of South Africa
ICT	Information and Communications Technology
ITU	International Telecommunication Union
GB	Gigabyte
GSMA	Global System for Mobile Communications Association
MB	Megabyte
NDP	National Development Plan
OECD	Organisation for Economic Co-operation and Development
SA	South Africa
SDGs	Sustainable Development Goals
SSI	Semi-structured Interviews
TAM	Technology Adoption Model
UN	United Nations
WEF	World Economic Forum

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Abstract

Purpose – The purpose of this study was to establish the extent to which mobile internet can aid job seeking for the lower income employees. The overall goal being to contribute to on-going research on the impact of the internet access to less advantaged communities in order to influence ICT policy makers, recruitment agents and companies to aid job seekers in gaining employment.

Methodology approach – This research followed a qualitative approach aided by face-to-face semi-structured interviews with a sample size of 14 actively job-seeking participants in Alexandra, a low LSM township in Johannesburg, South Africa.

Findings – This research confirmed that mobile internet can be useful as an aid for job seeking for some lower-Income earners in South Africa. However, there are barriers that impact the full adoption rate and intense online job seeking and these include the *high cost of data* and *devices*. Apart from the costs, recruitment agency related issues such lack of trust in the jobs posted, lack of communication with applications, delays in updating online job openings and general negative online experiences when applying for jobs on mobile compared to desktop have also resulted in a slower adoption of exclusive online job seeking.

Limitations – The study focused on lower income earners only from Alexandra, South Africa. The economic value derived from owning and using a mobile phone for job seeking was not quantified and further to these participants generally do not know what their exact mobile usage and spend is and therefore ranges were used.

Keywords: *Lower income earners, Mobile Internet; Online Job Seeking*

Chapter 1: Introduction

1.1 Background

The World Bank has stated that people who live on less than USD2 a day are considered to be living below the poverty line (The World Bank, 2019). Prahalad and Hart (2002) defined this economic group as the Bottom of the Pyramid (BoP) because they are made up of the poor and underserved market, who are often excluded from mainstream economic activities. In South Africa, 30.4 million people, more than half of the population, live on less than R1,230 per month (PEJDG, 2019). The majority of the poor are black South Africans who reside in rural and semi-urban areas across the country's provinces (Statistics South Africa, 2015). The median wage for South Africans is R3,300 per month according to the analysis done by PEJDG (2019) while typical expenses or the basic level of dignity for a low-income family in South Africa requires R7,649 a month. Low-income earners are defined as those earning up to R7,416 according to the Below-Market-Rate household income segmentation 2016 PEJDG (2019).

South Africa's high poverty levels are a direct result of the high unemployment levels that measured at 30.1% in the first quarter of 2020, up from 29.1% in the fourth quarter of 2019 (Business Tech, 2020). The country's unemployment rate is one of the highest worldwide and according to the OECD Jobs Strategy report, South Africa is a bottom performer on unemployment with extremely low labour market quality and extremely high unequal distribution of wages compared to the OECD standards (OECD Jobs Strategy, 2018). The Quarterly Labour Force Survey performed by Statistics SA (2020) reported that the youth, defined as people between the ages of 25-34, are the largest

population group and are the hardest hit by unemployment. The issue of youth unemployment is one of the leading socio-economic problems that South Africa faces because it has direct negative effects on the economy such as reduced production levels, increasing social exclusion, increased crime levels and the creation of general social instability (Kingdon & Knight, 2004).

The South African government has the important task of developing policies and regulatory interventions to address the high unemployment rate challenge and alleviate poverty. Lessons are being adopted from other developing countries such as India, whose development plans focus on economic growth through being more inclusive to alleviate poverty (Department of International Development, 2018). South Africa has the National Development Plan 2030 (NDP) which aims to eliminate poverty and reduce inequality by the year 2030 and has similarities to the United Nations' Sustainable Development Goals (SDGs) that aim to address the poor directly to create the highest impact on reducing poverty levels (ITU, 2019). Just like the SDGs, the NDP has identified the Information and Communications Technology (ICT) sector as a key enabler in accelerating economic productivity and efficiencies towards alleviating the countries poverty issues (NDP, 2012).

The NDP has highlighted that under-serviced areas, where the poor reside, should be connected to the internet to reduce the country's digital divide – the uneven internet connectivity gap between the rich and the poor (National Planning Commission, 2012).

The Independent Communications Authority of South Africa (ICASA) is the telecoms regulator in South Africa with the role of ensuring basic communication services for all

(ICASA, 2020) by boosting the entry of new mobile operators to take advantage of the growing sector with the goal to increase competition so that affordable services can be provided to all (Chavula, 2012). ICASA has already managed to bring down the cost of voice call communication and is currently focused on bringing down the cost of using the internet to accelerate internet penetration (ICASA, 2020). The South African Department of Telecommunications and Postal Services has launched the 'Internet for All' government initiative which aims to connect 22 million South Africans to fixed broadband by 2020, lower internet costs and provide cheaper mobile devices (Matshediso, 2017).

The government and regulators have presented plans on how to fast track the process of connecting the poor to the internet however these plans have not clearly articulated how access to the internet will actually reduce unemployment to alleviate poverty.

1.2 Context of the Study

According to the GSMA Mobile Economy 2019 report, South Africa has connected 59% of the population to the internet due to the increase in smartphone penetration sitting at 51% (GSMA, 2019). de Silva and Kang (2011) linked the growth in internet connectivity to other growth factors such as the development of cost-effective network technologies, growth in infrastructure investment spend, aggressive subsidies on devices, imports of cheaper devices and the overall decline in data prices.

According to Mpogole, Usanga, and Tedre (2008) owning a mobile phone is an important tool for the daily lives of consumers. The authors identified the key reasons consumers owned mobile phones in 2008, these were; to make voice calls and send

text messages. Research done by Poushter and Oates (2015) across seven sub-Saharan nations and the USA, showed that in recent years the mobile phone use has progressed to accessing the internet for social networking; searching and applying for jobs; obtaining political information; making or receiving payments and obtaining consumer information.

Mobile technology advancements have provided new commercial opportunities and efficiencies for many industries (Chavula, 2012). In agriculture, farmers are using the internet to receive real-time weather information to better prepare their crops for changing weather patterns (Potgieter, 2019). The health sector is sending reminder messages to patients to take their medicine and collecting health data to monitor patient progress (Chavula, 2012). The financial sector is utilising the internet to provide quick and affordable peer-to-peer mobile money transfers (Chavula, 2012). The employment industry has developed online e-recruitment platforms to advertise jobs, conduct interviews, and to recruit and place employees (Wadhawan & Sinha, 2019).

The increase in usage is expected to reduce communication costs which will result in further increases in the access to information for individuals and firms (Aker & Mbiti, 2010). Continued growth (in terms of access to connectivity) in the telecommunications sectors (telecoms sector – here after) will further increase the flow of information and provide the best rate between buyers and sellers (Aker & Mbiti, 2010). Thus, governments and development agencies should focus on including mobile connectivity in their development plans to help alleviate poverty in their communities (Bhavnani, Chiu, & Janakiram, 2008). The authorities further argue that with the opportunities mobile internet services provide to the greater populace, the poorer are limiting their ability to participate fully in economic activities.

The GSMA has extensively studied how mobile phones can be used as a tool to improve the quality of life for the poor, and how the rapid worldwide growth in mobile phone ownership has benefited countries in productivity and efficiencies (GSMA, 2019). The United Nations (UN) has implemented programs that focus on the integration of mobile services in poorer societies to accelerate progress in its sustainable development goals (SDGs), with a key goal of poverty alleviation worldwide (ITU, 2019).

A significant use of internet for unemployed individuals is the opportunity to job hunt and according to Pavon and Brown (2010), internet usage has grown significantly due to the search for employment opportunities as evidenced by the emergence and growth of recruitment platforms such as Indeed, LinkedIn and Facebook Jobs where employers, job seekers and freelancers search for and find each other.

In addition, using the internet offers cost savings in traveling in search of employment (Bhavnani et al., 2008). Job seekers are able to search for jobs, interview and take talent assessments from the comfort of their homes, which has been especially beneficial for the job seeker during the COVID-19 pandemic.

In recent years, recruitment agencies have focused on online channels for their recruitment processes to gain a wider reach of candidates, to reduce their recruitment costs and to reduce the lengthy process of advertising to placing candidates. (Campos, Arrazola, and de Hevia, 2018). Many job seekers continue to use offline traditional channels such as, newspapers, public employment services, personal referrals and job boards despite the exponential growth in online job advertisements (Campos, Arrazola, and de Hevia, 2018). Not taking advantage of the internet will

result in higher cost, fewer candidate pools for recruitment agents, and missed job opportunities for job seekers.

1.3 The Research Problem

The debate continues to exist about whether access to the internet can improve people's lives and contribute significantly towards poverty alleviation. Many articles have written about the gap between the population and those that have access to internet in emerging countries – the digital divide. (Kreutzer, 2009, Lavery et al., 2018). The 'digital divide' remains large in developing countries such as South Africa and many believe much more needs to be done in order to close this gap because it inhibits economic potential for developing countries (Lavery et al., 2018). With South Africa's poverty issues directly linked to its high unemployment rate, South Africa needs to invest in tools that will accelerate closing the unemployment gap (Business Tech, 2020). Several researchers having concluded that the internet has a direct relationship in improving efficiencies that have resulted in a positive impact on a country's economic output to reduce poverty (Thompson & Garbacz, 2011; Cheng, Chien & Lee, 2020; Anekal & Tarafdar, 2011). Overwhelmed with such evidence, the South African government has already embarked on using the internet as a tool to reduce poverty (NDP, 2012).

The existing literature however provides very little substantiated evidence on whether the mobile internet access can aid job seeking for lower-income employees in order to reduce unemployment and ultimately alleviate poverty. Taking into account that the South African government has already invested in trying to provide internet for all and has determined that it will aid the several efforts to alleviate poverty, this study aimed

to explore and recommend practical strategies on how *mobile internet* can aid job-seeking for low-income earners in South Africa.

1.4 Research Questions (RQ's)

The following research questions emanates from the problem statement articulated in section 1.3:

a) RQ 1: In what ways is mobile internet is useful and is being used by lower income earners seeking employment in South Africa particularly in Alexandra Township in Johannesburg?
b) RQ 2: What are the barriers that are preventing lower income earners in South Africa (particularly in Alexandra Township in Johannesburg) from accessing job opportunities online?
c) RQ 3: What strategies should recruitment agents and companies use to aid the recruitment process of lower income earning job seekers online in South Africa?

1.5 Research Objectives (ROs)

In order to address the research questions presented above (in section 1.4) this study pursued the following objectives:

I. Establish the extent to which mobile internet services is useful and is being used to aid job seeking for lower income earners in South Africa particularly in Alexandra Township in Johannesburg.

II. Identify any barriers that may exist and could be preventing lower-income earners in South Africa (particularly in Alexandra Township in Johannesburg) from accessing jobs online.

III. Recommend strategies that the recruitment agents and companies can adopt to increase online recruitment for lower income job seekers in South Africa.

1.6 Purpose of the Study

The purpose of this study was to establish the extent to which mobile internet can aid job seeking for the lower income employees. The overall goal being to contribute to on-going research on the impact of the internet access in developing countries in order to influence ICT policy makers, recruitment agents and companies to reduce barriers and aid job seeking for the poor.

1.7 Assumptions and Limitations

Limitation of this study include:

- Focusing on lower income earners only from Alexandra, South Africa. Other research may consider a larger group of participants that would include other townships and less urban areas where majority of lower-income earners reside and look for employment
- The economic value derived from owning and using a mobile phone for job seeking was not quantified
- Participants generally do not know what their exact mobile usage and spend is and therefore ranges were used

Assumptions: this study assumed that;

- Most lower income employees have basic internet literacy skills to harness benefits inherent in mobile internet
- The study participants were truthful in their responses to the interview questions
- Participants did not share their earnings but were assumed to be lower income earners by their age, work experience and current roles.

1.8 Structure of the Report

The structure of this document is as follows:

Chapter 01 (Introduction): This chapter contextualizes and gives direction to the study – starting with the background and the context of the research problem. It also provides the guiding framework of the study by outlining the research objectives; research questions; the purpose of the study, limitations and assumptions of the study.

Chapter 02 (Literature Review): This chapter explores the literature surrounding the proposed research questions and objectives. The literature from previous studies was used to determine the gaps that exist and to ensure that the research problem is relevant and has not been answered by previous research. The literature is centered on the relationship between the lower-income earners and the internet.

Chapter 03 (The Research Methods and Data Collection): This chapter will provide an overview of the proposed research methodology approach to be used, the research instrument, details of the population group, the data collection process and the data analysis strategy.

Chapter 04 (Presentation of Findings): The insights established from the interviews is presented and summarized in this chapter.

Chapter 05 (Discussion of Findings): This chapter discusses the study findings reflecting on the literature review of the study and the primary objectives.

Chapter 06 (Conclusions and Recommendations): This final chapter outlines the conclusions and recommendations of this study.

Chapter 2: Literature review

This chapter presents literature on the influence of mobile internet in aiding job seeking and attempts to synthesize key threads that were key to answer the research questions. This chapter uses the Technology Adoption Model (TAM) to assess the relationship between lower income earners and the job searching related capabilities enabled by the internet also reflecting on the barriers to internet access to this category of the population. The literature review also evaluated whether there is existing evidence that internet can be used to improve the employment levels of the poor. The chapter was structured around the framework presented in Figure 2.1 below.

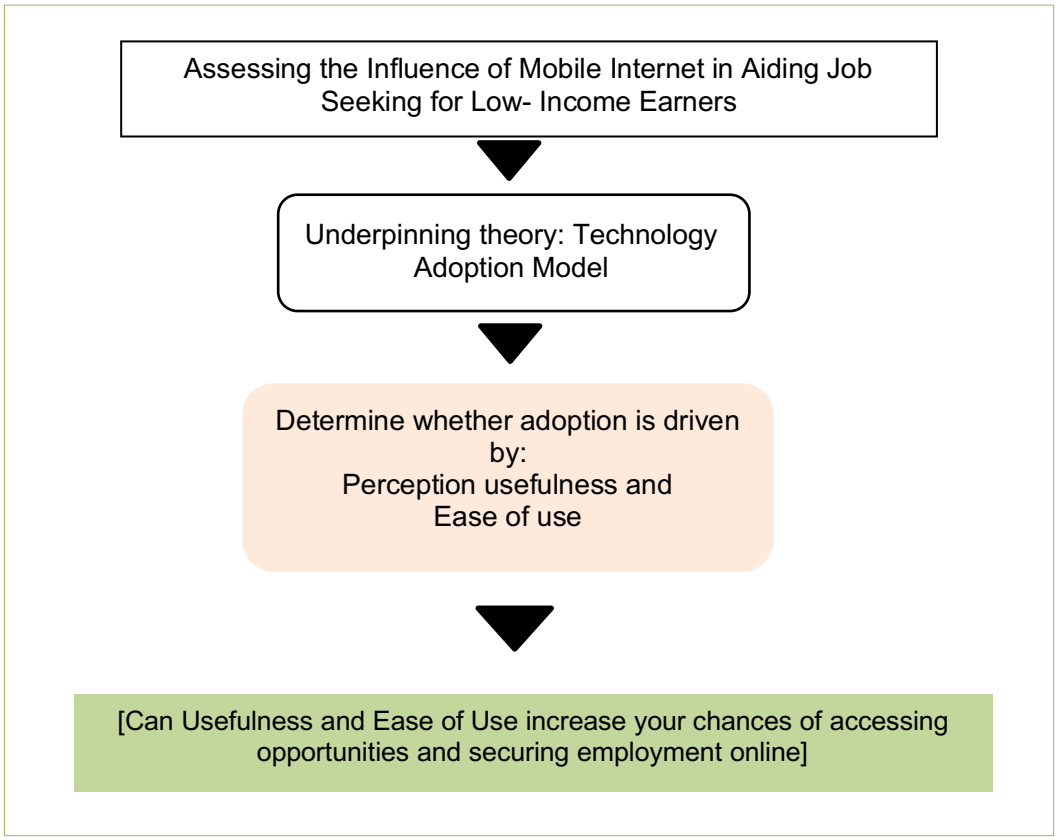


Figure 2.1: **Literature Review Synthesis Framework** (Researchers own illustration)

2.1 The underpinning theory

The Technology Adoption Model (TAM) has been applied in various online adoption research to predict the behaviors of individuals using new technologies and will be used for the study (Liao & Lu, 2008; Mehta, Morris, Swinnerton & Homer, 2019). The model focuses on two factors in decision making process in the adoption of technology services: Firstly, the perceived usefulness of the service being provided and the perceived ease of use of the service being provided (Liao and Lu, 2008). Perceived usefulness has been defined by Saade' and Bahli (2005) as the degree to which a person believes that using a particular system could enhance their performance and Perceived ease of use has been described as the degree to which a person believes that using a particular system is free of effort (Saade' & Bahli, 2005).

Results from investigations by Liao and Lu (2008) indicate a relationship between user perceptions towards online learning and the adoption rate of the technology. They argue that adoption rates are mostly impacted by the experience users have with the technology and so perceived usefulness has more positive outcomes with experienced users against inexperienced users. They concluded that time using the technology is needed to modify perceptions of users (Liao & Lu, 2008). Saade´ and Bahli (2005) concluded that perceived ease of use had a positive effect on perceived usefulness but was not significant in adoption of services.

There is minimum research on the adoption of online job seeking in developing countries such as South Africa. This research will try determine the adoption levels of the online job seeking technology and if perceived usefulness and perceived ease has an impact on the adoption rate for lower income earners job seekers.

2.2 The Relationship between the Lower Income Earners and the Internet

2.2.1 The Internet and the Economy

The assertion that improved telecommunications has a positive impact on income, growth and efficiency in developing countries has been raised by researchers (Thompson & Garbacz, 2011). Cheng, Chien and Lee (2020) studied the impact of internet on the economy by analysing 72 countries and results showed that internet penetration in high-income countries does lead to economic growth improvements, however in middle to low-income countries this was not the case. Hernandez, Faith, Martín, and Ramalingam (2016) found that it was not possible to capture the sole impact of internet services on economic growth, but rather researchers should include ICT investment, computers, the internet and mobile phones as part of the investigation of the relationship. Vu (2011) supported the notion of positive economic growth due to the combined effect of the availability of ICT and other types of access channels such as personal computers, mobile phones and the internet. On the contrary, Crandall, Lehr and Litan (2007) found no significant effects of internet penetration on the GDP. The researchers however, did find a relationship between broadband and employment figures. The authors' findings showed that a 10 percent increase in broadband lines led to a 0.2 to 0.3 percent increase in a country's employment figures (Crandall, Lehr & Litan (2007)

2.2.2 The Internet and its Impact on Job Seeking Activities

The immense lack of skills to meet the demands of skilled labour requirements is the reason for high unemployment in Sub-Saharan Africa according to Hino and Ranis

(2013). The shift in economic policies away from labour-intensive jobs towards high productivity, technology focused jobs has created a large unemployment gap for the unskilled labour force and caused the country to have a low labour market absorption rate (Graham & Mlatsheni, 2015). Graham and Mlatsheni further argued that household and personal factors for the poor such as high transportation costs that are required to apply for the job opportunities, lack of information on how best to apply for jobs and limited access to the internet or internet cafés are also important factors that should be considered as reasons for the high unemployment.

In addition, a study conducted in 2009 that examined the impact of household access to the internet on job searching capabilities in German found that as internet access increased, jobseekers increased their use of the internet as a job searching tool Stevenson (2009). Denzer, Schank & Upward, (2018) reported that using the internet allows job seekers to search quickly for vacancies over a wider geographical area at a much lower cost. The same research identified that having a home computer with internet access increases one's online search intensity by 39 percentage basis points higher than those that did not have a home connection and also increased the job seekers job finding rate.

Stevenson (2009) studied the relationship between employment search intensity and internet connectivity, and observed that the vast majority of job seekers who used the internet intensely were already employed and had full access to the internet at their employment. Consistently, Hjort and Poulsen (2017) also observed a positive relationship between fast internet and employment. The six African countries that Hjort and Poulsen analysed showed that the probability of an individual being employed increased by 3.1 percent in South Africa when fast internet became available.

However, in more remote locations employment levels were less affected by the arrival of fast internet. They also found the positive employment results came from skilled job seekers who generally have better access to the internet due to the workplace internet offerings when compared to unskilled job seekers (Hjort & Poulsen, 2017).

Kuhn and Mansour (2014) focused on understanding unemployment durations in the USA and concluded that the internet was effective in reducing unemployment durations when compared to offline job seekers. However, the same research found that the reduced unemployment durations impacted white unemployed job seekers more than black unemployed job seekers due to racial gaps in internet access between the two groups. Furthermore the same authorities argued that that the young unemployed job seekers made very little use of the internet but when they did, this was highly effective in securing jobs through contacting friends and relatives online.

According to researchers Green et al., (2012), although the internet has increased significantly in Britain from 2006 with increased online job searches, age and one's highest qualification were key factors affecting individuals in using the internet for job seeking. These authors found that older job seekers and those with lower education levels did not access employment opportunities via internet. Green et al., (2012), also observed that job seekers outside major metropolitan areas were less likely to use internet for job searching. (Green et al., 2012)

2.3 Perceptions that influence the Use of online Job-seeking

Wadhawan & Sinha (2019) studied job seeker perception towards job portals when seeking employment and found that the decision to use online recruitment by millennial job seekers was mainly influenced by ease of use while searching to submitting their applications, career opportunities, quality of the platforms used and trust of the platforms. Kristen and Brahmana's (2013) findings added that, ease of use coupled with enjoyment and usefulness were important factors in job seekers using the internet to find employment.

Brandão, Silva and dos Santo's (2019), research on online job seeking in Portugal revealed that only 49% of online jobseekers perceived the process of job seeking to be positive. The reasons cited by these authorities included that the internet facilitates access to companies, is convenient and the process is quicker than traditional channels. However, as cited by the same authorities, 26% perceived online job hunting negatively due to the low response rate when applying online, dissatisfaction from the impersonal process and safety issue around personal information.

Campos, Arrazola, and de Hevia (2018) gathered information on Spanish Labour trends on the most commonly used channels by recruitment agencies and found that although the internet had experienced the most growth over the years compared to more traditional channels such as employment agencies and newspaper advertisements, recruitment agencies preferred to recruit their employees through personal referrals instead of the internet.

It should also be noted that several researchers also found that online recruitment largely took place is large companies that were mainly in the financial or professional services sector activities (Campos et al, 2018; Parry & Tyson, n.d.).

2.4 Barriers impacting the Ease of Use of online Job seeking

2.4.1 High costs of data

According to de Silva and Zainudeen (2007), it is important to understand the communication affordability issues faced by the poor. de Silva and Zainudeen (2007) analysed how much low-income earners in developing countries, such as India, Sri Lanka and Nigeria, spent on mobile phone services and how this expenditure pattern varied at different levels of income. The authors found that poorer households spent between 4 to 8% on telecommunication services, much higher than what the rich spent on the same services. de Silva & Zainudeen (2007) argued that the internet should be considered a necessity and because it exists in every household's total expenditure and expenditure increases as household income decreases, it therefore should be subsidised through regulations.

At the Africa Summit in 2007, Paul Kagame (President of Rwanda) summarised the value of the mobile phone and the requisite internet, "… in 10 short years, what was once an object of luxury and privilege, the mobile phone has become a basic necessity in Africa" (ITU,2008).

Research by Barrantes and Galperin (2008) further reiterated the concept of the poor paying more for internet services. They observed a price premium for the poor when they collected prepaid prices for voice and data and income levels from seven Latin

American countries. They also found that poor people paid more for internet services when they opted to better control of their bills using prepaid services because prepaid has a higher charge per unit (Barrantes & Galperin, 2008).

Various researchers identified several reasons why internet is limited and expensive for the poor (Bhavnani et al., 2008; Anekal & Tarafdar, 2011). Anekal and Tarafdar (2011) firstly noted a lack of policies by regulators, which led to a failure in stimulating competition and thus higher pricing. Secondly, the development of infrastructure in poorer communities is hindered by historically poor public-private sector partnerships. Thirdly, underdeveloped basic infrastructure as one of the reasons and lastly (fourth), weak adoption levels due to low levels of computer literacy amongst the poor coupled with decreased disposable income can makes investment in such areas unattractive to businesses.

Making the poor pay higher rates for internet has impacted internet penetration levels and according to Statista (2019) 59 percent of South Africans are connected to the internet however only 65% of them actually use the internet regularly. Guesalaga and Marshall (2008) concluded that low-income earners use the internet sparingly by adopting strategies to manage their expenses such as buzzing (dialling the recipient then dropping the call before airtime is consumed), sharing phones, and texting instead of making calls (Donner, 2008). These cost management strategies limit users in communicating effectively and unlocking the full value that the internet can offer (Guesalaga & Marshall, 2008).

2.4.2 *High costs of devices*

Apart from the high cost of data bundles, the cost of mobile devices was cited as another major hindrance in accessing mobile internet (Economides & Grousopoulou, 2009). Economides and Grousopoulou, (2009) conducted a study in the European Union on the cost and importance of mobile internet among students and found that almost all of the participants have a mobile phone, but majority of them did not have internet access at home. The same study found that many participants still owned 2G mobile phones due to the perception that, 3G mobiles and services were expensive and many were not aware of what 3G could offer them.

According to the ITU (2006) the use of smart phones is nearly double as that of personal computers. However, due to the unequal distribution of resources, many people still cannot afford buying smartphones. Nonetheless, numerous researchers suggested that mobile phones have reduced the cost of communication and made it easy to access people far away. Aker and Isaac (2010) argued that although mobile phones are considered expensive, they have various financial benefits that outweigh the costs.

2.4.3 *Mobile Internet Literacy*

Mobile Literacy is defined as the use of mobile technologies to aid learners to expand their knowledge and empower them digitally by using mobile phones (Pegrum, 2014).

In Africa, with the development in the telecommunications market, the mobile devices are growing from contacting gadgets in to servicing delivery podiums (Economides & Grousopoulou, 2009). This has transformed lives of many people, yet most of the population have no idea how to earn through these platforms. Mac Callum and Jeffrey

(2014) found a relationship between online literacy and higher perceptions of mobile technology and its uses. The same study found that it is important to reduce ICT anxiety as this contributed to lowering the ICT adoption rate. The authors recommended integrating ICT literacy into the tertiary environment for students to ease anxiety and build positive perceptions in younger users, promote mobile learning initiatives, provide IT support and training (Mac Callum & Jeffrey, 2014).

2.6 Literature Review Key Findings

The literature review showed that there is no direct relationship between internet penetration and economic growth for developing countries such as South Africa unless the relationship is viewed from a more holistic perspective which includes ICT backbone and backend infrastructure and the access devices (Cheng, Chien & Lee, 2020; Hernandez et al., 2016). Some key findings from this literature review are outlined below;

- Researchers found no significant effects of internet penetration on the GDP (Crandall, Lehr & Litan (2007). However, the researcher established a relationship between broadband and employment figures. Crandall, Lehr and Litan (2007) findings showed that a 10 percent increase in broadband lines led to a 0.2 to 0.3 percent increase in a country's employment figures.
- The literature confirms that household internet access is a key factor in increasing adoption rates for online job seeking (Denzer, Schank & Upward, 2018)

- Having a home computer and connection increases the job seekers online job search intensity (Denzer et al., 2018). It was also confirmed that when the internet is fast the online job search intensity increases (Hjort & Poulsen (2017).
- Coupled with the observed high cost of data and mobile devices, the poor and lower-income earners will continue to use internet sparingly that will limit them exploring and applying online for job opportunities (Guesalaga & Marshall, 2008).
- The literature established that majority of job seekers who used the internet intensely are those that are skilled, are already employed and able to take advantage of the full internet access they receive at their workplace to conduct their online job searches (Hjort & Poulsen, 2017).
- One's age and highest qualification also determines one's capability to take advantage of online job seeking (Green et al., 2012). Contrary to this advantage, South Africa is a developing country with many job seekers who do not have high qualifications, many are semi-skilled and unskilled workers that would have little to no internet access. Further to that, the country has lower internet penetration levels compared to developed nations and in addition lower home internet connectivity contrary to the number of youths in South Africa.

2.7 Chapter Summary

This chapter reviewed the key issues related to The Relationship between the Low-Income Earners and the Internet and the barriers they face that will impact the adoption rate of online job seeking.

The next chapter details the research methodology used in this study.

Chapter 3: Research Methods and Data collection

The aim of the research is to examine whether the mobile internet can aid job seeking for the lower- income employees in South Africa. This chapter outlines the overall strategy (research methods and design) that was be followed to answer the research questions presented in chapter 1.

3.1 Research Approach

The objective of qualitative research methods is to gain an in-depth understanding of a given problem (Queirós, Faria & Almeida, 2017). Qualitative research focuses on the motives, aspirations, beliefs and attitudes according to Maxwell (2013) and aims to build relationships with the participants.

Merriam (2009) writes that qualitative researchers are interested in understanding how people make sense of their world and experiences they have in the world. The same authority argues that the data collected can be used as an object for analysis or as a proxy for experience.

Choy, (2014) analysed the strengths and weaknesses of qualitative research methods and through his case study research a key strength he identified with the method is that the researcher can gain valuable insights into new emerging topics such as technology. In qualitative research, data is usually gathered from fewer participants that provide insights that represent a bigger population and the research can be done in an informal environment to (Queirós et al, 2017).

A qualitative research methodology was used for this study with an intention to establish how the lower income earners in Alexandra, Johannesburg in South Africa experience new technologies such as mobile internet with respect to job searching. The overall intention was to understand if there is a problem, the extent of the problem and develop tailored intervention. The research needed to be conducted face-to face to observe the behaviors of the participants and encourage them in the discussion. The research needed to be conducted in Alexandra at the participants convenience to ensure a high participation rate.

3.2 Research Instrument

Semi-Structured interviews (SSI) are conversational discussions with individual participants in qualitative research. The questions asked in the SSI are a blend of closed- and open-ended questions that ask why or how questions to better understand the participants experiences (Adams, 2015).

Semi- structured interviews (SSI) allow for discussions rather than a straightforward question and answer. Speaking to participants has advantages such as the ability to build personal connections with participants during the interview and encouraging participants to answer questions in detail and honestly (James & Sjef, 1995). In other words, participants were able to provide their unique job seeking experiences using their mobile phone and this helped the researcher to better understand if owning a device has improved their job seeking activities. Creswell (2007) noted that speaking to participants has disadvantages in the form of shy participants that need more encouragement to speak and share ideas.

Researchers such as Hove & Anda (2005) and Adams (2015) write about how semi-structured interviews have high costs and that he quality of the collected data is determined by how the interviews were conducted. To reduce these costs, Hove & Anda (2005) recommend planning through estimating the required effort beforehand, ensuring that the interviewer is knowledgeable in the theme, the interviewer should interact well with interviewees and the interviewer must use the correct tools for the interview.

Adams (2015) suggests conducting focus groups to reduce the time and labor cost of preparing, setting up, conducting interviews and analysing feedback. He however recommends continuing with the Semi-structured interviews if the researcher wants to ask probing questions on topics that may prevent participants from revealing too much when discussing with peers in a focus group environment and most importantly for new research topics with unknown issues.

In order to evaluate the influence of the internet on employment prospects for the lower income earning job seekers, individual face-to-face semi-structured interviews were used as the main research instrument by the researcher.

The interview questions were aimed at finding out the why and how participants have used and benefited from using mobile internet for job seeking (See Annexure B and C for the interview process and questions - respectively. Question areas were linked back to the study objectives and followed a structured approach.

3.3 The Population Sample Group

The participants of the study owned a mobile phone and were low-income earners with their employment status being formally employed or unemployed but seeking

employment. The participants all reside in the low-income township called Alexandra in Johannesburg, South Africa. Alexandra has a population of 179,000 people and is considered one of the poorest urban areas in the country (Stats SA, 2011). The participants cut across sex and were within the working ages between 18 and 40.

3.4 Study Sample

Hagaman and Wutich (2016) found that 16 interviews were adequate to identify themes from homogeneous groups. Francis, Johnston and Robertson (2010) concluded that data saturation is achieved when no new ideas emerge from the interviewees and their interviews showed that the ideas stopped at 14 interviewees. Fourteen (14) participants were invited for individual in person interviews for one (1) hour at a venue in Alexandra. The sample was designed to represent those who are formally employed or unemployed participants who have used their phones for varying reasons (ensuring that they qualify within the criteria that define the target group as stated above).

3.5 Procedure for Data Collection

The data collection was through face-to-face discussions and observation. The participants were invited to participate two weeks prior to the interviews. The participant signed the Consent forms listed in Appendix A then the researcher explained the interview process in the order listed in Appendix B consistent with the ethical guidelines of the University of Witwatersrand. The interview participation was voluntary, and participants had an option to withdraw at any time without penalty. The interviews focused on understand whether mobile internet and phones are being used for job seeking activities. This also included checking for barriers preventing the

adoption of online job seeking and if there any there are improvements required from any of the stakeholders to improve online job seeking adoption. The questions listed in Appendix C were used for the interview.

The interviews were limited to 30 minutes and all sessions were recorded with consent granted by the participants – refer to Appendix A for the consent form and Appendix B for the interview process. The interview questions were divided into two sections (refer to Appendix C): section 1 focused demographic details of the participants such as age, occupation, mobile-phone ownership, usage and spend information. Section 2 sought to establish the participants perceived uses, benefits and issues with online job seeking.

3.6 Data Analysis and Interpretation

The researcher listened to the recorded interviews, consolidated the recorded data with the notes made during the session and wrote the transcripts. Participant's names were replaced with codes on the transcript to keep the responses confidential. The descriptive data was numbered based on the themes formed during the literature review. Themes were created based on the literature review findings and those identified during the organising stage. Responses were assessed for commonalities and differences on each theme. The data collected was compared to the literature review to form conclusions.

In summary the analysis of qualitative data involved recording, writing notes and segmenting the overarching themes and patterns that may come from the interviews.

3.7 Issues of Rigour – Validity and Reliability of the Research

Validity in research determines how accurately the findings are reflected in the data (Noble & Smith, 2015).

Qualitative research depends on experiences and viewpoints at a particular point in time and may change according to biases at the time of research. For qualitative research to be '*valid'* and '*reliable'*, it requires a consistent approach of analysis to avoid possible biases that may influence the findings. Reliability can be achieved by delivering a trustworthy report by ensuring that researcher decisions are clear and transparent so that other researchers are able to arrive to the same findings (Noble & Smith, 2015).

Trustworthiness is an essential concept in producing reliable, high quality research for qualitative research methodologies (Daniel, 2019). A trustworthy report will produce a high level of confidence in the outcome of the research. (Daniel, 2019). Creswell & Miller (2000) suggest that to produce a trustworthy report, one should firstly organize the data, analyse the data through coding, identify shared themes and then eliminate overlapping themes.

Cope (2014) recommends that to increase validity and reliability, the research needs to be *credible.* The researcher should take the participants through the themes that emerged from the interviews and request feedback from them to validate the conclusions made from the analysis. Cope further states that the researcher should also use quotes in the report to ensure analysis and interpretation matches with the participants views.

The researcher must ensure that the interpretation of the data does not include the researchers own viewpoints. An audit trail is recommended in the process to avoid research biases and to ensure that the described conclusions are made from the data (Korstjens & Moser, 2018)

The concept of data *dependability* prescribes detailing the research process in detail to enable future researchers to repeat the work and produce the same results (Johansson et al., 1994).

To ensure a high *confidence* level in the research, the participants were asked to relay their job seeking experiences. The researcher made notes during the session and transcribed from the recordings. The data was organized on excel and analysed through coding to identify shared themes; an audit trail exists. Quotes were used in the analysis of the themes and sub-themes to ensure interpretation matched with the participant's views. Some participants were contacted for feedback to validate some of the conclusions made in the research.

3.8 Ethical Considerations

The research was conducted in an ethical manner and according to the guidelines of the University of Witwatersrand.

Prior to the interviews, each participant was informed of the purpose of the research and how their feedback would be used towards the research. Each volunteering participant was signed a Consent Form to participate in the study. The consent form confirmed that they would remain anonymous, that they agreed to be recorded and the recordings to be used anonymously. The consent form can be found in the

Appendix A. The interview notes and transcripts have no reference to participants but rather code names were used such as P1 to P14.

The ethical protocol number used is WBS/BA1946313/107

3.9 Chapter Summary

This chapter detailed the methodological considerations and the justification for the choices. It also presented the research approach followed, the data collection and analysis techniques and reflected on the issues of rigor of the study. This chapter ended by reflecting on the ethical considerations applied in this study. The next chapter presents the findings of the study.

Chapter 4: Presentation of the Findings

In the previous chapter - chapter 3 of this study discussed the research methodology, the data collection process and analysis thereof that was used to answer the research questions. This chapter outlines the feedback received from the fourteen (14) study participants relating to the research questions as presented in section 1.4 and as outlined below;

- *RQ 1: In what ways is mobile internet is useful and is being used by lower income earners seeking employment in South Africa particularly in Alexandra Township in Johannesburg?*
- *RQ 2: What are the barriers that are preventing lower income earners in South Africa (particularly in Alexandra Township in Johannesburg) from accessing job opportunities online?*
- *RQ 3: What strategies should recruitment agents and companies use to aid the recruitment process of lower income earning job seekers online in South Africa?*

The chapter begins with an overview of the study response rate and graphically presents the basic demographics of the participants. Feedback from the participants was then be presented. Finally the emerging themes and subthemes were outlined presented.

4.1 Demographics of the Participants

The study included face-to face interviews with telephonic follow-ups with 14 participants. The participants all owned smart mobile phones and were categorised as lower-income earners (earned less that ZAR10,000 per month). The participants were

all black African and were from Alexandra township in Johannesburg, South Africa. This section presents the summary demographics of the participants - age, sex, highest qualification and employment status.

4.1.1 Gender of the Participants

Figure 4.1 shows the gender of the participants. Nine (9) out of the 14 participants were female, 64%.

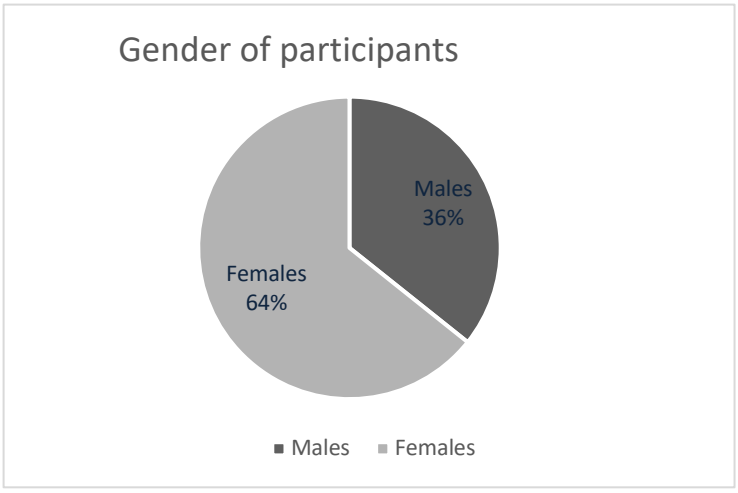


Figure 4.1: Gender of Participants

4.1.2 Age of participants

Figure 4.2 below shows the age of the study participants. Three (3) participants are between 18 and 24 years of age, nine (9) are between the ages of 25 and 30 years and two (2) are older than 30 years.

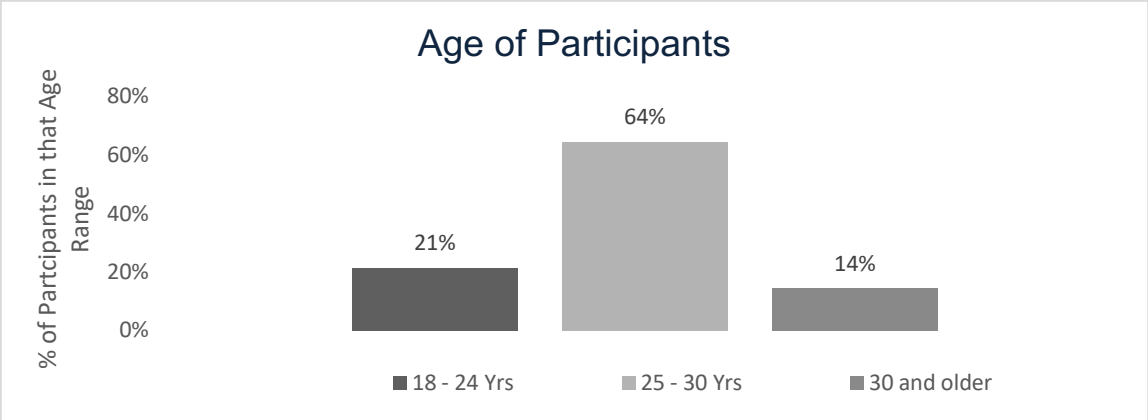


Figure 4.1: Age of Participants

4.1.3 Employment Status of participants

Figure 4.3 below shows the employment status of the participants. Ten (10) participants are employed while four (4) are unemployed and looking for employment.

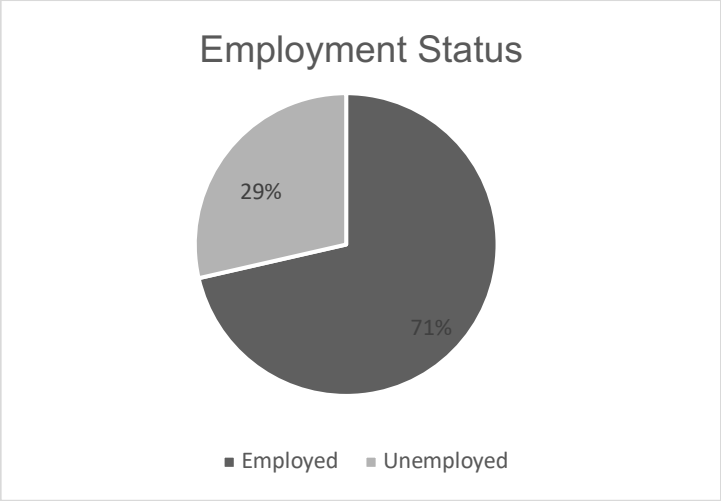


Figure 4.3: Employment Status of Participants

4.1.4 Educational background of participants

Figure 4.4 below shows the educational background of the participants. Two (2) participants did not complete high school. six (6) participants completed high school as their highest qualification and six (6) participants went further than high school and have completed a higher certificate or diploma.

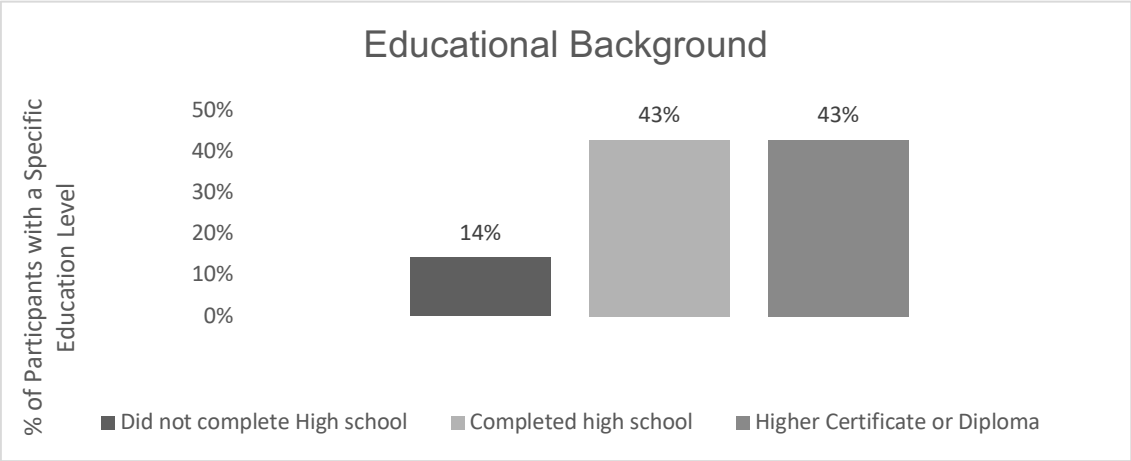


Figure 4.4: Educational Background of Participants

4.1.5 Smartphone Ownership

All participants own a smartphone. The participants confirmed that they have a smartphone because it enables them to communicate more effectively, socialise with friends and family and it allows them to research and apply for jobs online. Majority said that the smartphones were expensive however believed that the benefits outweigh to costs of owning the mobile device.

4.1.6 Data Usage range of participants

Figure 4.5 shows the Data usage range of the participants. Four (4) participants use between 1 -2 gigabytes (GB hereafter) of data per month, four (4) participants use

between 2-5 GB of data per month while the other six (6) participants use more than 5GB of data per month. Majority of the participants were on prepaid, use WhatsApp bundles, and switch off high consuming apps to control their data spend. All the participants wished that they had more mobile data. Participants who used more than 5GB monthly had free access to Wi-Fi at their workplace or had a parent who paid for an unlimited LTE connection at home.

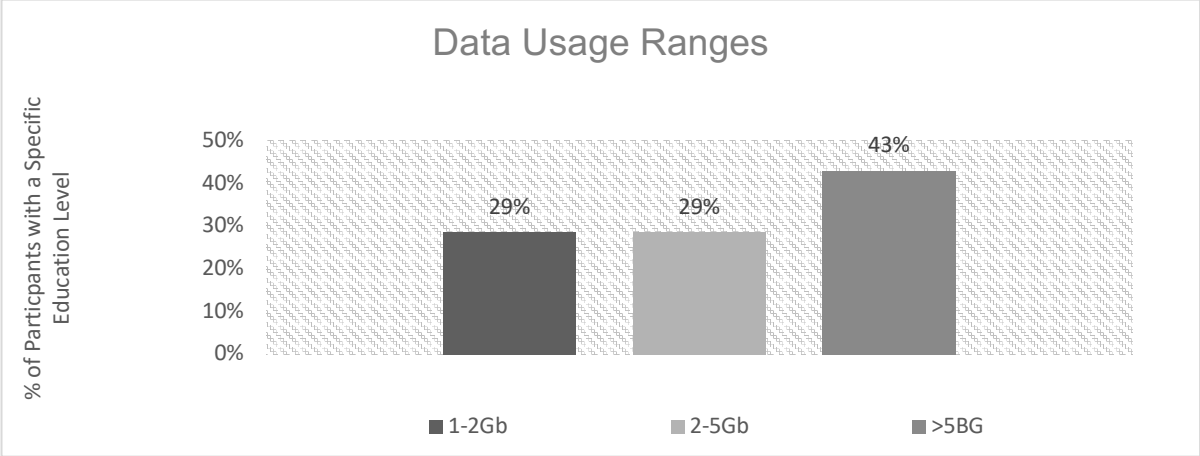


Figure 4.5: Data Usage Range of Participants

4.2 Themes of the Study

The participants were asked to recount their experiences with job hunting in the past and currently. They were asked to explain what sources they used to find employment, how they applied for jobs and whether they were successful in any of their applications.

Three themes emerged from this research that are aligned with the TAM framework, these included:

- The usefulness of searching for jobs online
- The ease of searching for jobs online

- Improvements required for online job searching

Three (3) themes emerged from the study. Table 4.1 below summaries the link between the research questions, the main themes and the respective themes.

Table 4.1: Summary of the Main Themes per Research Question

Research question(s)	Main theme	Sub-themes per main themes based on number of quotations
RQ 1: Is mobile internet being used by low-income earners seeking employment in South Africa (in particular in Alexandra)?	***The usefulness of searching for jobs online***	1. Mobile internet as a convenient means to get job alerts and access jobs online 2. Mobile internet as an enabler for quick response to job applications 3. Aiding with remote job seeking during the times of Covid-19
RQ 2: Are there barriers that could prevent lower-income earners in South Africa (in particular in Alexandra) from	***The ease of searching for jobs online***	1. The convenience of online job seeking compared to traditional methods 2. The ease of which online job portals are easy to navigate

accessing job opportunities online?		3. The time it takes to populate information on mobile devices compared to traditional means 4. CV always already to upload
RQ 3: What strategies should recruitment agents and companies use to increase quality applications and recruitment for lower-income earning job seekers online in South Africa	***Improvements needed to increase online job searching adoption***	1. Online security issues and related scams 2. User friendly job portals 3. Lack of communication 4. Delays in updating online job availability

4.3 Theme 1: The Usefulness of Searching For Jobs Online

The findings of this study suggested that all the participants are aware of online recruitment pages and online job opportunities. All participants have explored looking for jobs online and each have varying degrees of success with finding employment when applying for jobs online. All the participants preferred to use aggregated recruitments pages such as Careers24, Career Junction, Jobs SA, Indeed, LinkedIn and Facebook Jobs. The participants also indicated that they only go directly to

individual recruitment or company pages when directed to by referrals or a google search.

Several participants confirmed that when job hunting, they search online every day with a high intensity and agreed that had it not been for the internet, they would not have heard or seen the several job opportunities they see daily. Two (2) participants indicated that they enjoyed online job hunting because they felt they would not be judged by their looks at least in the in the initial stages of the recruitment process.

Most of the participants indicated that they enjoyed the convenience of applying for jobs with a phone and with some mentioning that it was easier than handing out their *curriculum vitae* to prospective employers like retailers – only during weekends when they were free. Below are some of the remarks from the participants, wherein for clarity P1 means *participant 1* and P4 means *participant 4* in that fashion.

P1: "…I do job hunt online. I use hospitality placement sites and I believe that there a lot of hospitality job opportunities online for international and domestic jobs."

P2: "… If there was no internet I wouldn't have gotten these jobs as I would not have heard of the job hiring."

P4: "…There are many opportunities online, I even received my first quality corporate job from online… I prefer online because I believe big companies are moving away from corruption and nepotism and so online controls that."

P10: "… I have been successful at least four times with my phone."

P14: “… I have applied and obtained most of my jobs via the internet. I am happy with online job hunting and will continue to use going forward.”

All participants confirmed that they use or have used online recruitment pages for job hunting. 9 out of the 14 participants have been successful in gaining employment through online job seeking, while the remainder stated that they have been successful in gaining employment through referrals from friends and family. One participant said that they had only converted to using online job searches in 2020 due to the Covid-19 pandemic.

P1: “…I knock door-to-door with stores dropping off hard copies of my CV.”

P4: “…not all my jobs have obtained through the internet. In retail someone hooked me and the second time I got my job through handing out my physical CV to the retails stores.”

P9: “… I have never received employment via internet”

P10: “… my current job was a referral from Harambee (*a Youth Employment Accelerator network)”*

P11: “… I apply online and offline but majority of the time it is on the internet”

Participants that exclusively used the internet as a job seeking tool said that they are successful because they downloaded recruitment apps, had created profiles on those apps, their profiles were kept up to date hence were ready for any opportunities on the online platforms.

4.4 Theme 2: The Ease of Searching for Jobs Online

Many of the participants agreed that there is an issue with lack of application responses when applying online.

P3: "… it is hard looking for a job online. I have applied to over 10 jobs recently online and haven't even received a call to confirm receipt of any of my applications."

P7: "… there is a general lack of feedback from online recruiters."

P10: "… I will continue to handout my CV's physically because online response rate is bad and slow"

13 of the 14 participants stated that their curriculum vitae (CV's) is on their mobile phone ready to be distributed when needed. They say that they have shared their CV's via email or via WhatsApp on numerous occasions. Participants all agreed that applying for jobs online is easy when the application only requires the upload of their CV. However, it became difficult when the application consumed a lot of input data.

P14: "… banking sites ask for too much information, it takes time and I might give up. Sometimes the pages expires when populating for too long."

Some participants complained of difficulties they experienced with creating and updating their CV's on their mobile devices. They stated that job hunting also requires a personal computer to create and update the CV then the mobile phone would be used for distribution.

P2: “… I created my CV on a PC but now it is on my phone for distribution and it can be edited.”

P9: “… my CV had to be created by my friend who has access to a computer. I do not have one.”

Some of the participants complained that using a mobile phone for job search presented them with difficulties and some preferred a computer than using their phones.

P2: “… I prefer to search using a PC as some websites are too big for the phone and sometimes the different recruitment pages prefer you to use a PC.”

Participant 5, summaries on the issue of the ease on working with online job portals: “… the search is better on a laptop”

4.5 Theme 3: Improvements Needed to Increase Online Job Searching Adoption

Although most of the participants perceived online job seeking to be useful and perceived it to be easy to use, issues were identified that limited their online job seeking. The study showed that they continued to use traditional methods and referrals because of mistrust of online jobs and the process at large. Three (3) of the participants said that there were instances where they believed that the jobs online were fraudulent. Others said that they do not trust the posts being advertised because there are many instances of job posts requiring application fees as high as R200 on the Facebook Jobs portal. As mentioned earlier in statements by participant 3, 7 and

10, the participants do not trust the posts any longer because of lack of feedback from their many job applications.

P9: “… Job placements need money upfront. There are many scams online”.

P12: “… I have entered many Facebook groups where people post online but most are scams that request R100 to R200 upfront. I am worried that it could be for human trafficking with a promise of a job.”

One participant said that she had an issue with recruitment agents that failed to update unavailable jobs.

4.6 Summary of the Findings

The basic demographics and the responses of the participants were discussed in this chapter. A summary of the main themes per research question was presented. Different themes were generated on the basis of responses and feedback.

Based on the basic demographic information, smartphone ownership or adoption is a basic standard for lower income earners. The smartphone across all participants is used for communication, socializing online and for job seeking. The cost of the device is considered high however all participants believe that the benefits outweigh the costs.

Participants of this study who have lower monthly data usage (between 1 - 2 GB), were found to have not completed high school and offer unskilled labour, do not use online job seeking exclusively.

All high data users (greater than 5GB) perceived online job seeking to be useful and five out of the six participants confirmed that they have received employment through using online platforms.

Three major themes that depicts the emerging trends regarding employment and the internet were found on the basis of the research questions.

Theme 1: **the usefulness of searching for jobs online**, the participants with internet availability are aware of online recruitment pages and the job opportunities. They get good exposure on finding jobs online.

Theme 2: t**he ease of searching for jobs online** many of the participants believe that it is easy to search for jobs online however there are issues in the getting the responses from the organisations which causes them to continue to search for employment offline (or use traditional methods).

Theme 3: **Improvements needed to increase online job searching adoption**, suggested that although they found online job seeking useful, convenient, and easy, participants had trust issues and many of them do not get responses from their online applications.

This chapter ends by concluding that the internet can support access to employment but there are also issues that have slowed down the adoption rate, and these need to be addressed. The next chapter analyses these findings and deliberates on the possible recommendations reflecting on the literature review presented in chapter 2.

Chapter 5: Discussion of Findings

5.1 INTRODUCTION

The purpose of this study was to establish the extent to which mobile internet can aid job seeking for lower income employees. The next sections analyses and discusses the study findings reflecting on the relevant literature as presented in chapter 2 of this report. The research objectives of this study the following objectives:

I. Establish the extent to which mobile internet services is useful and is being used to aid job seeking for lower income earners in South Africa particularly in Alexandra Township in Johannesburg?
II. Identify any barriers that may exist and could be preventing lower-income earners in South Africa (particularly in Alexandra Township in Johannesburg) from accessing jobs online?
III. Recommend strategies that the recruitment agents and companies can adopt to increase online recruitment for lower income job seekers in South Africa.

5.2 DISCUSSION OF FINDINGS

5.2.1 **Findings of Objective 1:** *Establish the extent to which mobile internet services is useful and is being used to aid job seeking for low-income earners*

The literature provided the background of relationship between internet access and employment prospects. According to Denzer, Schank & Upward (2018) household internet access is a key factor in increasing one's adoption rate for online job seeking.

Crandall,. et al (2007) found a 10 percent increase in broadband lines led to a 0.2 to 0.3 percent increase in a country's employment figures. Having access to the internet at the office and a home connection increases the job seekers online job search intensity that reduces one's unemployment duration (Kuhn & Mansour, 2014). It was also confirmed that when the internet is fast the online job search intensity increases (Hjort & Poulsen, 2017). The author's further state that literature also highlighted that unskilled labour has a disadvantage when it comes to job search intensity due to limited internet access they receive or don't receive at their workplace to conduct their online job searches. And one's age and highest qualification also determines whether they would successfully use online job seeking (Green et al., 2012).

Based on the study findings the participants adopted the internet as a tool to seek employment and believe that there are many jobs online however they are limited in their job search intensity because they do not have computers at home or adequate internet data. For those employed they rely on internet at the office and other participants rely on a family members to provide extra data. Many of the participants have been successful with finding employment online but still a large portion says that they will continue with offline job seeking activities as they have not found success online.

The Technology Adoption Model states that the Perceived Usefulness of technology service is a key driver for the adoption of services. Liao and Lu (2008) indicated a relationship between positive outcomes in user perceptions towards new technologies and the experience users have with the technology. The findings show that those with more internet and more access had a higher perceived usefulness for the technology.

5.2.2 ***Findings of Objective 2:*** *Identify any barriers that may exist and could be preventing lower-income earners from accessing jobs online*

The literature provided the background of the research topic in terms of what could potentially prevent or slowdown the adoption of using the internet as a tool for job seeking.

According to Guesalaga & Marshall (2008), the poor will continue to use internet sparingly that will limit them exploring and applying online for job opportunities due to observed high cost of data and mobile devices. Economides and Grousopoulou's (2009) study found that although all their participants had a mobile phone, majority of them did not have internet access at home. They also found that many participants still owned 2G mobile phones due to the perception that, 3G mobiles and services are expensive and many were not aware of what 3G could offer them.

Based on the study findings the benefits of owning smartphone are valued over the costs of acquiring the device. Participants however all agreed that the cost of data is a major issue that hinders large data bundles being bought to be used to increase online job search intensity.

According to the Saade' and Bahli (2005), the Perceived ease of use is the degree to which a person believes that using a particular system is free of effort. In the findings, the group found online job seeking to be convenient compared to traditional methods and easy to navigate the job portals, however they had issues with trust. They had online security concerns, believed that there are many scams online and felt that recruitment agencies did not communicate with them. This reduced their Adoption rate.

5.2.3 ***Findings of Objective 3:*** *Recommend strategies that the recruitment agents and companies can adopt to increase online recruitment for lower level/ income job seekers.*

The literature provided the background of the research topic in terms of what more recruitment agencies, companies and other stakeholders could do to improve access to the internet for all and improve overall online experiences in the pursuit to increase employment.

Based on the study findings online job seeking is not always a primary tool in search for employment due to a number of issues that include, lack of recruitment agency trust, recruitment agency lack of communication with applications, delay in recruitments updating their online job openings, negative online experiences when applying on mobile compared to desktop and general online page expiry due to lack of data.

Chapter 6: Conclusion and Recommendations

The overarching objective of the study was to understand whether the internet can be used by low-income job seekers to secure employment to better their lives and ultimately achieve the government's poverty alleviation goals.

The research examined the impact of the internet on job seeking activities for low-income earners. ICT sector has been identified as a key enabler in boosting efficiencies in the job seeking process to address South Africa's high unemployment rates. This research acknowledges that the internet and technology advancements have provided new commercial opportunities for the employment industry from promoting jobs, applying for jobs and ultimately, placing employees.

This study is aimed at assisting lower-income job seekers in their decision making on whether or not to use the internet to job hunt. The overall goal being to contribute to on-going research on the impact of internet access to the masses in order to influence ICT policy makers, recruitment agents and companies to aid job seeking for the poor and with key considerations needed to drive the technology adoption of mobile employment services. Recruitment agents and companies also need closely evaluate the technology adoption to determine how much resources are required to implement these new technologies.

As the internet has become an increasingly important resource for finding and applying for jobs, disparities are present when it comes to the tools that job seekers have available to access these resources. The research has assessed the relationship between the lower income earners and the job searching related capabilities enabled

by the internet. It also focused on the barriers to internet access to this category of the population, like how higher data rates have impacted internet usage levels and ultimately online job seeking activities. Apart from the high cost of data bundles, the cost of mobile devices such as personal home computer, is another major hindrance in accessing mobile internet at home and increasing job seeking intensity.

This research confirms that mobile internet can be used as an aid for job seeking for lower-Income Earners South Africa but due to the barriers or Perceived Ease of Use issues many people face, full-use off mobile internet on a full time basis for job seeking is still in its infancy in the lower LSM communities.

Recommendations to the Recruitment Agencies

- Recruitment agencies and hiring companies should address the high costs by engaging with mobile operators to sponsor or zero-rate their recruitment pages and portals in specific low-income communities so that the unemployed can gain access to these pages even without data and allow them to spend more time on the pages search and applying for the right roles.
- Recruitment agencies need to address and reduce negative job seeker experiences on their platforms such as;
    - ✓ The lack of agency trust must be addressed to improve adoption. Well-known and well marketed recruitment bodies are needed to verify and hold companies accountable to codes of conduct. Job seekers have many choices online and are not able to determine which website to use and ones that they can trust. Recruitment companies require high amounts of personal information from users and a system that promises to protect

data, provide minimum standards of service and also a channel for consumers to lodge their complaints and resolve their issues would improve the company's reputation and improve trust by users. The Federation of African Professional Staffing Organisation is committed to the professionalism of the Staffing industry in South Africa however, none of the job seekers knew this body, many of the recruitment sites did not list them and those that did, used small print at the bottom of the web page.

- ✓ Recruitment companies need to communicate with users on application processes, timelines, confirmations of receipt, application closing date and outcomes. This demonstrates that the agencies are customer centric and aim for greater user experiences by reducing barriers that consumers could be experiencing in the processes. Fixing these issues and simplifying the process will encourage job seekers to return to their pages.
- ✓ Recruitment companies need to update their online job openings more regularly to avoid job seekers wasting their time applying for jobs that do not exist. This will help develop trust between online job seekers and recruitment agents.
- ✓ Recruitment companies need to develop both desktop and mobile friendly sites to ensure a fair intake of those that do not have access to desktops. Recruitment pages such as Indeed and LinkedIn have a created web-based, mobile-based versions of their sites and downloadable mobile applications so that the application journey can continue seamlessly across devices. Users would not be restricted to desktops at offices or internet cafes to apply for job but can rather complete their applications at home on their mobiles.

Recommendations to the Local Government and Policy Markers

- The South African government must develop policies and regulatory interventions to address the high unemployment rate through the high cost of data by enforcing the reduction of data bundles offered by mobile operators. This can be achieved by working closely with ICASA and designing a program that can benefit both operators and users.
- Local government should consider establishing youth development centers focused on job preparation, providing basic computer skills training, assistance in resume creation, provides lessons on how to search for job online so that job seekers are better equipped to seek and gain employment.

Areas of future Research

- A provincial wide research will assist in findings across different townships to better understand how groups from different areas are impacted when seeking employment and whether online job seeking experiences are different for those closer or further away from metropolitan areas.

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Appendices

APPENDIX A

The Research Instrument: Consent Form for participation in the research interview

Title of project: Assessing the Influence of Mobile Internet in Aiding Job Seeking for lower-Income Earners in Alexandra, Gauteng - South Africa

Name of researcher Bonolo Z. Moholi

I, ……, agree to participate in this research project conducted by Bonolo Z Moholi, a student at the University of Witwatersrand.
The research has been explained to me and I understand what my participation will involve. I agree to the following:

(Please circle the relevant options below).

I agree that my participation will remain anonymous	YES	NO
I agree that the researcher may use anonymous quotes in his / her research report	YES	NO
I agree that the interview may be audio recorded	YES	NO
I agree that the information I provide may be used anonymously after this project has ended, for academic purposes by other researchers, subject to their own ethics clearance being obtained.	YES	NO

…… (signature)
…… (name of participant)
…… (date)

…… (signature of researcher)
…… (name of researcher)
…… (date)

APPENDIX B

The Research Instrument: The Interview Process

1. Welcome the participant, and thank them for making themselves available for the research
2. State the expected duration of the session
3. Reiterate the purpose of the research and the interview
4. State the intended use for the information gathered during the interview
5. Explain the measures taken to protect confidentiality and anonymity
6. Ask permission to record the session, and to take notes
7. Ask the participant if they have any questions regarding the interview process
8. Ask the interview questions
9. Ask if the respondent has any additional information that they would like to add, which was not covered during the interview.

APPENDIX C:
The Research Instrument: The Interview Questions

Assessing the Influence of Mobile Internet in Aiding Job Seeking for lower-Income Earners in Alexandra, Gauteng - South Africa

Background and Demographics of the Participant

i. What is your age?
ii. What is your occupation/ how do you earn an income? Are you Employed or unemployed?
iii. Do you live and/or work in Alexandra?

Basic Mobile Phone Ownership

i. Do you own a phone and if so, is it a smartphone?
ii. What do you mostly use your phone for?
iii. Do you consider owning a mobile phone, smartphone or not, an expensive exercise, please elaborate your answer?
iv. Do most people in your community own a smartphone and if not, why?
v. Who is your current mobile operator? Why are you with them?
vi. Do you use the internet on your phone and if so, on what?
vii. How much data do you use and how much do you spend on buying airtime or data bundles every week/month?
viii. Is the data that you purchase enough for your needs or do you want more? If more, for what purpose?
ix. How do you save/ reduce your data costs?

The interviews questions are structured around the study objectives

Objective # 1: The extent to which mobile internet services can aid job seeking

i. In the past or currently, how do go about searching for employment opportunities?
ii. Do you use your phone for seeking employment? If so, how often have you used your phone to seek employment?
iii. What is your overall experience with using your phone for job searching?
iv. Have you been successful in securing employment and if so, do you think you would've found employment without your mobile phone?
v. Do you use specific apps on your phone to seek employment or increase your income? Please explain how you use these applications?
vi. Are there specific tools or activities you use to increase your chances of job security?
vii. How intense is your job hunt online?

viii. Is you CV on your mobile phone? How do you distribute it?
ix. Do you believe that your life has improved, financially and non-financially since owning a smartphone with internet? Please specify how.

Objective # 2: Barriers to accessing mobile internet services

i. Do you online job hunt exclusively? If not, why?
ii. Do you have enough data for online job seeking?
iii. Do the benefits of owning a smartphone outweigh the costs of owning one?

Objective # 3: Strategies that can increase access to mobile internet and hence aid the poor in job seeking.

i. What issues have you experienced with online job seeking?
ii. What do you wish could be done better for online recruiting services?

Appendix D: Ethical Clearance

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

SCHOOL OF GRADUATE SCHOOL OF BUSINESS ADMINISTRATION ETHICS COMMITTEE
CONSTITUTED UNDER THE UNIVERSITY HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)

CLEARANCE CERTIFICATE **PROTOCOL NUMBER:** **WBS/BA1946313/107**

PROJECT TITLE	Assessing the impact of mobile internet on employment for people living on the Bottom of the Pyramid
INVESTIGATOR	Mrs Bonolo Moholi
SCHOOL/DEPARTMENT OF INVESTIGATOR	MBA (Research Article)
DATE CONSIDERED	09 October 2020
DECISION OF THE COMMITTEE	Approved unconditionally
RISK LEVEL	LOW RISK
EXPIRY DATE	30 JUNE 2021

ISSUE DATE OF CERTIFICATE 23 October 2020 **CHAIRPERSON** _____
(Dr MDJ Matshabaphala)

cc: Supervisor: Mr Singh

DECLARATION OF INVESTIGATOR

To be completed in duplicate and **ONE COPY** returned to the Chairperson of the School/Department ethics committee.

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

Signature **Date** 26 / 10 / 2020

PLEASE QUOTE THE PROTOCOL NUMBER ON ALL ENQUIRIES