Labour force participation of youth (15-34) in South Africa 2014

KHAUKANANI ANDREW KHULUVHE

STUDENT NUMBER: 753246

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

FACULTY OF HUMANITIES

SCHOOL OF SOCIAL SCIENCES

A Research Report Submitted to the School of Social Sciences, Faculty of Humanities University of the Witwatersrand, Johannesburg, In Partial Fulfillment of the Requirements for the Degree of Master of Arts in the Field of Demography and Population Studies for the Year 2016

2016

DECLARATION

I, Khaukanani Andrew Khuluvhe, declare that this research report is my own unaided work. It is submitted for the degree of Master of Arts in Demography and Population Studies at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any other degree or examination in any other university.

Signed: _____

Khaukanani Andrew Khuluvhe

Date: 24 November, 2016

ACKNOWLEDGEMENTS

I thank God for seeing me through this study. Furthermore, I would like to express my sincere gratitude to my Supervisor Prof Clifford Odimegwu, all my Lecturers, and the University of Witwatersrand for affording me the opportunity to realize my dream of completing my studies.

DEDICATION

To my wonderful children, Gundo and Pfano.

ACRONYMS

BLS	Bureau of Labour Statistics
LFS	Labour Force Survey
OHS	October Household Survey
QLFS	Quarterly Labour Force Survey
YLFP	Youth Labour Force Participation
EPWP	Expanded Public Works Programme
NGP	New Growth Path
RDP	Reconstruction and Development Programme
GEAR	Growth, Employment and Redistribution strategy
AsgiSA	Accelerated and Shared Growth Initiative for South Africa
HCT	Human Capital Theory
NPC	National Planning Commission
ILO	International Labour Organisation
BLS	The Bureau of Labour Statistics
NDP	National Development Plan
GDP	Growth Domestic Products
E/P	Employment Population ratio
FET	Further Education and Training college
SETAs	Sectoral Education and Training Authorities
PPS	probability proportional to size
PSUs	sampling of primary sampling units
DUs	dwelling units
ISR	Inverse Sampling Rate
EA	Enumeration Area
CV	Coefficient of Variation
CI	Confidence Intervals

OR	Odds Ratio
Deff	Design Effect
SRS	Simple Random Sample Design
Q1	Quarter 1
Q2	Quarter 2
Q3	Quarter 3
Q4	Quarter 4
DF	Degree of Freedom

Key words: Labour market, Human Capital Theory, Quarterly Labour Force Survey, logistic regression modeling, socio-demography

ABSTRACT

INTRODUCTION: Youth labour force participation (YLFP) measures the level of economic activity among the youth. It is measured as the sum of all young people who are employed, unemployed or looking for work, as a percentage of the youth population. The weakening of the global recovery in 2012 and 2013 further aggravated the youth jobs crisis and the queues for available jobs have become longer for young jobseekers (ILO, 2013). This study examines the association between age, population groups, gender, type of residence and provinces with labour force participation of youth in South Africa. It also seeks to examine the association between the level of education and labour force participation among the youth in South Africa.

METHOD: Analysis of the data from a sample of 30144 youth aged 15-34 years who participated in the South African 2014 Quarterly Labour Force Survey was done using logistic regression models. In the multiple logistic regression, two models were used. Model 1 included the following variables: education level, age and gender whilst in model 2 this study controlled for: population group, type of residence and province because these socio-demographic factors influence youth labour force participation.

RESULTS: When controlled for potential confounding effects of age, gender, type of residence, population group and province, youth with higher education were more likely to participate in labour force as compared to youth who have no or have primary education [(Q1: OR[1] 4.28, 95% CI[2] 3.74 to 4.90); (Q2: OR 4.34, 95% CI 3.78 to 4.97); (Q3: OR 3.91, 95% CI 3.41 to 4.48) & (Q4: OR 3.88, 95% CI 3.38 to 4.45)]. The association between education level and youth labour force participation was found to be statistically significant.

CONCLUSION: Young people with tertiary qualifications in South Africa are more likely to participate in the labour force. The evidence from the study shows there is a higher risk of mismatch

[1] Odds Ratio
[2] Confidence Interval

for youth at the bottom of the educational pyramid, which is reflected in relatively high unemployment rates for the low skilled in comparison with the high skilled.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

Youth labour force participation (YLFP) is a primary indicator of the degree to which youth contribute in the economic activities of the country. Young people who participates have in broader sense being greater in the 2000s than in the past ten years (1990s). Lam, et al., (2007) presents an analysis of the then October Household Survey (OHS) data sets which is now referred as General Household Survey in 1995 which indicates that the participation proportion of young people between the ages 15 and 34 years old was 42.1%, by means of the official definition of unemployment. In 1999, the participation proportion of young people increased to 46.1%. By 2000s, young people participation proportions were justly stable at 52.1% in 2002 (using Stats SA data) and 50.1% in 2005. The absolute numbers shows, marginally more non-participants and less unemployed were taken in 2005 than in 2002. During the 1995 to 1999, there was an increase in the young people participation rate which was mainly in the form of growth in the number of the unemployed.

The country South Africa has a serious problem of unemployment of young people that needs a multi-pronged approach to support inclusion and increase employment. When high number of young people are unemployment means that they are not getting the skills necessary to drive the economy to the fore. This hinders the economic growth of the country and imposes a bigger burden on the State to deliver social support. The Labour Force Survey conducted quarterly by Statistics South Africa presented the following about employment of young people: Around 42.1 per cent of youth who are less than 30 year old are unemployed associated with fewer than 17.2 per cent of older people of 30 year and more; less skilled and inexperienced are the main reason most young people tend to be unemployed; and the employment of 15 to 24 years has dropped by more than 20 per cent

since the year 2008. Around 86 per cent do not have formal higher education, while almost two-thirds have never worked.

Around 2000, the Department of Education in South African effected two policies that were destined to lessen the large number of over-age pupils in the school system arrangement. The implication was that schools under basic education were no longer permitted to accept pupils who were more than two years older than the right grade-age (for grade ten is 16 year old) and pupils might not be held back more than once in each of four schooling segments. The examination done by Burger, et al., (2013) using survey data and school administrative data shows that these policies corresponded with a decline in school registration of at least 420,000 and probably more than 920,000 pupils. The work of these policies seem to have forced many scholars into the employment at earlier ages than was observed for earlier cohorts. This could explain much of the rapid growth in the participation of young persons in unemployment and labour force. Nevertheless, since these persons would possibly have move in the labour market earlier if not for their poor employment forecasts, the study reveals that the subsequent increase in unemployment suggests a more exact replication of veiled unemployment that already happened in the late-1990s rather than a worsening of labour market circumstances (Burger, et al., 2013).

Furthermore, many researchers (Fields, 2000; Altman 2007 and ILO, 2013) present numerous explanations why young persons are not employed. These include: The companies look for experience and skills. The organizations take inexperienced, unskilled jobseekers as a dangerous investment; Skills cannot be substituted by education - schooling is not a constant indication of capabilities, and low school value nourishes into poor workroom learning ability; and Assumed the hesitation about the prospective of school leavers, companies consider entry-level wages to be too high in relation to the risk of employing these untried employees.

Fields, (2000) presents The New Growth Path which calls on the South African government to deliver effective plans to generate the thousands and even millions of new employments that the country need. According to Burger, et al. (2013) this entails the amalgamation of creativities that include private sector partnerships, direct government participation, and the utilisation of civil society to take a hands-on interest in addressing the complications presented by unemployment. Up until recently, the outcomes-based method in education adopted by South African government recognises the need to grow a multi-pronged plan to challenge unemployment of young persons. As outlined in Altman (2007), policy choices to support young people employment will have to deliver an extra control for government to generate jobs and must not be restricted to any specific sector. The New Growth Path already identifies opportunities for youth, in the areas such as tourism. In addition, these include identifying employment and entrepreneurial opportunities for young people as well as improving training (Burger, et al., 2013).

Republic of South Africa has a variety of labour market programs that can assist to lower the unemployment of young people. These concentrates on improving the employability of the young people through current education policies and skills development by means of learnership enticements or provide direct public sector employment over the Expanded Public Works Programme (EPWP) (Blumenfeld, 2011). These methods should be achieved by employment funding for young people which is South African government initiatives to reduce youth unemployment. According to Rankin, et al. (2013) companies would be able to claim the learnership funding in accumulation to any youth employment funding if they offer recognized training to subsidised personnel. Blumenfeld (2011) shows that other methods could be examined to link the funding to work readiness, job search support or other ways of training and skills advancement. Rankin, et al. (2013) established that a youth employment funding lowers the relative cost of acquisition a young people while leaving the salary the employee receives unaffected and therefore

rises demand for young employees. Other benefit is that the work training and experience gained during the date of subsidised work will advance longer-term employment projections. Receiving that first job is significant. Unemployed young people who have some work knowledge are over three times more likely to find a work than young people have no experience (Blumenfeld, 2011).

According to Mayer et al., (2011) in the very same year the cabinet adopted the New Growth Path (NGP), which signifies a momentous shift from earlier economic policies, such as the Accelerated and Shared Growth Initiative for South Africa (AsgiSA), the Reconstruction and Development Programme (RDP) and the Growth, Employment and Redistribution (GEAR) strategy. The difference is because it places employment before other things in the growth path. According to the policy variables, such as fiscal, monetary, industrial and trade policy and regulation are seen as the means to realize the goal of creating around five million jobs over the next ten years starting from 2012.

This study uses the Human Capital Theory (HCT) which hypothesizes that the education of youth is clearly related to youth labour force participation. Education is also a simultaneous decision together with participation partly because you become educated because you would like to participate. The adopted theory helps to examine the short-term changes in the labour force. The adoption of policy is a progression of knowledge gained from earlier researches such as Rankin et al., (2013) and Anderson (2001), both of which examined the annual changes in YLFP. Investigating annual dynamics in YLFP is sensible, as the market economy is always changes and small changes can have massive impacts on youth labour force participation.

1.2 STATEMENT OF THE PROBLEM

The statement that youth unemployment persistently rise at a distressing pace from 31.1% in the late 1995 to 42.7% in 2009 (*by the expanded definition*[3]) recommends that the changeover from apartheid policies did not only fail to restrain the long-term trend, but that unemployment may have even been aggravated by policies that were projected to reduce it (Burger, et al., 2013). Increasing opportunities for youth economic participation is one of the biggest challenges facing South Africa (Kennedy, et al., 2007). The National Planning Commission (NPC)'s diagnostic report (2011) lists the fact that very few people are participating in the economy as one of the challenges facing the country, especially in the labour market. A study by Fernandes-Alcantara (2012) indicates that labour market forecasts in South Africa should have better-quality. This means that economic development should evidently have interpreted into better chance for the formerly marginalised, who could capitalise on the better levels of education that young people of today had accumulated, in the setting of different, "anti-discriminatory labour market regulation". In the lack of these expected benefits, many reviewers started mentioning to "jobless growth", although subsequent studies of labour market leanings over this time (Fernandes-Alcantara, (2012); Kennedy, et al., (2007)) have believably negated this assumption. The problem then remains why gradually greater stocks of human capital did not interpret into lesser unemployment proportions in the new South Africa.

One challenge which requires a lasting perspective is that the Republic of South Africa has a huge number of young people. This refers to the size of the youth group which is seen as a foremost supplier to unemployment of young persons. Fernandes-Alcantara (2012) and Kennedy, et al., (2007). Du Toit (2003) indicates that more than 50.4% of the entire population in the world is under

[3] The expanded or broad definition of unemployment" includes discouraged job-seekers: those that want to work but are not actively searching for a job as they have lost hope, wanted to work but there are no jobs in the area or were unable to find work that required their skills". They are sometimes referred to as the "*non-searching unemployed*".

the age of 25. This means that more than 3 billion persons are children and young people. The results of the latter is known as a 'demographic dividend', this happened where a large part of the population is economically lively, thereby dropping poverty rates and dependency ratios and promoting growth (Altman, 2007). Nevertheless, the truth is this dividend can only be earned if these young persons are in fact employed. The bigger the group of marginalised young persons who remained unemployment the larger the danger that dependency proportions will increase as the demographic bulge follow through.

In the background of economic rearrangement and deteriorating growth, the labour market in Africa has become volatile and youth labour absorption challenging. In exact, the difficult of what is generally referred to as 'youth unemployment and absorption' has progressively come to be recognised as one of the more thoughtful social and economic difficulties presently threatening many less developed countries, especially those in Sub-Saharan Africa (Chigunta, 2002; ILO, 2013).

However, existing prognoses show that many countries in Africa, urban unemployment distresses between 16 to 21 per cent of the labour force (ILO, 2013). More figures as per these prognoses, shows young persons contain 41 to 76 per cent of the overall number of the unemployed (Chigunta, 2002). Youth are twice as likely to be unemployed, with an estimated youth unemployment rate of 11.9 per cent in 2012, this likened with an adult unemployment rate of 5.9 per cent in 2012, (ILO, 2013). Over half of young persons in the labour market were not participating in the year 2012, this shows youth unemployment rates much higher than the continental average are found in South Africa, (Rankin et al., 2013). Millions of South Africans youth cannot find work; those who are employed, many more are in jobs which do not accomplish their determinations or capabilities (Lam, et al., 2007). Off those youth who are able to find formal employment, the bulk are male with less female (op cit, 2007). The study by Chigunta (2002) indicates that urban unemployment in Africa

has pretentious young people from a comprehensive variety of socioeconomic groups, both the less and highly educated, even though it has predominantly stricken a significant fraction of young people from limited education and low-income backgrounds.

This study examined the factors related with youth labour force participation in the Republic of South Africa. The basic education system in the Republic of South Africa largely miss the mark to get ready young persons with problem solving, critical thinking skills, fundamental literacy, and numeracy, neither does it inspire attainment of values such as a self-discipline and work ethic that are essential in the work environment (Altman, 2012). Furthermore, young person who are unemployed are extremely diverse group with different levels of educational accomplishment combined with the challenges posed by the various surroundings in which they were educated and presently staying. The current labour market make it impossible for companies to establish which new labour market applicants that have completed a definite level of education are best prepared to enter the work environment (Altman, 2012). The study examined the factors related with youth labour force participation in the Republic of South Africa.

1.3 RESEARCH QUESTION

- What are the factors related with youth labour force participation in the Republic of South Africa?

1.4 RESEARCH OBJECTIVES

1.4.1 GENERAL OBJECTIVE

- To examine factors related with youth labour force participation in the Republic of South Africa.

1.4.2 SPECIFIC OBJECTIVES

- To examine the association between gender, provinces, type of residence, population groups, and age with youth labour force participation in the Republic of South Africa.
- To determine the association between education level and labour force participation among youth in the Republic of South Africa.

1.5 JUSTIFICATION OF THE RESEARCH

Despite the vast literature (Lam, et al., 2007; Banerjee, et al., 2007 and Dias & Posel, 2006) on YLFP rates, several studies mostly concentrated on the investigation of short periods of generally one year. More studies (e.g. Haldenwang, 1994; Yu, 2013) used one-year period and looked at only a small subdivision of the United Nation definition of youth from 15-24 years. Yu (2008) embraced the same as method as the two studies reviewed above, except that all 1994-1999 OHSs and 2000-2006 Labour Force Surveys were used to derive labour market developments under the broad and official definition over the 12-year period. Even though the upsurge of labour force participation rate was the highest in the 15-24 years group, this rate remained at the bottom when associated with the rates of other allies. In contrast, employment increased in all other standard age groups throughout the years, but the increase was the lowest in the younger age group which is 15-19 years. This means that the degree of increase of employment of young persons was not fast enough to absorb the net labour force applicants, thereby affecting unemployment rates and the number of unemployed in the younger age group to grow between 1995 and 2006. For example, the expanded unemployment rates of the 15-24 years and 25-34 years cohorts increased by 10.7 percentage points (from 53.1% in 1996 to 63.8% in 2007) and 6.3 percentage points (from 34.2% to 40.4% between 1996 and 2007) correspondingly; young people aged 15-34 years accounted for 70.1% of unemployed in 1996 but this cut increased to about 75.3% in 2006.

Only two scholarly studies done in South Africa focus predominantly on how young people fare in the labour market. Mlatsheni and Rospabé (2002) used the October Household Survey 1999 data to examine people aged 15-30 years. Altman (2007) defined young people as those aged 15-34 years and separated them into three age groups (15-19, 20-24 and 25-34 years). Using the October Household Survey 1997 and 1999 as well as the September Labour Force Survey 2001, 2003 and 2005 data, she found that the slight labour force participation rate and the slight unemployment rate were the highest for those aged 15-19 years and 25-34 years respectively.

In summary, most of the studies studied above, including Altman studies (2007) and (2012) only briefly scrutinized the youth labour force since the dawn of democracy (1994). The general conclusion was that the speed of employment growth was not adequate enough to keep up with the fairly bigger increase of labour force, thereby affecting the youth unemployment problem to get worse. All these studies endeavor to provide replies on issues affecting YLFP in the country. However, these findings are generally indecisive if littler periods (quarterly dynamics) are not examined, as a way of informing policymakers. Governments in the Republic of South Africa and elsewhere in the continent might find the investigation of the impact of quarterly or shorter-term changing aspects on YLFP to be more beneficial.

The study will help in the improvements of the training programmes that South Africa have like tax stipends for apprenticeships and learnerships and 1% pay-roll tax that goes to Sector Education and Training Authorities (SETAs). An inspiring government policy in this respect is the Youth Enterprise Development Strategy (YEDS), a programme launched 2013 by the Department of Trade and Industry (DTI) to "promote self-employment of young people and youth-owned and managed enterprise. The policies that can benefit include youth wage subsidy which include the introduction

of unemployment assistances for young people that have never worked and Extended Public Works Programme (EPWP) also thrown in 2004.

1.6 DEFINITION OF TERMS

1.6.1 Employed young person

"These are young people aged 15-34 years employed in market production activities who during the reference week, even if it was for only one hour met the following conditions: Must have been worked for a salary, wage, commission or payment in kind (including any payment of doing any work including domestic work); and Managing small or big business of any kind" (Stats SA, 2008).

- **Unemployed Young People** "are those aged 15–34 years who were not employed in the past four weeks preceding the survey interview but **a**ctively looked for work or tried to start a business **and w**ere available for work". (Stats SA, 2008).

1.6.2 Unemployment rate is the percentage of the "labour force that is unemployed" (Stats SA, 2008).

1.6.3 Youth Not economically active: "these young peopl**e** aged 15–34 years who are neither employed nor unemployed in the past four weeks preceding the survey interview" (Stats SA, 2008).

1.6.4 Young discouraged work-seeker "these are young people who were not employed during the past four weeks preceding the survey interview, wanted to work, was available to work or to start a business but did not take vigorous steps to find a job" (Stats SA, 2008).

1.6.5 Youth labour force "encompasses all young people age 15-34 year old employed plus those who are unemployed" (Stats SA, 2008).

1.6.6 Youth labour force participation rate is the "percentage of young people aged 15–34 years who either employed or unemployed" (Stats SA, 2008).

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Labour market participation by young people[4], is a proxy indicator of interest in work among young people (Kennedy, et al., 2007). Generally, increase in youth labour force participation shows greater desire in working, whereas a decrease in labour force participation indicates a decline or lack of interest in work. According to Fernandes-Alcantara (2012) variations in youth labour force participation proportions, nevertheless, are not perfect pointers of young people or combined interest in working. For example, labour force participation may drop because young people become dispirited about job forecasts and stop eyeing for employment. Young persons may also choose to concentrate on education because of the earnings they will receive in the future when they are employed.

Participation in the labour force is essential for social integration. Unemployment, consequently, is one of the central networks of social elimination for it averts people from changing their productive information and their labour services (Kennedy, et al., 2007). Youth unemployment in South Africa postures a daunting policy challenge. The youth unemployment rate of average 36.1%, according to the official definition considering four quarters in 2011 (Stats SA, 2011), this average is among the highest in the whole world. Suggestively, unemployment is concentrated in the 15–34 age group, which is responsible for 72.2% of the unemployed in 2009. As a result, the country's unemployment tragedy is understood as a youth unemployment tragedy in particular. South Africa had recorded economic growth in the 20 years of democracy, that trajectory has not absorbed labour at the

[4] Two terms Young people and youth will be used interchangeable referring to one thing as any person aged 15-34 years

required scale, and the lack of access to the labour market and wage income has compelled up poverty and inequality, this happen despite an important rollout of basic services and social grants.

There are several reasons that explains why young people, generally have higher unemployment proportions. Some include (Altman, 2007): Workers have been employed recently, and when the company needs to lay off, young persons will be the first to go; young people lack work search competences and networks that are appropriate to the labour market; Young people are 'shopping around' for a job that meets their expectations. The above reason provided might be most appropriate for youth coming from well-resourced families; young people lack resources and movement to look for a job. Young people, consequently, stay near to home where jobs may not be that readily available; there is a measurement difficult, since young persons may be in and out of studying and working. The most marginalized might not be studying, or studying and working.

The study reviewed literature has been in three folds, namely, the global experience, the African context and South Africa's economy and labour market.

2.2 THE GLOBAL EXPERIENCE

The participation of women in labour markets has increased strongly in most OECD countries[5] over the last thirty years (Jaumotte, 2004). The increase in participation of women has varied across countries, some countries started earlier (*e.g.* the United States and the Nordics), and in the last twenty years the largest growth have been witnessed in less developed countries (Greece, Ireland, Italy, Portugal and Spain) including some Northern European countries (Belgium, Germany and the

[5] "The OECD's originated in 1960, when 18 European countries including the United States and Canada come together to form an organisation that was looking to economic development".

Netherlands) (Jaumotte, 2004) . The aggregate participation rates as well as the current cross-country difference of aggregate participation rates in OECD countries. This has to be explained by an increase in female labour force participation is the most important factor in explaining increases in aggregate participation rates as well as the current cross-country variation of aggregate participation rates in OECD countries (op cit, 2004)

According to International Labour Organization around a billion jobs were needed to be generated between 2002 and 2011 to put up young workers entering the labour force market and lessen unemployment (ILO, 2013). The number of young persons, in the world, is about to become the largest in past relative to the adult persons (ILO, 2013). Currently more than 51 per cent of the population is under the age of 25, in absolute numbers just over three billion individuals are young person. In terms of young people alone (15 – 24 year old), there were over 1.4 billion young persons in the whole world in 2004 out of a population of 6.3 billion. This means that nearly two persons in ten was between the age of 15 and 24 years, or 18.1 per cent of the world's population is "youth" (Fernandes-Alcantara, 2012). The challenges that concern youth labour force participation are a global issue.

Investigating selected countries dealing with high levels of unemployment of young people presents worrying statistics. In Iran young persons (aged 15-30 years) account for 70.1 per cent of the population of more than 67 million. An aggregate of about 780,100 people is entering the Iranian labour market every year. Examining situation in Palestine, the unemployment proportion of an adult is estimated at 48 per cent and reaches 27 per cent in some other Arab countries. The frightening examples is that of South Africa (56 per cent), Dominica (42 per cent), and Egypt (35 per cent) (Fernandes-Alcantara, 2012). The difficulty is not only restricted to less income countries. A conspicuous example is Italy, one of the largest economies in the world. In 1999, over 30.6 per cent

of the 20-24 cohorts was not employed in Italy (ILO, 2013). This shows that the youth unemployment of young people can be found in both less developed and more developed countries.

The current South African youth unemployment challenges are similar with those of the United States (U.S.) as happened three decades ago (Leighton and Mincer, 1982). The concern about employment problems of young people in the US develops from three evidences: (1) the youth unemployment rate is extraordinary high in absolute numbers, both in relative to unemployment of adult and in comparison with other countries in the world; (2) unemployment rate of young black is much higher and a large number of unemployed black youths does not even search for jobs: (3) youth unemployment proportion of young people has increased in current years (Leighton and Mincer, 1982). The trend is not the same among whites, but the rate for black youths has risen from levels comparable to white rates in the 1960s to the present (Leighton and Mincer, 1982).

Young people aged 16-24 may follow a diversity of employment and education trails. Those still under basic education levels may attend high school and/or work. Young people in United States with a completed high school diploma can join a two- or four-year academy, register in the armed services, or secure job-sharing or fulltime employment (Fernandes-Alcantara, 2012). Young people sometimes attend school and work concurrently. Youth who didn't finish high school can do some of these same things, but their prospects are more restricted. Youth in United States cannot register in a four-year college or, choose to, enlist in the military (op cit: 2012). This young people may also face problems in getting employment.

Also youth who are attending secondary school or a tertiary education (or those who have taken break from school) may feel that they need to work, or sense that they have to work, for wide range of motives—to cover expenses by generating cash, contribute to their family income, advance work

experience, and save for the days to come. In a countrywide representative survey in 2005, nearly 6 out of 10 high school pupils reported that they anticipate work to be a fundamental part of their lives, and almost 90% said they value a work that gives a sensibly foreseeable future (Fernandes-Alcantara, 2012). About 80% stated that they valued a job that is inherently gratifying because it is stimulating to do, uses one's abilities and skills, and permits one to acquire new things, among other factors (op cit: 2012). About 80 percent of high school pupils valued work because of its extrinsic rewards, including that a job—has high stature and status that most people look up to and respect; allows for promotion and advancement; and must provide a good deal of money (op cit: 2012).

According to Fernandes-Alcantara (2012), young persons can easily get employment, the employment that compensates well, provided the youth have some sort of tertiary education. The researcher further claims that as the level of education increases, the unemployment rate drops and median monthly earnings rise for those who work (op cit: 2012). Among labour force participants in United States without secondary school education in 2011, unemployment was 14.8%; this relates to an unemployment proportion of 10.4% and 5.5% for those with a high school qualification or a post high school degree (op cit: 2012). The Bureau of Labour Statistics (BLS) foresees that the fastest growing jobs between 2015 and 2025 will require post high school degrees. Additional, in all career groups, a post high school degrees or better offers availability to most high-salaried occupations. Moreover, the growing necessity for education to secure employment is likely a major cause why some young persons are preceding work for school. Again, BLS predicts that more than half of new occupations and 64% of job openings to replace employees will require only a post high school qualifications. This study revealed challenges of labour force participation on an international level. Below the literature reviews focusing at African perspectives.

2.3 THE AFRICAN CONTEXT

Around 20 million young people in less developed countries including Africa 22% of all young people (15–24) were unemployed in 2003 (Garcio and Fares, 2008). This rate of youth unemployment surpasses that of all other regions except the Middle East and North Africa (op cit: 2008). Relating youth and adult unemployment rates shows that young workers are more disadvantaged relative to adults. Associated with an adult unemployment figures of 6.1 per cent in 2011, young people are twice as likely to be unemployed, with a projected youth unemployment rate of 12.4 per cent in 2011 (ILO, 2013). Looking at the study by Garcio and Fares (2008), young people unemployment proportion is greater than that of adults in all nations except Burundi and The Gambia. More young workers are particularly disadvantaged in Cameroon and Sao Tome, where the young people unemployment proportion is more than five times that of older people (op cit: 2008). Young people unemployment proportions much greater than the regional average are found in South Africa, where above half of young persons in the labour market were unemployed in the year 2011 (Rankin et al., 2013).

In discussing, the bases of youth unemployment in Africa, Chigunta (2002) emphasized the importance of considering both the demand and supply cross aspects and how they interrelate to cause young people unemployment. The ILO (2013) outlines a main supply influence which relays to the situation within which the whole labour force in Africa nurtures and the social and economic variables that affect or impact its growth. Two studies by Chigunta (2002) and Garcio & Fares (2008) acknowledge that a main cause of the high young people unemployment rate in Africa is the present high population growth figures which has resulted in a moderately young population and a large proportion of young people in the population of the employed age. According to these studies mentioned above, the high population growth figure in many Sub Saharan-African countries has ensued in the rapid growth of the labour force which is outstripping the supply of works.

Associated with the fast growing of population in Africa and most developing countries is the issue of rural/urban migration. This notion was supported by the International Labour Organisation (2013) which mentioned that another important factor influencing young people unemployment in Sub Saharan-Africa is the high degree of geographical movement of young people in the form of rural-urban migration arrangement (op cit: 2013). ILO (2013) confirms that young migrants in Sub Saharan-Africa are three times many as among other migrants. The same results complements that the urbanisation rate of the young people was 34 per cent in 1990, compared to fewer than 26 per cent for the adult population. It is revealed by the ILO (2013) that during 2011, around 60 per cent of the young people in Sub Saharan-Africa were residing in urban areas where job prospects are limited to infrequent formal sector and informal sector formations. In order to counter these, the UN endorses that programmes of incorporated rural development and re-arranging of economic activity and social investments concerning the rural areas need to be boarded upon to create a suitable rural-urban economic stability (ILO, 2013).

One more other supply-side factors shown by researchers (Garcio and Fares, 2008) are what some professionals be likely to pronounce as inappropriate school syllabuses and deficiency of employable abilities. Several specialists (Garcio and Fares, 2008; Chigunta, 2002) argue that in so far as formal sector employment is all about in Africa, the abilities that employment seekers possess do not cup tie the needs and demands of companies. It is contended that Africa's education structure does not just over supply the labour force with alumnae and school leavers, but also does not yield the type of talents needed in formal employment, with its strong control of mining and manufacturing (Chigunta, 2002).

Furthermore, other reasons mentioned by Garcio and Fares (2008) and Chigunta (2002) contain the fundamental awareness among policy architects – and also among the eventual beneficiaries themselves (young people) – that employment refers a job with an income or wage and working for somebody else. Agreeing with Garcio and Fares (2008), these observations have intensely influenced

those organizations that offer skills training. Subsequently, training programmes and prospectuses are said to be conspicuously biased towards preparing youth for strict sector pay jobs, though this has started changing in current years (Garcio and Fares, 2008; Chigunta, 2002 and ILO, 2013). Assumed that these works do not exist, there is a subsequent mismatch between the expectations/skills of job searchers on the one hand and existing jobs on the other (Chigunta, 2002).

It is also contended that in the middle of policy makers that there has been a tough statement that the key cause of unemployment among young people has been the nonappearance of vocational and artisinal skills (Garcio and Fares, 2008 and Chigunta, 2002). The whole scenario has led to the constant expansion of training strategy in such parts as auto mechanics, carpentry, television and radio repair, brick laying, and many examples. This is more of a supply-driven reaction to teaching, which has essentially overlooked the demand for the skills being presented and the absorptive volume of societies to make actual use of these skills. Chigunta, (2002) notes that the important experience that arises from these programmes is that any training involvement should be based on a cautious valuation of available employment prospects and opportunities for manufacturing that would want abilities and therefore generate a request for training. The section below reviews literature on labour market in the Republic of South Africa.

2.4 SOUTH AFRICA'S LABOUR MARKET

According to Census 2011, the labour force aged 15 to 64 contribute 63.1 per cent of the entire population, with the percentages of children and the elderly making smaller parts. In the world, demographic profiles such as these are often related with faster productivity growth, higher savings, rising living standards and increasing incomes. On the other hand, they can lead to an unsatisfying and threatening environment where young people cannot get work, contributing to violence, crime, alcohol abuse and other social ills.

The evidence of participation differences by gender are there. Non-participants proportions are fairly equally divided by gender with only a marginally greater percentage of them being women. In the year 1995, 52.2% of nonparticipating young people 15-19 were females and this percentage has keep on fairly stable over to 2005 where 51.4% of non-participants were females (Lam, et al., 2007). In line with the above analysis, the participation arrangements of young people 15-19 and 20-24 are preserved distinctly. Lam, et al. (2007) specify that within-gender participation proportions are greater among men throughout the period of eleven years 1995 to 2006. Furthermore, the above study shows that participation proportions amplified up until 2001 and reduced afterwards.

From the mid-90s labour-force participation of women has seen a glaring increase by 38.2 per cent boost up the general employment levels (Lam, et al., 2007). Yet by world standards labour force participation of women at 47.3 per cent rests low and it is lower than for men be around to a gap of 14.1% (op cit: 2007). Further developments in female's labour market outcomes are needed. Female's employment too often remains either within the traditional women professions or within the domestic (96.8%) and farming sectors (op cit: 2007). They are often focused within situations which are small paying and which have high proportions of revenue (Altman, 2007). The growth in labour force market in the economy of the Republic of South Africa over the past twenty years has not been matched by a growth in job creation (op cit: 2007). The next paragraph will review race issue in South Africa.

Undoubtedly, in the South African situation, race is a significant distinguishing factor in labour market outcomes and conduct. Lam, et al. (2007) indicates that African/black youth 15-19 have the lowermost participation proportions while Coloured young people in this age group have the uppermost. Low participation proportions amongst this group are not necessarily a debauched

symbol as many of these young people are still at high school. Equally the fairly high percentage of Coloured youth participating over past ten years is cause for concern as this shows early exit from education in a situation of mass unemployment. Amid the older 20-24 group Black/Africans again display lesser participation proportions than the other race groups although their participation proportions together with those of Coloureds have largely increased over the period (Altman, 2007). The trend in White and Indian participation rates is less clear. It seems that participation proportions initially amplified for white young people in the 1990s and weakened in the 2000s. Black/Africans make up by far the largest number of labour force participants. Given the growth of 17 percentage points in Black/African participation (looking at 1996 and 2006), it is clear that the increase in generally labour market participation for this group over the decade mentioned has been driven by the Black/African (Lam, et al., 2007).

Closely related with skills expansion is the sweltering issue of youth not employment. South Africa's figures of unemployment, associated to other countries worldwide, is higher. Furthermore, this level of unemployment is related with a variety of social difficulties such as inequality, poverty and crime (Stats SA, 2014). South Africa's difficulties of young people unemployed cannot be importantly not interconnected from the republic's growth pathway. Since the start of democracy in 1994, this path has been characterised by major essential changes, alongside inflexibly extraordinary levels of inequality and increasing poverty (Lam, et al., 2007). These social and economic developments have been intensified by the effect of the global economic downturn in 2009, which resulted in the economy shrinking and a substantial amount of works being vanished (Altman, 2007). The National Planning Commission in its Diagnostic report (2011) presents some important challenges that position in the way of reducing inequality and eliminating poverty; amongst other which tells to this study was that too few South Africans work.

The "growth-employment-poverty-inequality dynamic" (GEPID) has not given rise to in growth being all-inclusive since it has not been labour-absorbing (Burger, et al., 2013). The absence of access to pay income is the key driver of poverty, and unruffled with growing income disparities between different population groups, has driven up discrimination (op cit: 2013). Fields (2002) recognized at least two parts of marginalization from the labour force which are apparent, namely, little participation rates, which are largely the significance of spatial exclusion and poverty hindering job pursuit and; high unemployment figures, or omission from the strict labour market. The latter is focused among young person's parting their training and education with ambitions of penetrating to labour market.

Certain that spending on education has improved especially during the onset of democratic government in 1994, the unemployed young people have greater educational credentials than older people who are already employed. Therefore, "the fact that better-educated young people remain poor suggests that the labour market has not been playing an effective role in easing poverty and that the education system is not providing the skills desired in the labour market" (Altman, 2007).

The education level does not look to be a good interpreter of movements from being unemployed to employed, although those with fewer education are more at risk of exiting employment from time to time (roughly about 6.1% movement for those without secondary education matched with 1,3% for those with higher education). Older people are more likely to get employment than the young people, and older people are more likely to stay in employment (Stats SA, 2014).

It is very important that the pathway into labour market through education and training are important causes of movement out of poverty and omission from the formal economy and the goods of its growth. Tentative analyses in less developed countries indicate that original disparities in the dissemination of human capital (e.g. education and health) and physical capital (e.g. land) signify

difficulties to economic development, with the consequesnces being almost twice as great for the deprived as for the entire population as a whole (Rankin, et al., 2013).

Concerning South Africa it can be contended that "the persistence of high income inequality, which is clearly dissuading economic growth and poverty reduction, cannot be meaningfully disassociated from the limited and unequal access to human capital; they are inseparably linked" (Rankin, et al., 2013).

Rankin, et al. (2013) and Altman (2007) agree that in order to restore inequality and poverty, the final objective of the republic's growth and growth path for the next coming twenty years should be to enable speedy social movement, with the aim of making a huge middle class. There is considerable agreement that this will be attained through the labour force, by building a development path that allows the poor to be protected in decent compensating jobs. Any upcoming development path that is not labour-absorbing will worsen the challenges of inequality and poverty.

According to Burger, et al. (2013), "the New Growth Path (NGP)", accepted by Cabinet in 2011 signifies an important change from earlier economic policies, such as "the Growth, Employment and Redistribution (GEAR) strategy, the Reconstruction and Development Programme (RDP) and the Accelerated and Shared Growth Initiative for South Africa (AsgiSA)", primarily because it places employment at the centre of the development path. Other economic variables, such as fiscal and industrial policy and regulation, trade, monetary, are seen as the means to attain the target of generating over five million jobs over the next ten years till the year 2021.

The National Development Plan (NDP) presents a lasting plan to rise employment and broaden opportunities through education and work experience, vocational training, health and nutrition, public transport public employment programmes and access to information. While there are "quick

successes" to be attained in each of these parts, the policies will take period to have an important effect on poverty.

2.5 THE RELATIONSHIP BETWEEN EDUCATION AND EMPLOYMENT

Skills expansion and other methods of human capital are largely distinguished as important factors in economic progression (Altman, 2007). The Republic of South Africa education system from basic education to higher education, is far from optimum. Though it is challenging to measure the degree education or the deficiency of it - has backed to or slowed down economic development, limited would disagree with the necessity for far-reaching alterations in our skills growth struggles. Companies would extremely love to see young person's coming out of training programmes better armed to deal with with the stresses of the workroom.

The NDP distinguishes the insufficiencies of educational system in South Africa and the significance of working on these instantly to attain the skills growth that will be required for advanced levels of employment and growth in GDP. The NDP deliberates the matter of skills in full. Chapter 9 of the NDP is titled "Improving education, training and innovation". It is outside the scope of this study to cover all of the NDP's inquiry and suggestions concerning to educational reforms. However, the (NDP, 2011) categorizes "four key features" of South Africa's "low growth, middle income trap". "These are: fragile competition for goods and services; high unemployment; low savings; and; a poor skills profile" (NDP, 2011).

Additionally, the NDP states that the labour atmosphere is made up of "weak skills" (NDP, 2011). This is largely because "South African employers spend too little money on training their staff and investing in their long term potential" (op cit: 2011).

Higher Education achievements also plays a role in whether young people pursue and are able to find work. Young people may choose not to chase employment and to go to school in its place; they may want to both pursue employment and attend school, but may not have chances to work due to an absence of job opportunities. The school enrollment is rising has likely influenced the descending trend in the Employment Population (E/P) ratio for young people. From the analyses done by Fernandes-Alcantara (2012), the higher education enrollment rate among 15 and 19 year olds and 20 and 24 year olds has gradually amplified over time, reaching all-time highs in 2012. In 2012, about half of all teens ages 15 and 19 were attending professional schools, colleges and universities, and—an increase of about 35.8% since 1975. Closely half of young people' aged between 20 and 24 were registered in tertiary education in 2011, related to about 1 out of 6 in 1975 (Fernandes-Alcantara, 2012).

The NDP outlines that the "quality of education for utmost black children is poor" (NDP, 2011). It establish that "South Africa loses nearly half of every cohort that enters the school system by the end of the 12-year schooling period, wasting important human potential and harming the life-chances of many young persons" (op cit: 2011).

Regression analysis using the Labour Force Surveys done by Mlatsheni & Rospabe (2002) endorses that in general the greater the level of educational accomplishment of young people, the enhanced their prospects of finding employment, though the solidest effects are noticed at tertiary level. As the conversation underneath tells, even young people who have completed matriculation do not fare well with regard to finding jobs. Additionally, many young people with post matric qualifications experience unemployment. These key results tell that there is either a difficult with young people work-readiness upon succeeding with their school achievement or with company perceptions of

young people work-readiness and that government and private companies needs to put close attention to education and training policies in order to address this problem. The level of completion of post primary schooling is a source for worry, as are the results achieved in Matric and also the unfortunate achievement of Further Education and Training (FET) college progresses in terms of finding jobs (Lam, et al., 2007).

The above research by (Lam, et al., 2007), concerning tertiary education supports the NDP which argues that "the performance of existing institutions of higher learning ranges from world-class to mediocre" (NDP, 2011). It further claims that the "South African higher education system is not well designed to meet the skills development needs of either the youth or the economy. Although some institutions perform well and have the academic proficiency and infrastructure to be internationally competitive, many lack adequate capability, are under-resourced and incompetent" (op cit: 2011). "The data on the quality of university education is worrying. The need to improve quality is confirmed by the reports of graduates who are unable to find employment…" (op cit: 2011).

The NDP is serious of the "further education and training (FET) system, which it found to be not effective". It is also insignificant and the production quality is unfortunate (Lam, et al., 2007). The NDP recommends the need of unbroken quality improvement as the system increases" (NDP, 2011). "Approximately 66 percent of college students are unable to find work experience. The college sector is intended as a pathway for those who do not follow an academic pathway, but it suffers from a poor standing due to the low rate of employment of college graduates" (op cit: 2011).

The Sectoral Education and Training Authorities (SETAs) were introduced in 1997 and were envisioned to develop sector-specific skills. The SETAs have also experienced severe difficulties. The (NDP, 2011) acknowledged six difficulties with the SETAs, namely "no proper monitoring and

evaluation system; no accurate records of the number of people who have benefited from the system; inadequate human resources; poor administration and financial management; poor governance and what the impact has been; and no linkages with the post-school sector".

According to Lam, et al. (2007), there are a number of possible justifications for the present state of affairs. "The apartheid legacy, the inappropriate merging, the closing of teacher training colleges and restructuring of educational institutions, the introduction of outcomes-based education, and weak administration; all of these above have played a part". Whatsoever the influence each of these and other reasons may have had, of highest significance is to recognise the requirement for speedy and operative change to report the condition.

The NDP is flawless about the necessity for skills expansion in attaining associated goals and supporting economic growth when it states that "South Africa has set itself the goals of eradicating poverty, decreasing inequality, growing the economy by an average of 5, 4 percent, and cutting the unemployment rate to 6 percent by 2030. Education, training and innovation are critical to the attainment of these goals" (NDP, 2011). Certainly, "improving the quality of education, skills development and innovation is one of three priorities that the NDP has identified for achieving its general objectives; the other two are raising employment through faster economic growth, and building the capacity of the State to play a developmental, transformative role" (op cit: 2011).

Among the NDP's "enabling mileposts" is to "ensure that skilled, technical, professional and managerial posts better reflect the country's gender, racial and disability makeup" (op cit: 2011). In the midst of its "critical actions" is an "education accountability chain, with lines of responsibility from State to classroom" (op cit: 2011).

To take into consideration the "skills crisis", the NDP outlines "improving the quality of education outcomes throughout the education system as one of the highest priorities over the next 13 years, and beyond. This includes the higher education system which the National Planning Commission believes must provide quality learning opportunities for young people; adults who want to change careers or upgrade skills; people who have left school before completing their secondary education; and unemployed people who wish to start a career" (op cit: 2011). The Republic "must reform the system of skills training to provide for the needs of the economy and of society as a whole" (op cit: 2011).

Much international evidence supports the notion that higher educational attainment leads to better employment outcomes, such as higher wages and lower unemployment. For young people, however, this association is not always evident. In some selected countries in Africa, post-primary and higher education is not associated with lower unemployment figures among young people (Garcio and Fares, 2008). Youth with secondary or tertiary education in Cameroon, Côte d'Ivoire, Kenya, Burundi, Madagascar, and Nigeria have higher rates of unemployment than youth with lower educational attainments. (Garcio and Fares, 2008).

The contributing factor of achievement is whether the state can tie together the advantage of having a great number of young person who are willing and able to work. According to the NDP, to achieve that means providing them with "education and skills, and helping school leavers find work that is stimulating and through which they can fulfill their determinations". In order to "lessen the severe effects of poverty on millions of South Africans over the short term, the plan proposes to advance the quality of education in underperforming schools and further education and training colleges".

2. 6 CONCEPTUAL FRAMEWORK

Very few models have been put forward to explain the relationship between educational level and labour market, one of these models is the theory of transitional labour market of schooling and employment (Harmon and Walker, 1995). This applies to two lower age cohorts (15-19 and 20-24 age groups) were shift from school or education to employment take place. A conceptual framework is critical in guiding the collection of data, analysis and interpretation of it. The framework must explain the hierarchical and non-hierarchical associations between different variables (Ashenfelter and Rouse, 1998).

The study focuses on the theory of human capital which postulates that education is a method of investment in human investment, and that the profitability of different types of investment can be measured using cost benefit, or rate of return analysis. The more a person is educated the higher the likelihood of participating in labour market. According to Pierce-Brown (1998), the human capital stock concept is widely utilised by labour economists since the 1970s. The person's capital stock has an "innate ability," and this can be stretched to "(i) prior participation in the labour force by education, (ii) during employment through on-the-job training, and (iii) experience". This theory proposes that youth with matriculation or tertiary education are more economically active than those without higher education (Nam, 1991). Moreover, "an individual's lifetime earnings usually show a one-off return for formal education, and subsequent salary increases to reflect the individual's years of experience and job training on a specific area" (op cit: 1991).

One passage through which scholastic accomplishment go in the labour supply choice is through its encouragement on the presented salary. If higher intensities of educational accomplishment are related with higher intensities of throughput, persons with higher intensities of educational

accomplishment should be offered higher salary rates in the labour force. A current Australian revision by Kennedy, et al. (2007) revealed that there was an optimistic relationship between educational achievement and paychecks, in line with the suppositions of international texts on this subject (op cit, 2007).

Another passage by which educational accomplishment impacts participation is through its effect on the ability of persons to answer to occupation loss. Elongated periods of unemployment can lead to skill waste away and to persons becoming dispirited from dropping out of the labour market and looking for employment. Essential changes in the economy, and/or economic recessions can put out of place large numbers of persons from employment, and are often related with insistent unemployment or what economists like to name hysteresis.

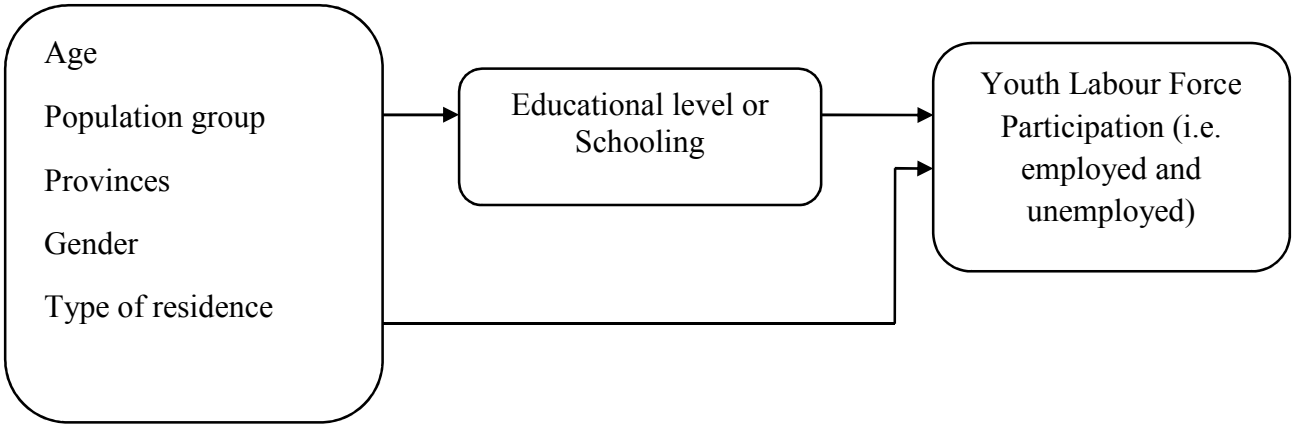
Highly educated persons may be less likely to understand extended term of unemployment or remove from the labour market as a consequence of a period of unemployment. Other, they may be more able to acclimatize to fresh employment prospects, "reskill and upskill", to acclimatize to a fluctuating labour force. Young people may also be more geographically moveable and more able to respond to provincial moves in labour demand. It is more of skilled persons that are able "to move into less skilled employment for short periods following job loss, opportunities that are then not available to the less skilled". Farber (2003) shows that in the United States of America of those with low levels of educational achievement experienced greater explosiveness in employment rates over the business sequence and "were less likely to get work once unemployed".

The information and investigation presented in this study supports these ideas, in getting a robust positive association between educational achievement and participation. Nevertheless, there is a need for thoughtfulness in understanding these associations. As outlined by Harmon and Walker (1995);

and Ashenfelter and Rouse (1998), little educational achievement and poor labour force outcomes may also be a result of other overlooked features. For instance, "there may be a selection preference in the observed data, insofar as people with a high probability of participating in the labour force due to natural abilities or personal preferences 'select' into higher levels of educational achievement". Some percentage of the detected changes in participation between assemblages with different levels of educational achievement is likely to be clarified by such a collection preference. In another look, there are likely to be dissimilarities between the minimal and middling impact of higher achievement on participation.

This affords sustenance for the suggestion that there is a causative link between educational achievement and youth labour force participation. Based on this assertion, it would tell that policy architects from government and private sector seeking to increase participation rates should consider encouraging higher educational achievement as a means of achieving this result.

Table 1: Operational framework for youth labour force participation in South Africa



Nonetheless, policies intended to upsurge youth labour force participation must be mirrored in a comprehensive context of social welfare and wellbeing. The main objective is to remove obstacles to

participation, rather than higher participation being a policy objective in and of itself. Achieving higher participation in youth people should be seen as providing a role in improving individual wellbeing and attaining improved social and economic outcomes.

CHAPTER 3

METHODOLOGY

3.1 INTRODUCTION

This study discusses the following as part of research methodology namely, study population and sample size; Questionnaire Design, Structure and Content; dependant and independant variables; hypothesis; ethical consideration; data analysis and management.

3.2 STUDY DESIGN

This is a cross sectional study involving an analysis of secondary data from the 2014 Quarterly Labour Force Survey (QLFS) conducted by National Statistics Office of in South Africa.

3.2.1 THE SOUTH AFRICAN "QUARTERLY LABOUR FORCE SURVEY"

"QLFS" is a survey that collects data on labour market on a quarterly cycle. The main aim of the QLFS is to collect quarterly data about people aged 15 to 64 years the labour market (Stats SA, 2008). This persons includes "those who are employed; those who are unemployed and those who are not economically active". The Labour Force Survey frame has been developed as a general purpose household survey frame "that can be used by all other household surveys irrespective of the sample size requirement of the survey" (op cit, 2008).

3.2.2 STUDY POPULATION AND SAMPLE SIZE

The QLFS sample covers "the non-institutional people except for workers' hostels". The sample size for the QLFS is roughly 30 000 dwellings; and these are divided equally into four rotation groups, that is, 7 500 dwellings per rotation group (Stats SA, 2008).

The sample is based on information collected during the 2001 Population Census conducted by Stats SA. In preparation for the 2001 Census, the country was divided into 80 787 enumeration areas (EAs). Some of these EAs are small in terms of the number of households that were enumerated in them at the time of Census 2001. Stats SA's household-based surveys use a Master Sample[6] which comprises of EAs that are drawn from across the country. For the purposes of the Master Sample the EAs that contained less than 25 households were excluded from the sampling frame, and those that contained between 25 and 99 households were combined with other EAs to form Primary Sampling Units[7] (PSUs) (Stats SA, 2008).

According to Stats SA the number of EAs per PSU ranges between one and four. On the other hand, very large EAs represent two or more PSUs. The sample is designed to be representative at the provincial level and within provinces at the metro/non-metro level. Within the metros, the sample is further distributed by geography type. The four geography types are: urban formal, urban informal, farms and tribal. This implies that, for example, that within a metropolitan area the sample is designed to be representative at the different geography types that may exist within that metro (Stats SA, 2008).

The current sample size is 3 080 PSUs. It is equally divided into four sub-groups or panels called rotation groups. The rotation groups are designed in such a way that each of these groups has the same distribution pattern as that which is observed in the whole sample. They are numbered from

[6] "A master sample frame is one in which the frame is used to select samples either for multiple surveys, each with different content, or for use in different rounds of a continuing or periodic survey" (Stats SA, 2008).
[7] Primary sampling unit refers "to sampling units that are selected in the first (primary) stage of a multi-stage sample ultimately aimed at selecting individual elements "(Stats SA, 2008.

one to four; and these numbers also correspond to the quarters of the year in which the sample will be rotated for the particular group (Stats SA, 2008).

The sample for the Quarterly Labour Force Survey is based on a stratified two-stage design with probability proportional to size (PPS) sampling of primary sampling units (PSUs) in the first stage, and sampling of dwelling units (DUs) with systematic sampling in the second stage (Stats SA, 2008).

3.2.2.1 Sample Rotation

The sampled PSUs have been allocated to four rotation groups, and dwellings nominated from the PSUs assigned to rotation group 'one' are rotated in the first quarter. Similarly, the dwellings selected from the PSUs assigned to rotation group 'two' are rotated in the second quarter, third quarter and so on. Thus, each sampled dwelling will stay in the sample for four consecutive quarters. It should be noted that the sampling unit is the dwelling, and the unit of observation is the household. Therefore, if a household moves out of a dwelling after being in the sample for, say 2 quarters and a new household moves in, then the new household will be enumerated for the next two quarters. If no household moves into the sampled dwelling, the dwelling will be classified as vacant (unoccupied) (Stats SA, 2008).

Each quarter, ¼ of the sampled dwellings rotate out of the sample and are replaced by new dwellings from the same PSU or the next PSU on the list. A total of 3 080 PSUs were selected for the QLFS, and 770 have been assigned to each of the four rotation groups (Stats SA, 2008).

3.2.3 WEIGHTING

The sampling weights for the data collected from the sampled households are constructed so that the responses could be properly expanded to represent the entire civilian population of South Africa. The

weights are the result of calculations involving several factors, including original selection probabilities, adjustment for non-response, and benchmarking to known population estimates from the Demographic Division of Stats SA. The base weight is defined as the product of the provincial Inverse Sampling Rate (ISR) and the three adjustment factors, namely, adjustment factor for informal PSUs, adjustment factor for sub-sampling of growth PSUs and an adjustment factor to account for small EAs excluded from the sampling frame (i.e. EAs with less than 25 households) (Stats SA, 2008).

3.2.3.1 Non-Response Adjustment

In general, imputation is used for item non-response (i.e. spaces within the questionnaire); edit failure (i.e. unsound or unreliable responses) and weight adjustment to reason for the non-respondent households (e.g. refusal, no contact, etc.). The sampled dwellings with no suitable households, e.g. foreigners only, or no households, (i.e. vacant dwellings), do not add to the survey. The eligible households in the sampled dwellings can be divided into two response groupings: respondents and non-respondents. The non-response adjusted weight is the product of the base weight with the non-response adjustment factor given above. If the PSU level non-response rate is too high, the non-response adjustment is applied at the VARUNIT level, where two VARUNITs have been formed by grouping PSUs within strata level. The PSU level non-response adjustment is applied only if the matching adjustment factor is less than 1, 5 (Stats SA, 2008).

3.2.3.2 Final Survey Weights

The final survey weights are built using regression estimation to calibrate to the known population counts at the national level population estimates (which are delivered by the Demography Division within Stats SA). This is cross-classified by 5-year age groups, gender and race, and provincial

population estimates by broad age groups are used for calibration weighting. The 5-year age groups are: 0–4, 5–9, 10–14, 15-19, 20-24, 55–59, 60–64 and 65 and over. The provincial level age groups are: 0–14, 15–64 and 65 years and over (Stats SA, 2008).

3.2.4 ESTIMATION

The final survey weights are used to get the estimates for various domains of interest. For example, the number of persons employed in agriculture in the North West Province, number of males employed in manufacturing, etc. The estimates of ratios are obtained as ratios of the estimated totals. Thus, survey estimates for any estimation domain can be calculated using the set of final weights for the respondents in the domain of interest (Stats SA, 2008).

3.2.5 RELIABILITY OF THE SURVEY ESTIMATES

Because estimates are constructed on sample data, they differ from figures that would have been obtained from whole enumeration of the population using the same instrument. The results are subject to both sampling and non-sampling errors. The non-sampling errors include, amongst others, biases from incorrect reporting, tabulation, processing and errors from non-response and incomplete reporting. These types of errors cannot be measured readily. However, to the extent possible, non-sampling errors can be minimised through the procedures used for data collection, editing, quality control, and non-response adjustment. The variances of the survey estimates are used to measure sampling errors. The variance estimation methodology is discussed in the next section (Stats SA, 2008).

3.2.5.1 Variance estimation

The most commonly used methods for estimating variances of survey estimates from complex surveys, such as the QLFS, are the Taylor-series Linearization, Jackknife Replication, Balanced

Repeated Replication (BRR), and Bootstrap methods (Wolter, 2007). This study implemented the replication method for the QLFS mainly because of simplicity. The QLFS sampled 3 080 PSUs by selecting an even number of 4 or more PSUs from within strata. The Jackknife method would be applicable for the sample design with more than two PSUs per stratum, but this would result in 3 080 replicates, which would be computationally very intensive. The Fay's BRR method on the other hand is applicable when two primary sampling units (PSUs) are sampled from each stratum. Therefore, this study decided to use Fay's BRR method by disintegrating PSUs into two groups of PSUs within each stratum (Stats SA, 2008).

3.2.5.2 Other measures of precision

In practice, the sampling variance itself is hardly ever stated. Instead, users find it more valuable to rely on one of the derivatives of the sampling variance, such as the standard error, the coefficient of variation, the margin of error, or the confidence interval. These are all linked expressions, and it is quite easy to go from one to the other using simple calculated operations (Stats SA, 2008).

3.2.5.3 Standard error

The standard error of an estimator is the square root of its sampling variance. This measure is easier to understand since it provides an indication of sampling error using the same measure as the estimate; whereas the variance is based on squared changes. If $\hat{\theta}$ is the estimate of a given population parameter θ (e.g., true employment but unknown) and v ($\hat{\theta}$) is the corresponding estimate of its variance, then the standard error of the estimate is defined as se ($\hat{\theta}$) = $\sqrt{v(\hat{\theta})}$.. (Stats SA, 2008)

3.2.5.4 Coefficient of variation

It is more valuable in many situations to assess the size of the standard error relative to the scale of the characteristic being measured. The coefficient of variation (cv) offers such a measure. It is the ratio of the standard error of the survey assessment to the value of the estimate itself expressed as percentage. It is very useful in comparing the precision of several different survey estimates, where their sizes or measure differ from one another (Stats SA, 2008).

3.2.5.5 Confidence intervals

The 95 per cent confidence interval is the interval such that there is a 95 per cent probability (chance of 19 out of 20) of the unknown population parameter θ being within the interval. The 95 percent confidence interval is given by $(\hat{\theta})$ ± 1.96 × se $(\hat{\theta})$. The lower limit of the interval is $(\hat{\theta})$ - 1.96 × se $(\hat{\theta})$ and the upper limit of the interval is $(\hat{\theta})$ + 1.96 × se $(\hat{\theta})$. The width 1.96 × se $(\hat{\theta})$ is known as half-width of the 95 per cent confidence interval. The smaller the half-width of the confidence interval, the more precise is the survey estimate (Stats SA, 2008).

3.2.5.6 Design effects

Most surveys are based on complex designs involving stratification, and clustering due to multi-stage designs. Moreover, the weighting involves non-linear adjustments (e.g., non-response and weight calibration adjustments, etc.). It is crucial that these features of the complex survey design be accounted for in the variance estimation (Choudhry and Valliant, 2003). The design effect associates the variance of the estimate from the sample design that was actually employed to the variance of the estimate that would have been obtained from a simple random sample (SRS) design. Design effect is another way to evaluate the effectiveness of a sample design and the procedure used to develop the

survey estimates. Design effect is defined as the ratio of the variance of an estimate for a complex sample design and the variance of the estimate under the SRS design with the same sample size. Kish (1965) introduced the concept of design effect to deal with complex sample designs involving stratification and clustering. Stratification, generally, primes to a gain in efficiency over simple random sampling, but clustering primes to deterioration in the efficiency of the sample design due to positive intra-cluster correlation among units in the cluster (PSUs in the case of QLFS). To determine the total effect of any complex design on the sampling variance in contrast to the alternative simple random sample design, the design effect (deff) is defined as:

$$\text{Deff} = \frac{Sampling\ variance\ of\ a\ complex\ sample\ design}{Sampling\ variance\ of\ simple\ random\ sample\ design}$$

A design effect can be derived for any sampling design and estimator, provided one can compute a sampling variance. It is important to note that the design effect is related with both the design and the estimator. Therefore, for a given survey, the design effect can vary substantially from one variable to another (Stats SA, 2008).

3.2.5.7 Effective sample size

Another concept that is often used is effective sample size defined as the actual sample size that was nominated for the complex design divided by the corresponding design effect. The effective sample size can be read as the sample size that would be needed for an SRS design to obtain the same variance as that attained with the complex design (i.e. the design that was actually implemented) (Stats SA, 2008).

3.2.6 QUESTIONNAIRE DESIGN, STRUCTURE AND CONTENT

3.2.6.1 Questionnaire design

The core QLFS questionnaire has a cover page and two parts. Part one comprises of 7 questions: two general questions to establish household membership etc.; and five socio-demographic questions (age, sex, marital status, population group, educational attainment). Persons aged 15 years and older are then screened to answer Part two of the questionnaire which has three sections. Each questionnaire allows for up to six household members to complete Part two on an individual basis (Stats SA, 2008).

3.2.6.2 Questionnaire structure and content

The inclusion of questions in the core questionnaire was guided by the need to have a minimum set of questions that would enable robust analysis of key labour market patterns on a quarterly basis, while at the same time not burdening respondents with a long questionnaire (op cit, 2008). In light of this, two types of questions were included in the QLFS core questionnaire as follows:

- Classification questions: Those required in determining labour market status.
- Descriptor questions: Those that provide insight into key labour market patterns.

In addition to the fieldwork and processing details required on the cover page of each questionnaire, the core QLFS questionnaire has in total 59 questions in Section 1 through to Section 4. The sequencing and phrasing of each question was tested through behind-the-glass observations and focus-groups in all the official languages. The questionnaire was also translated into all the official languages for reference during fieldwork. Four field tests using the new questionnaire were conducted during the period April 2006 to December 2007. The insides of the QLFS questionnaire are summarised as follows:

- **Cover page of the QLFS core questionnaire**

"The cover page contains details that enable the tracking of the questionnaire and monitoring of fieldwork at Head Office, the Provincial offices and District offices".

- **Section 1 of the QLFS core questionnaire**

"This section has socio-demographic questions which are completed for all household members irrespective of age".

- **Section 2 of the QLFS core questionnaire**

"The questions in this section determine those individuals, aged 15–64 years, who are employed and those who are not employed".

- **Section 3 of the QLFS core questionnaire**

"This section defines which respondents are unemployed and which respondents are not economically active".

- **Section 4 of the QLFS core questionnaire**

This section comprises questions about the work situation of respondents who are employed. It includes questions about the number of jobs at which the respondent works, the hours of work, the industry and occupation of the respondent as well as whether or not the person is employed in the formal or informal sector etc. (Stats SA, 2008).

3.3 VARIABLE DEFINITIONS

3.3.1 DEPENDENT VARIABLES

The dependent variable in this study is Youth Labour Force Participation status (YLFP status). For the purposes of this study, the labour force as discussed earlier comprises "all persons who are employed and all persons who are unemployed". This dependent variable indicates the YLFP status

of all persons in the household aged 15 to 34. The dependent variable was assembled into four groupings in the QLFS 2014 as follows: (1) Unemployed, (2) Employed, (3) Not economically active, and (4) discouraged job seekers. The variable Youth Labour Force Participation status (YLFP status) was rearranged in STATA 12 with groupings 1 and 2 = 1 and groupings 3 and 4 = 0 and recoded as Yes and No – i.e., participate and not participate correspondingly.

This study compared Quarter 1 (Q1) to Quarter 4 (Q4) of the Labour Force Survey to take into account quarterly dynamic forces in the labour market and their impact on YLFP.

Table 2: Definition of dependent Variable

Definition of dependent variable	
Variable	**Categories**
Youth Labour force participation status (YLFP status)	1. Yes (Participate) (Employed + Unemployed) 0. No (Not Participate) (Not economically active + Discouraged job seekers)

Major labour market categories

An unemployed person is defined under international guidelines as a person within the economically active population who: did not work during the seven days prior to census night, and would have liked to work, and was available to start work within a week before the interview and had taken active steps to look for work or to start some form of business in the four weeks prior to the interview (Stats SA, 2001).

3.3.2 INDEPENDENT VARIABLES

Table 3: Definition of Independent Variables

Variables	**Definitions**
Demographic	
Age	15-19 years 20-24 years 25-29 years 30-34 years
Population groups	Black/African Coloured Indian/Asian White
Gender	Female Male
Type of residence	Rural residence Urban residence
Provinces	Limpopo Kwazulu-Natal Eastern Cape North west Free State Northern Cape Gauteng Mpumalanga Western Cape
Educational Level	No & Primary education Secondary education Higher education

Educational Level

This study looks at the association between educational levels and labour force participation among youth, using levels of educational accomplishment as a substitution for skills. The study examines the labour force participation of youth in South Africa, based on evaluation of the educational accomplishments of the labour force participation among youth.

3.4 HYPOTHESES

H_o: There is no relationship between education level and labour force participation among young persons in South Africa.

H_1: There is a relationship between education level and labour force participation among young persons in South Africa.

3.5 ETHICAL CONSIDERATIONS

The Quarterly Labour Force Survey (QLFS) is a survey conducted by National Statistics Office of South Africa. The QLFS survey is conducted guided by the principles of official Statistics wherein it also addresses confidentiality as one of the principles. The study under current consideration will involve secondary analysis of pre-existing data. As a result, no personal information or names of the respondents will be disclosed in the dataset, thus anonymity will be guaranteed.

3.6 DATA MANAGEMENT

The 2013 QLFS data in Stata format were downloaded from Statistics South Africa website. Stata Version 12 was used for analysis. From the set of downloaded data from the Labour Force Survey, variables considered to be relevant to this study were identified and extracted into four different data set representing four quarters in 2013. There was a total of 20 061 820 cases in the first quarter; 20

092 493 in the second quarter; 20 206 779 in the third quarter and there were a total of 20 205 395 cases in the fourth quarter in the Labour Force Survey module. However, for some of the variables, there were missing cases. In some instances, this was attributable to the respondents stating that they were unsure of how to respond or they omitted the question completely. However, the majority of the questions, over 96%, were complete. All cases in the 2014 QLFS data were given weights, to adjust for differences in probability of selection and also to adjust for the non-response in order to have a representative sample.

Weights were calculated by Statistics South Africa, and were used throughout the analysis to scale data from sample to population level. It must be taken into consideration that the Indian population is the minority in South Africa and thus data for this sub-group might be problematic due to low observation numbers. Measurement errors do occur, and thus the reader must be careful when quoting figures for the Indian population.

This is especially troublesome when non response occurs just within a specific subgroup. If the non-response is according to the population composition, the rates will be inflated accordingly. However, if it is a skewed distribution, all rates are inflated but one group more than the other. These inflated rates are difficult to pinpoint because non response is unpredictable. Non response can be any value, and there are different ways of dealing with this. One response is to regard all non-response as zero or to use hot deck imputation methods. Schoier (2008) states that this method uses respondents that fully completed the questionnaire to match with respondents that have missing values, and then impute their values into the non-response values. This preserves the distribution of item values and there are different methods to obtain the 'donor value'. One way is to filter through certain variables (example race, sex etc.) for both donor and receiver, and when these variables match the rest of the donor information will be imputed into the receiver's missing values.

3.7 DATA ANALYSIS

The dependent and independent variables used in this study were analyzed in three stages, namely, univariate, bivariate and multivariate analysis. The significance tests were two tailed and the statistical significance was defined at the alpha level of 0.05.

3.7.1 UNIVARIATE ANALYSIS

This is done to profile the respondents by summarising the demographic and socioeconomic variables. Calculation of youth labour force participation rate, employment and unemployment was done at this level.

3.7.2 BIVARIATE ANALYSIS

This is done to look at the relationship between the independent social and economic, demographic, and the dependent variables of whether education level influences labour force participation of youth. In order to look at such a relationship, the unadjusted odds ratios were computed to clarify the likelihood of negative labour force participation outcomes occurring. The selected youth labour force participation outcome variable included the following:

- Youth labour force participation. The total number of youth 15 to 34 years that is either employed or unemployed.

3.7.3 MULTIPLE LOGISTIC REGRESSION ANALYSIS

A logistic regression analysis was used in the final stage of the analysis. There are two main gains of logistic regression over other models. Firstly, it describes the "relationship between a categorical outcome (response variable) and a set of covariates (predictor variables). The categorical outcome may be binary (e.g., yes or no) or ordinal (e.g., normal, mild and severe). The predictor variable(s) may be continuous or categorical". The second is that "logistic regression provides a quantified value for the strength of the association adjusting for other variables as it eliminates confounding effects. The exponential of coefficients resemble to odd ratios for the given factor (Kleinbaum and Klein, 2010).The logistic regression model was chosen in order to overcome the problems related with linear probability models because it provides a comparative estimation based on probabilities" (Kleinbaum and Klein, 2010).

This was also used in this study because the outcome variables are dichotomous or binary. For this stage, the labour force participation were the outcome variable. Thus if the respondent recorded not economically active and discouraged job seekers, they were coded as "0" and the employed and unemployed youth coded as "1". The purpose of such coding ensured that only the negative values could be used in the model. The logistic regression was also used for each of the independent variables that were significant by each binary, dependent variable. In the first model level of education, age and gender variables were introduced into the model as the independent variables. Finally, in the second model, more variables were added that included place of residence, population group, and province because these characteristics are known to influence labour force participation. The basic logistic regression equation used was:

$$Ln\left(\frac{P_i}{1-P_i}\right) = \propto +\beta_1 X_{1i} + \beta_2 X_{2i} + \cdots + \beta_k X_{ki} + e_i$$

$$Ln\left(\frac{P_i}{1-P_i}\right) = is\ the\ logit\ of\ the\ odds\ of\ being\ educated$$

$$X_i = independent\ variables$$

$\beta_{=}\beta_{1,}\beta_{2,}\ldots\beta_{k,}$= is a vector of parameter estimates representing the effects on the log odds of the vector of independent variables x_i. It is a regression coefficient. The log odds are not easily understood and so they can be exponentiated to provide the odds of being educated by the following formula:

$$\left(\frac{P_i}{1-P_i}\right) = e^{\propto+\beta x_i+e}i$$

Where

α_i= average log odds (means) when all x_i.are set to zero. It is the error or unexplained part of the regression (op cit, 2010). It is a constant.

The logistic regression equation takes the form:

Labour force participation= Level of education + Age + Gender + Population group + Place of residence + Province

The dependent variables take one of the following labour force status:

- Labour force participation= (Employed + Unemployed)

In this section of the study, the strength of associations between the respondent's background and level education with labour force participation was considered. This improves the understanding of the key variables or characteristics that are significantly associated within the logistic regression model provided. In the first model level of education, age and gender variables were introduced into the model as the independent variables. In the second model more variables that included population

group, place of residence, and province were added because these characteristics are known to influence labour force participation.

CHAPTER 4

RESULTS

4.1 INTRODUCTION

Chapter 4 presents outcomes of the characteristics of the survey respondents. This is followed by a presentation of the results of the association between the dependent variable selected youth labour force participation and the independent variables including age, sex, population group, provinces and educational level. Youth labour force participation status included employed and unemployed youth in 2014. The chapter also discusses multiple logistic regression results.

4.2 DESCRIPTIVE STATISTICS

4.2.1 SOCIO-DEMOGRAPHIC FEATURES OF THE RESPONDENTS

This unit centers on the univariate analysis of the 2014 QLFS data. The analysis generated the following results shown in table 4 below.

Table 4: Weighted percentage distribution of South African youth, by selected social and demographic characteristics, SAQLFS, 2014

Features	First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
Age								
15 - 19	5163576	25.5	5161527	25.3	5157752	25.2	5152352	25.2
20 - 24	5075231	25.0	5091456	25.0	5106527	25.0	5120142	25.0
25 - 29	4805702	23.7	4821695	23.7	4839090	23.7	4857535	23.7
30 - 34	5242423	25.8	5300412	26.0	5330673	26.1	5338418	26.1
Total	20286932	100	20375090	100	20434042	100	20468447	100.0
Gender								
Male	10232150	50.4	10264758	50.4	10299443	50.4	10312894	50.4
Female	10054782	49.6	10110332	49.6	10134599	49.6	10155553	49.6
Total	20286932	100	20375090	100	20434042	100	20468447	100.0
Population group/Race								
African/Black (1)	16868716	83.2	16946893	83.2	17007114	83.2	17053461	83.3
Coloured (2)	1694707	8.4	1698260	8.3	1708911	8.4	1703001	8.3
Indian/Asian (3)	478204	2.4	480925	2.4	472591	2.3	473103	2.3
White (4)	1245304	6.1	1249012	6.1	1245427	6.1	1238882	6.1
Total	20286932	100	20375090	100	20434042	100	20468447	100.0
Type of residence								
Rural residence	7019629	34.6	7020245	34.5	7211008	35.3	7307265	35.7
Urban residence	13267303	65.4	13354845	65.5	13223034	64.7	13161182	64.3
Total	20286932	100	20375090	100	20434042	100	20468447	100
South African Provinces								
Western Cape (1)	2158354	10.6	2177322	10.7	2183857	10.7	2183237	10.7
Eastern Cape (2)	2530948	12.5	2537570	12.5	2535327	12.4	2542223	12.4
Northern Cape (3)	425506	2.1	430748	2.1	431193	2.1	428526	2.1
Free State (4)	1075241	5.3	1080193	5.3	1082050	5.3	1071821	5.2
KwaZulu-Nat (5)al	4046650	19.9	4060063	19.9	4065970	19.9	4088159	20.0
North West (6)	1339964	6.6	1355815	6.7	1353659	6.6	1354317	6.6
Gauteng (7)	4821124	23.8	4827806	23.7	4867781	23.8	4878453	23.8
Mpumalang (8)a	1651597	8.1	1659957	8.1	1661695	8.1	1662693	8.1
Limpopo (9)	2237548	11.0	2245615	11.0	2252510	11.0	2259019	11.0

Total	20286932	100	20375090	100	20434042	100	20468447	100.0
Educational Level								
Primary & No Education (1)	1960336	9.7	2030944	10.0	2032253	9.9	2088761	10.2
Secondary Education (2)	16227794	80.1	16203639	79.7	16300737	80.0	16269676	79.7
Higher Education (3)	2058763	10.2	2096636	10.3	2050135	10.1	2054675	10.1
Total	20246893	100.0	20331219	100	20383125	100	20413112	100.0

The weighted frequencies are approximately the same as the unweighted frequencies. The difference in the sum is possibly due to rounding errors.

As shown in Table 4, the 30-34 years age group made up the largest group (26%) amongst the youth who participated in the study in the second to fourth quarter, with the exception of first quarter (25.8%). The lowest age group 25-29 has 23%, whilst the other remaining age groups have 25% in all quarters. There are slightly more males (50.4%) than females (49.6%) in all quarters of the year.

Gauteng had the highest percentage of participants in the study, making up 23.8% with Northern Cape having the least percentage of 2.1% in almost all the quarters. The other provinces had relatively high percentages such as Eastern Cape 12.5%, Limpopo 11% and Western Cape 10.7%.

From the study, it was noted that around 83% of the respondents were African/Black whilst the other remaining percentage shared amongst coloured, Indian/Asian and White. The situation remains almost the same in all the quarters. In terms of levels of education of the youth participants, 80% had secondary education followed by 10% who had higher education and 9% had had primary education.

4.2.2 Labour Force Characteristics of the Respondents

From the table 5 below, a distinction was made to youth who participated in labour market and those young people who did not participate in labour market. In Q1 those who were participating were 49.4% and decreased to 48.7% in Q4 and for those not participating 50.6% in Q1 increased to 51.3% in Q4.

Table 5: Weighted percentage distribution of Youth, by selected Labour Force Characteristics, QLFS, 2014

Characteristics	Frequency	Percent	Youth Labour Force Participation Status	Frequency	Percent	Unemployment Rate (1)	Employment rate (2)	Youth Labour Force Participation Rate
First Quarter								
Employed (1)	6480519	31.9						
Unemployed (2)	3531623	17.4	Yes (Participate)	10012142	49.4			
Discouraged job seeker (3)	1595069	7.9						
Other not economically active (4)	8679721	42.8	No (Not Participate)	10274790	50.6			
Total	**20286932**	**100.0**		**20286932**	**100**	35.3	31.9	49.4
Second Quarter								
Employed	6492902	31.9						
Employed (1)	3520296	17.3	Yes (Participate)	10013198	49.1			
Unemployed (2)	1648824	8.1						
Discouraged job seeker (3)	8713068	42.8	No (Not Participate)	10361892	50.9			
Other not economically active (4)	**20375090**	**100.0**		**20375090**	**100.0**	35.2	31.9	49.1
Third Quarter								
Employed	6429495	31.5						
Employed (1)	3623922	17.7	Yes (Participate)	10053417	49.2			
Unemployed (2)	1678955	8.2						
Discouraged job seeker (3)	8701671	42.6	No (Not Participate)	10380626	50.8			
Other not economically active (4)	**20434042**	**100.0**		**20434043**	**100.0**	36.0	31.5	49.2
Fourth Quarter								
Employed	6553228	32.0						
Employed (1)	3406363	16.6	Yes (Participate)	9959591	48.7			
Unemployed (2)	1645870	8.0						
Discouraged job seeker (3)	8862985	43.3	No (Not Participate)	10508855	51.3			
Other not economically active (4)	**20468447**	**100.0**		**20468446**	**100.0**	34.2	32.0	48.7

Reflecting on quarterly changes in employment matters on Table 5, the youth who are not working decreased from Q1 to Q4 with rates from 35.3 to 34.2 respectively. The opposite results were visible with the absorption rate which increased from Q1 to Q4. Absorption rate moved from 31.9 in Q1 to 32 in Q4. A downward trend was observed with youth labour force participation rate which moved from 49.4 in Q1 to 48.4 in Q4.

4.2.3 Cross-tabulation of Labour Force Participation Rates and Educational Level

From table 6 below, quarter 1, among youth with primary or no education, 37.6% reported participating in labour force whilst 62.4% reported not participating in labour force. A similar pattern with slight increase is noted amongst youth with secondary education. Approximately fifty percent (46.7%) with secondary education reported participating in labour force unlike 53.3% from the same group who reported not participating in labour force. Things start to change drastically among youth with higher education 81.3% reported participating in labour force whilst a meagre 18.7% reported not participating in labour force.

The above analysis is based on what was happening in quarter one, having carefully checked all the remaining quarters (Q2, Q3 and Q4) a similar pattern is being observed as indicated in table 6. There seems to be a difference in terms of participating or not participating in labour force between youth with no schooling, primary education, secondary and higher education. Nonetheless, it is noted that youth with higher education are 35.7% (81.8-46.1%) more probable to participate in labour market compared with youth having secondary education. Compared with youth with primary education it is noted that youth with secondary education are also 10.8% more probable to participate in labour market compared with youth having primary education.

There seem to be some differences in labour force participation especially among youth with no schooling and with those youth with higher education.

Table 6: Labour Force Participation Status and Education Level Cross tabulation

			Level of Education			Total
			Primary/no education	Secondary Education	Higher Education	
Quarter 1						
Youth Labour Force Participation Status	**Yes (Participate)**	Count	736272	7573630	1674450	9984352
		% within Educational Level	37.6%	46.7%	81.3%	49.3%
	No (Not Participate)	Count	1224064	8654164	384313	10262541
		% within Educational Level	62.4%	53.3%	18.7%	50.7%
Total		Count	1960336	16227794	2058763	20246893
		% within Educational Level	100.0%	100.0%	100.0%	100.0%
Quarter 2						
Youth Labour Force Participation Status	**Yes (Participate)**	Count	707289	7572030	1700607	9979926
		% within Educational Level	34.8%	47.5%	84.1%	49.9%
	No (Not Participate)	Count	1323654	8631610	396029	10351293
		% within Educational Level	65.2%	54.2%	19.6%	51.8%
Total		Count	2030943	15938744	2021216	19990903
		% within Educational Level	100.0%	100.0%	100.0%	100.0%
Quarter 3						
Youth Labour Force Participation Status	**Yes (Participate)**	Count	707575	7648274	1656525	10012374
		% within Educational Level	34.8%	46.9%	80.8%	49.1%
	No (Not Participate)	Count	1324678	8652463	393610	10370751
		% within Educational Level	65.2%	53.1%	19.2%	50.9%
Total		Count	2032253	16300737	2050135	20383125
		% within Educational Level	100.0%	100.0%	100.0%	100.0%
Quarter 4						
Youth Labour Force Participation Status	**Yes (Participate)**	Count	731481	7501780	1681620	9914881
		% within Educational Level	35.0%	46.1%	81.8%	48.6%
	No (Not Participate)	Count	1357279	8767896	373055	10498230
		% within Educational Level	65.0%	53.9%	18.2%	51.4%
Total		Count	2088760	16269676	2054675	20413111
		% within Educational Level	100.0%	100.0%	100.0%	100.0%

** "Number of valid cases is different from the total count in the cross tabulation table because the cell counts have been rounded and there are missing cases".*

Table 7: Chi Square Tests for association between (Education Level, Gender and Population Group) and Labour Force Participation Status

	Education Level				Population Group				Gender		
	Value	**df**	**Asymp.Sig. (2 Sided)**		**Value**	**df**	**Asymp.Sig. (2 Sided)**		**Value**	**df**	**Asymp.Sig. (2 Sided)**
Quarter 1											
Pearson Chi-Square	1400.0	2	.000		464	3	.000		205	1	.000
No. of valid Cases	30144				30144				30144		
Quarter 2											
Pearson Chi-Square	1400.0	2	.000		442	3	.000		189	1	.000
No. of valid Cases	29173				29173				29173		
Quarter 3											
Pearson Chi-Square	1400.0	2	.000		480	3	.000		211	1	.000
No. of valid Cases	29228				29228				29228		
Quarter 4											
Pearson Chi-Square	1300.0	2	.000		440	3	.000		158	1	.000
No. of valid Cases	28725				28725				28725		

From table 7 above, the observed results in Q1 indicate that there is a statistically important association between education level and youth labour force participation status (Chi-Square with two degrees of freedom = 1400.0, p = 0.000). All the other three quarters show that there is a statistically

important association between education level and youth labour force participation status (refer to above table 7 to check the corresponding numbers).

Again, the observed results in Q1 indicate that there is a statistically important association between population group and youth labour force participation status (Chi-Square with three degrees of freedom = 464.0, p = 0.000). All the other three quarters show that there is statistical important association between population group and youth labour force participation status (refer to above table 7 to check the corresponding numbers).

Lastly, there is statistical important association between gender and youth labour force participation status (Chi-Square with one degree of freedom = 205.0, p = 0.000). All the other three quarters show that there is a statistically important association between gender and youth labour force participation status (refer to above table 7 to check the corresponding numbers).

Table 8: Measurement of strength of association between (Education Level, Gender and Population Group) and Labour Force Participation Status

	Education Level		Population Group		Gender	
Quarter 1	**Value**	**Approx. Sig**	**Value**	**Approx. Sig**	**Value**	**Approx. Sig**
Nominal by Nominal Cramer's V	0.217	.000	0.124	.000	-0.083	.000
No. of valid Cases	30144		30144		30144	
Quarter 2						
Nominal by Nominal Cramer's V	0.219	.000	0.123	.000	-0.081	.000
No. of valid Cases	29173		29173		29173	
Quarter 3						
Nominal by Nominal Cramer's V	0.216	.000	0.128	.000	-0.085	.000
No. of valid Cases	29228		29228		29228	
Quarter 4						
Nominal by Nominal Cramer's V	0.215	.000	0.124	.000	-0.074	.000
No. of valid Cases	28725		28725		28725	

The Cramer's V coefficient in table 8 which measures the strength of the association between labour force participation and education level was noted as 0.217 in quarter 1. The result is statistically significant with a p-value <0.05. There is moderate relationship between labour force participation and education level. More of similar figures were observed in other quarter as indicated in table 8 (Q2=0.219, Q3=0.216 and Q4=0.215) which also gives a moderate association between labour force participation and education level.

The second Cramer's V coefficient in table 8 which measures the strength of the association between labour force participation and population group was noted as 0.124 in quarter 1 and the result is

statistically significant with a p-value <0.05. There is weak relationship between labour force participation and population group. More of similar figures were observed in other quarter as indicated in table 8 (Q2=0.123, Q3=0.128 and Q4=0.124) which also gives a weak association between labour force participation and population group.

Lastly, the Cramer's V coefficient in table 8 which measures the strength of the association between labour force participation and gender was noted as -0.083 in quarter 1. The result is statistically significant with a p-value <0.05. There is very weak relationship between labour force participation and gender. More of similar figures were observed in other quarter as indicated in table 8 (Q2= -0.081, Q3= -0.085 and Q4= -0.074) which also gives a very weak association between labour force participation and gender.

4.3 BIVARIATE ANALYSIS RESULTS

This unit presents the results of the unadjusted logistic regression analyses which were done to find out the bivariate association between each social and demographic variable and selected labour force participation. Research has shown mixed outcomes between the association of education level and labour force participation in Southern Africa (Lam, et al., 2007).

In this section, the following hypotheses were tested and were applicable for each bivariate analysis of selected socioeconomic and demographic factor and selected labour force participation:

H_0: There is no relationship between selected social, demographic factors and labour force participation.

H_1: There is a relationship between selected social, demographic factors and labour force participation.

In this section our selected socioeconomic and demographic factors include highest educational level, age, gender, population group and province. The labour force participation employed included a sub categories employment and unemployment separately. Because of the nature of the analysis conducted, employment was dropped as a variable because it was an opposite of unemployment and features well in binary categories of unemployment as those youth who are unemployed.

4.3.1 Education Level and Labour Force Participation of Youth

From table 9, it is noted that compared with youth with no or primary education, the youth with secondary education were more likely to participate in labour force [(Q1: OR 1.46, 95% CI 1.35 to 1.58); (Q2: OR 1.63, 95% CI 1.50 to 1.78); (Q3: OR 1.68, 95% CI 1.55 to 1.82) & (Q4: OR 1.65, 95% CI 1.52 to 1.79)].

Youth with higher education compared with no or primary education were more likely to participate in labour force [(Q1: OR 7.21, 95% CI 6.30 to 8.24); (Q2: OR 7.85, 95% CI 6.85 to 9.01); (Q3: OR 7.83, 95% CI 6.83 to 8.98) & (Q4: OR 7.69, 95% CI 6.71 to 8.82)].

However in table 9 below, the observed Chi-Square Statistic had p-values <0.05 and so the researcher therefore reject the null hypothesis. Thus the researcher gives support for the research hypothesis and can settle that education level was associated with labour force participation.

Table 9: Unadjusted odd ratios of the relations between selected features and labour force participation

Characteristics	Labour Force Participation			
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
	N 30144	N 29173	N 29228	N 28725
	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
Education Level				
No & Primary Education	**1.00**	**1.00**	**1.00**	**1.00**
Secondary Education	**1.46** (1.35- 1.58)*	**1.63** (1.50- 1.76)*	**1.68** (1.55- 1.82)*	**1.65** (1.52- 1.79)*
Higher Education	**7.21** (6.30- 8.24)*	**7.85** (6.85- 9.01)*	**7.83** (6.83- 8.98)*	**7.69** (6.71- 8.82)*
Pearson Chi-Square p-value	**0.00***	**0.00***	**0.00***	**0.00***
Age				
15-19	**1.00**	**1.00**	**1.00**	**1.00**
20-24	**14.35** (12.77- 16.12)*	**13.81** (12.29- 15.51)*	**14.41** (12.78- 16.24)*	**14.43** (12.75- 16.32)*
25-29	**39.36** (34.09- 45.45)*	**36.56** (31.71- 42.15)*	**40.89** (35.26- 47.41)*	**40.55** (34.89- 47.15)*
30-34	**50.84** (43.57- 59.31)*	**45.01** (38.74- 52.28)*	**51.01** (43.60- 59.67)*	**53.10** (45.16- 62.44)*
Pearson Chi-Square p-value	**0.00***	**0.00***	**0.00***	**0.00***
Gender				
Male	**1.00**	**1.00**	**1.00**	**1.00**
Female	**0.72** (0.69- 0.75)*	**0.72** (0.69-0.76)*	**0.71** (0.68-0.74)*	**0.74** (0.71- 0.78)*
Pearson Chi-Square p-value	**0.00***	**0.00***	**0.00***	**0.00***
Population Group/Race				
African/Black (1)	**1.00**	**1.00**	**1.00**	**1.00**
Coloured (2)	**1.91** (1.77- 2.06)*	**1.98** (1.83- 2.13)*	**2.02** (1.87- 2.18)*	**1.94** (1.79- 2.09)*
Indian/Asian (3)	**1.91** (1.60- 2.26)*	**1.63** (1.37- 1.94)*	**1.65** (1.39- 1.95)*	**1.67** (1.40- 1.99)*
White (4)	**2.11** (1.88- 2.36)*	**2.03** (1.81-2.28)*	**2.07** (1.84- 2.32)*	**2.09** (1.86- 2.35)*
Pearson Chi-Square p-value	**0.00***	**0.00***	**0.00***	**0.00***
Type of residence				
Rural residence	**1.00**	**1.00**	**1.00**	**1.00**
Urban residence	**3.01** (2.86- 3.17)*	**2.77** (2.64- 2.92)*	**2.76** (2.63- 2.91)*	**2.73** (2.60- 2.87)*
Pearson Chi-Square p-value	**0.00***	**0.00***	**0.00***	**0.00***
Province				
Limpopo (1)	**1.00**	**1.00**	**1.00**	**1.00**
KwaZulu Natal (2)	**1.77** (1.62- 1.94)*	**1.72** (1.57- 1.89)*	**1.57** (1.42- 1.71)*	**1.50** (1.36- 1.63)*
Eastern Cape (3)	**1.67** (1.50- 1.84)*	**1.73** (1.56- 1.91)*	**1.53** (1.39- 1.70)*	**1.46** (1.31- 1.61)*
North West (4)	**1.94** (1.72- 2.17)*	**1.79** (1.60- 2.00)*	**1.90** (1.70- 2.12)*	**1.92** (1.71- 2.15)*
Free State (5)	**3.00** (2.69- 3.36)*	**3.00** (2.68- 3.36)*	**2.81** (2.52- 3.14)*	**2.64** (2.37- 2.95)*
Northern Cape (6)	**3.00** (2.64- 3.42)*	**2.93** (2.58- 3.35)*	**2.71** (2.38- 3.08)*	**2.83** (2.50- 3.21)*
Gauteng (7)	**4.21** (3.81- 4.65)*	**3.73** (3.38- 4.12)*	**3.55** (3.22- 3.91)*	**3.58** (3.25- 3.96)*
Mpumalanga (8)	**2.56** (2.31- 2.84)*	**2.33** (2.11- 2.59)*	**2.18** (1.97- 2.42)*	**1.97** (1.78- 2.18)*
Western Cape (9)	**4.81** (4.31- 5.37)*	**4.64** (4.16- 5.18)*	**4.35** (3.91- 4.84)*	**4.02** (3.62- 4.48)*
Pearson Chi-Square p-value	**0.00***	**0.00***	**0.00***	**0.00***

**p<0.05.* *Values are odds ratios (95% Confidence Interval).* *Missing cases were excluded from analysis*

4.3.2 Age and Labour Force Participation of Youth

Compared with youth of the age group 15-19 years, young persons aged 20-24 years were 14 times more probable to participate in labour market in Quarter one [(Q1: OR 14.35, 95% CI 12.77 to 16.12); (Q2: OR 13.81, 95% CI 12.29 to 15.51); (Q3: OR 14.41, 95% CI 12.78 to 16.24) & (Q4: OR 14.43, 95% CI 12.75 to 16.32)].

Youth aged 25-29 years were also 40 times more probable to participate in the labour market [(Q1: OR 39.36, 95% CI 34.09 to 45.45); (Q2: OR 36.56, 95% CI 31.71 to 42.15); (Q3: OR 40.89, 95% CI 35.26 to 47.41) & (Q4: OR 40.55, 95% CI 34.89 to 47.15)].

The youth aged 30-34 years, compared with the youth of 15- 19 years were 50 times more probable to participate in labour force [(Q1: OR 50.84, 95% CI 43.57 to 59.31); (Q2: OR 45.01, 95% CI 38.74 to 52.28); (Q3: OR 51.01, 95% CI 43.60 to 59.67) & (Q4: OR 53.10, 95% CI 45.16 to 62.44)].

However in table 9, the observed Chi-Square Statistic had p-values <0.05 and so we therefore reject the null hypothesis. Thus, we support the research hypotheses and can settle that age was associated with labour force participation.

4.3.3 Gender and Labour Force Participation of Youth

Compared with male youth, female youth were less likely to participate in labour force [(Q1: OR 0.72, 95% CI 0.69 to 0.75); (Q2: OR 0.72, 95% CI 0.69 to 0.76); (Q3: OR 0.71, 95% CI 0.68 to 0.74) & (Q4: OR 0.74, 95% CI 0.71 to 0.78)]. There is not much of a difference between male and female youth.

However in table 9, the observed Chi-Square Statistic had p-values <0.05 and so we therefore reject the null hypothesis. Thus, we support the research hypotheses and can settle that gender was associated with labour force participation.

4.3.4 Population Group and Labour Force Participation of Youth

From table 9, compared with youth who are African or black, coloured youth were more likely to participate in labour force [(Q1: OR 1.91, 95% CI 1.77 to 2.06); (Q2: OR 1.98, 95% CI 1.83 to 2.13); (Q3: OR 2.02, 95% CI 1.87 to 2.18) & (Q4: OR 1.94, 95% CI 1.79 to 2.09)].

Indian or Asian compared with youth who are African or black, were more likely to participate in labour force [(Q1: OR 1.91, 95% CI 1.60 to 2.26); (Q2: OR 1.63, 95% CI 1.37 to 1.94); (Q3: OR 1.65, 95% CI 1.39 to 1.95) & (Q4: OR 1.67, 95% CI 1.40 to 1.99)].

Lastly, White compared with youth who are African or black, were more likely to participate in labour force [(Q1: OR 2.11, 95% CI 1.88 to 2.36); (Q2: OR 2.03, 95% CI 1.81 to 2.28); (Q3: OR 2.07, 95% CI 1.84 to 2.32) & (Q4: OR 2.09, 95% CI 1.86 to 2.35)].

However in table 9, the observed Chi-Square Statistic had p-values <0.05 and so we therefore reject the null hypothesis. Thus, we support the research hypotheses and can settle that population group was associated with labour force participation.

4.3.5 Type of Residence and Labour Force Participation of Youth

From table 9, compared with youth in rural residence, youth in urban residence were more likely to participate in labour force [(Q1: OR 3.01, 95% CI 2.86 to 3.17); (Q2: OR 2.77, 95% CI 2.64 to 2.92); (Q3: OR 2.76, 95% CI 2.63 to 2.91) & (Q4: OR 2.73, 95% CI 2.60 to 2.87)].

However in table 9, the observed Chi-Square Statistic had p-values <0.05 and so we therefore reject the null hypothesis. Thus, we support the research hypotheses and can settle that type of residence was associated with labour force participation.

4.3.6 Province and Labour Force Participation of Youth

From table 9, compared with youth in Limpopo province, youth in KwaZulu Natal were more likely to participate in labour force [(Q1: OR 1.77, 95% CI 1.61 to 1.94); (Q2: OR 1.72, 95% CI 1.57 to 1.89); (Q3: OR 1.57, 95% CI 1.43 to 1.71) & (Q4: OR 1.50, 95% CI 1.37 to 1.64)].

Youth in Eastern Cape compared with Limpopo province were more likely to participate in labour force [(Q1: OR 1.67, 95% CI 1.50 to 1.84); (Q2: OR 1.73, 95% CI 1.56 to 1.92); (Q3: OR 1.53, 95% CI 1.39 to 1.70) & (Q4: OR 1.46, 95% CI 1.31 to 1.61)].

Youth in North West compared with Limpopo province were more likely to participate in labour force [(Q1: OR 1.94, 95% CI 1.72 to 2.17); (Q2: OR 1.79, 95% CI 1.60 to 2.00); (Q3: OR 1.90, 95% CI 1.69 to 2.12) & (Q4: OR 1.91, 95% CI 1.71 to 2.14.

Youth in Free State compared with Limpopo province were 3 times more likely to participate in labour force [(Q1: OR 3.00, 95% CI 2.67 to 3.36); (Q2: OR 2.99, 95% CI 2.68 to 3.35); (Q3: OR 2.81, 95% CI 2.52 to 3.14) & (Q4: OR 2.64, 95% CI 2.37 to 2.95)].

Youth in Northern Cape compared with Limpopo province youth were 3 times more likely to participate in labour force [(Q1: OR 3.00, 95% CI 2.64 to 3.42); (Q2: OR 2.94, 95% CI 2.58 to 3.35); (Q3: OR 2.71, 95% CI 2.39 to 3.08) & (Q4: OR 2.83, 95% CI 2.50 to 3.21)].

Youth in Gauteng compared with Limpopo province youth were 4 times more likely to participate in labour force [(Q1: OR 4.21, 95% CI 3.81 to 4.65); (Q2: OR 3.73, 95% CI 3.38 to 4.12); (Q3: OR 3.55, 95% CI 3.22 to 3.92) & (Q4: OR 3.58, 95% CI 3.25 to 3.96)].

Youth in Mpumalanga compared with Limpopo province youth were two times more probable to participate in labour force [(Q1: OR 2.56, 95% CI 2.31 to 2.82); (Q2: OR 2.33, 95% CI 2.11 to 2.59); (Q3: OR 2.19, 95% CI 1.97 to 2.42) & (Q4: OR 1.97, 95% CI 1.78 to 2.19)].

Youth in Western Cape compared with Limpopo province youth were 5 times more likely to participate in labour force [(Q1: OR 4.81, 95% CI 4.31 to 5.37); (Q2: OR 4.64, 95% CI 4.16 to 5.18); (Q3: OR 4.35, 95% CI 3.91 to 4.84) & (Q4: OR 4.02, 95% CI 3.62 to 4.48)].

However in table 9, the observed Chi-Square Statistic had p-values <0.05 and so we therefore reject the null hypothesis. Thus, we support the research hypotheses and can settle that province was associated with labour force participation.

A mixed pattern of associations between socio-demographic characteristics, education level and labour force participation was noted in this bivariate analysis which is not conclusive as each characteristic is likely to influence the model in some way and hence the need for a multiple logistic regression.

4.4 MULTIPLE LOGISTIC REGRESSION ANALYSES

4.4.1 INTRODUCTION

This section uses multiple logistic regression analysis to assess the influence of level of education and selected social and demographic variables (type of residence, age, population group, gender, and province) on labour force participation. This method of analysis is more advanced than the bivariate analysis because it simultaneously analyses the effect of numerous independent variables, on the outcome variable.

In this study, the dependent variables included, among others, the following labour force status:

- Labour force participation.

The logit model was implemented to evaluate odds ratios for youth aged 15 to 35 years old who had reported that they are in labour force. The logit model was selected for use because of its strengths in overcoming the inherent challenges related with linear probability models as logit model offers relative approximation based on probabilities (Garcio, et al., 2008). Two estimation models are presented in this study. For the purposes of this study, Model 1 used evaluations for education level, gender and age as the independent variables. In model 2, population group, type of residence and province are added because these characteristics are known to influence labour force participation (Garcio, et al., 2008). The table 10 that follow include a summary of results of final model 1 and 2.

4.4.2 MULTIPLE LOGISTIC REGRESSION MODELLING RESULTS

Table 10: Odds ratios of the relations between selected features and youth labour force participation based on final models

Labour Force Participation (Yes/ No)												
	First Quarter			Second Quarter			Third Quarter			Fourth Quarter		
	N 30144			N 29173			N 29228			N 28725		
Characteristics	**OR**	**95.0% C.I.**	**P-value**	**OR**	**95.0% C.I.**	**P-value**	**OR**	**95.0% C.I.**	**P-value**	**OR**	**95.0% C.I.**	**P-value**
Modelling 1: Full												
Education Level												
1. No & Primary Education (Ref)	**1.00**			**1.00**			**1.00**			**1.00**		
2. Secondary Education	**1.41**	(1.27- 1.56)*	<0.001	**1.50**	(1.36- 1.66)*	<0.001	**1.38**	(1.24- 1.53)*	<0.001	**1.32**	(1.19- 1.46)*	<0.001
3. Higher Education	**3.14**	(2.72- 3.62)*	<0.001	**3.36**	(2.91- 3.87)*	<0.001	**2.94**	(2.55- 3.41)*	<0.001	**2.90**	(2.51- 3.36)*	<0.001
Age												
15-19 (Ref)	**1.00**			**1.00**			**1.00**			**1.00**		
20-24	**14.68**	(13.18- 16.34)*	<0.001	**14.33**	(12.88- 15.94)*	<0.001	**15.02**	(13.45- 16.76)*	<0.001	**14.96**	(13.35- 16.75)*	<0.001
25-29	**42.85**	(38.32- 47.92)*	<0.001	**39.50**	(35.34- 44.16)*	<0.001	**44.20**	(39.42- 49.54)*	<0.001	**43.63**	(38.81-49.05)*	<0.001
30-34	**54.86**	(48.98- 61.44)*	<0.001	**48.12**	(43.02- 53.84)*	<0.001	**54.55**	(48.62- 61.20)*	<0.001	**57.27**	(50.87- 64.48)*	<0.001
Gender												
1. Male (Ref)	**1.00**			**1.00**			**1.00**			**1.00**		
2. Female	**0.52**	(0.49- 0.55)*	<0.001	**0.53**	(0.50-0.56)*	<0.001	**0.52**	(0.49-0.55)*	<0.001	**0.54**	(0.51- 0.58)*	<0.001
Population Group/Race												
1. African/Black (Ref)	**1.00**			**1.00**			**1.00**			**1.00**		
2. Coloured	**1.35**	(1.19- 1.53)*	<0.001	**1.49**	(1.32- 1.69)*	<0.001	**1.60**	(1.41- 1.82)*	<0.001	**1.42**	(1.26- 1.61)*	<0.001
3. Indian/Asian	**1.18**	(0.94- 1.47)	0.151	**1.13**	(0.91- 1.42)	0.263	**1.15**	(0.92- 1.44)	0.210	**1.11**	(0.88- 1.40)	0.374
4. White	**1.14**	(0.97- 1.33)	0.102	**1.15**	(0.99- 1.36)	0.067	**1.16**	(1.00- 1.37)*	0.049	**1.20**	(1.02- 1.41)*	0.027
Type of residence												
Rural residence (Ref)	**1.00**			**1.00**			**1.00**			**1.00**		

Urban residence	**2.05**	(1.91- 2.22)*	<0.001	**1.87**	(1.74- 2.01)*	<0.001	**1.97**	(1.83- 2.12)*	<0.001	**1.96**	(1.82- 2.12)*	<0.001
Province												
1. Limpopo (Ref)	**1.00**			**1.00**			**1.00**			**1.00**		
2. KwaZulu Natal	**1.35**	(1.21- 1.51)*	<0.001	**1.38**	(1.24- 1.54)*	<0.001	**1.25**	(1.12- 1.39)*	<0.001	**1.18**	(1.06- 1.32)*	0.003
3. Eastern Cape	**1.39**	(1.23- 1.57)*	<0.001	**1.52**	(1.34- 1.72)*	<0.001	**1.34**	(1.19- 1.53)*	<0.001	**1.24**	(1.09- 1.41)*	0.001
4. North West	**1.69**	(1.47- 1.93)*	<0.001	**1.59**	(1.39- 1.82)*	<0.001	**1.65**	(1.44- 1.89)*	<0.001	**1.54**	(1.35- 1.77)*	<0.001
5. Free State	**2.00**	(1.73- 2.29)*	<0.001	**2.09**	(1.82- 2.41)*	<0.001	**2.02**	(1.75- 2.33)*	<0.001	**1.81**	(1.57- 2.08)*	<0.001
6. Northern Cape	**2.06**	(1.74- 2.43)*	<0.001	**2.16**	(1.82- 2.56)*	<0.001	**1.89**	(1.60- 2.24)*	<0.001	**2.07**	(1.75- 2.44)*	<0.001
7. Gauteng	**2.40**	(2.11- 2.73)*	<0.001	**2.19**	(1.93- 2.50)*	<0.001	**1.99**	(1.75- 2.26)*	<0.001	**2.04**	(1.79- 2.33)*	<0.001
8. Mpumalanga	**2.44**	(2.15- 2.76)*	<0.001	**2.19**	(1.94- 2.48)*	<0.001	**2.09**	(1.85- 2.37)*	<0.001	**1.89**	(1.67- 2.14)*	<0.001
9. Western Cape	**2.85**	(2.44- 3.33)*	<0.001	**2.71**	(2.33- 3.16)*	<0.001	**2.38**	(2.04- 2.77)*	<0.001	**2.47**	(2.11- 2.87)*	<0.001
Modelling 2: Reduced												
Education Level												
1. No & Primary Education (Ref)	**1.00**			**1.00**			**1.00**			**1.00**		
2. Secondary Education	**1.70**	(1.54- 1.86)*	<0.001	**1.73**	(1.57- 1.91)*	<0.001	**1.65**	(1.50- 1.82)*	<0.001	**1.60**	(1.44- 1.76)*	<0.001
3. Higher Education	**4.28**	(3.74- 4.90)*	<0.001	**4.34**	(3.78- 4.97)*	<0.001	**3.91**	(3.41- 4.48)*	<0.001	**3.88**	(3.38- 4.45)*	<0.001
Age												
15-19 (Ref)	**1.00**			**1.00**			**1.00**			**1.00**		
20-24	**13.85**	(12.48- 15.38)*	<0.001	**13.35**	(12.03- 14.81)*	<0.001	**13.80**	(12.39- 15.36)*	<0.001	**13.74**	(12.30- 15.36)*	<0.001
25-29	**38.35**	(34.41- 42.74)*	<0.001	**35.42**	(31.79- 39.46)*	<0.001	**39.27**	(35.15- 43.87)*	<0.001	**38.75**	(34.58- 43.42)*	<0.001
30-34	**50.69**	(45.40- 56.58)*	<0.001	**44.69**	(40.06- 49.84)*	<0.001	**49.89**	(44.61- 55.81)*	<0.001	**51.59**	(45.98- 57.90)*	<0.001
Gender												
1. Male (Ref)	**1.00**			**1.00**			**1.00**			**1.00**		
2. Female	**0.53**	(0.50- 0.56)*	<0.001	**0.55**	(0.51-0.57)*	<0.001	**0.54**	(0.51-0.57)*	<0.001	**0.56**	(0.53- 0.59)*	<0.001

Ref = Reference category; * p<0.05; * p<0.001; Missing cases were not considered in the analyses.

4.4.2.1 Level Of Education

Table 10 displays the odds ratios from the multiple logistic regression modeling. It was noted that after controlling for population group, type of place of residence and province, level of education was still significantly associated with labour force participation. Furthermore, it has been noted that compared with youth with no or primary education, the youth with secondary education were more likely to participate in labour force [(Q1: OR 1.70, 95% CI 1.54 to 1.86); (Q2: OR 1.73, 95% CI 1.57 to 1.91); (Q3: OR 1.65, 95% CI 1.50 to 1.82) & (Q4: OR 1.60, 95% CI 1.44 to 1.76)]. Youth with higher education compared with no or primary education were more probable to participate in the labour force [(Q1: OR 4.28, 95% CI 3.74 to 4.90); (Q2: OR 4.34, 95% CI 3.78 to 4.97); (Q3: OR 3.91, 95% CI 3.41 to 4.48) & (Q4: OR 3.88, 95% CI 3.38 to 4.45)].

4.4.2.2 Gender

Compared with male youth, female youth were less probable to participate in the labour force [(Q1: OR 0.53, 95% CI 0.50 to 0.56); (Q2: OR 0.55, 95% CI 0.51 to 0.57); (Q3: OR 0.54, 95% CI 0.51 to 0.57) & (Q4: OR 0.56, 95% CI 0.53 to 0.59)]. In this analysis gender was significantly associated with labour force participation (p-value <0.001).

4.4.2.3 Age

In this case, the other independent predictors were gender, age, type of place of residence, population group and province. From table 10, compared with youth of the age group 15-19 years young persons aged 20-24 years were more likely to participate in labour force in Quarter one [(Q1: OR 13.85, 95% CI 12.48 to 15.38); (Q2: OR 13.35, 95% CI 12.03 to 14.81); (Q3: OR 13.80, 95% CI 12.39 to 15.36) & (Q4: OR 13.74, 95% CI 12.30 to 15.36.

Youth aged 25-29 years were more probable to participate in labour force [(Q1: OR 38.35, 95% CI 34.41 to 42.74); (Q2: OR 35.42, 95% CI 31.79 to 39.46); (Q3: OR 39.27, 95% CI 35.15 to 43.87) & (Q4: OR 38.75, 95% CI 34.58 to 43.42)].

The youth aged 30-34 years, compared with the youth aged 15- 19 years were more probable to participate in labour force [(Q1: OR 50.69, 95% CI 45.40 to 56.58); (Q2: OR 44.69, 95% CI 40.06 to 49.84); (Q3: OR 49.89, 95% CI 44.61 to 55.81) & (Q4: OR 51.59, 95% CI 45.98 to 57.90)]. There was a significant trend towards labour force participation (p-value for trend <0.001).

4.4.2.4 Type of Residence

It was also noted that after controlling for population group, type of place of residence, and province, there was a statistically important relationship between type of residence and labour force participation. Compared with youth who reside in rural areas, urban youth were more likely to participate in labour force [(Q1: OR 2.05, 95% CI 1.91 to 2.22); (Q2: OR 1.87, 95% CI 1.74 to 2.01); (Q3: OR 1.97, 95% CI 1.83 to 2.12) & (Q4: OR 1.96, 95% CI 1.82 to 2.12)]. In this analysis type of place of residence was significantly associated with labour force participation (p-value <0.001).

4.4.2.5 Population Group

From table 10, compared with youth who are African or black, coloured youth were more likely to participate in labour force [(Q1: OR 1.35, 95% CI 1.19 to 1.53); (Q2: OR 1.49, 95% CI 1.32 to 1.69); (Q3: OR 1.60, 95% CI 1.41 to 1.82) & (Q4: OR 1.42, 95% CI 1.26 to 1.61)].

4.4.2.6 PROVINCE

From table 10, compared with youth in Limpopo province youth in KwaZulu Natal were more likely to participate in labour force [(Q1: OR 1.35, 95% CI 1.21 to 1.51); (Q2: OR 1.38, 95% CI 1.24 to 1.54); (Q3: OR 1.24, 95% CI 1.12 to 1.39) & (Q4: OR 1.18, 95% CI 1.06 to 1.32)].

Youth in Eastern Cape compared with Limpopo province were more likely to participate in labour force [(Q1: OR 1.38, 95% CI 1.23 to 1.57); (Q2: OR 1.52, 95% CI 1.34 to 1.72); (Q3: OR 1.35, 95% CI 1.19 to 1.52) & (Q4: OR 1.24, 95% CI 1.09 to 1.41)].

Youth in North West compared with Limpopo province were more likely to participate in labour force [(Q1: OR 1.69, 95% CI 1.47 to 1.93); (Q2: OR 1.59, 95% CI 1.39 to 1.82); (Q3: OR 1.65, 95% CI 1.44 to 1.89) & (Q4: OR 1.54, 95% CI 1.34 to 1.77)].

Youth in Free State compared with Limpopo province were two times more probable to participate in labour force [(Q1: OR 2.00, 95% CI 1.73 to 2.29); (Q2: OR 2.09, 95% CI 1.81 to 2.41); (Q3: OR 2.02, 95% CI 1.75 to 2.33) & (Q4: OR1.81, 95% CI 1.57 to 2.08)].

Youth in Northern Cape compared with Limpopo province youth were two times more likely to participate in labour force [(Q1: OR 2.05, 95% CI 1.74 to 2.43); (Q2: OR 2.16, 95% CI 1.82 to 2.56); (Q3: OR 1.89, 95% CI 1.60 to 2.24) & (Q4: OR 2.07, 95% CI 1.75 to 2.44)].

Youth in Gauteng compared with Limpopo province youth were two times more probable to participate in labour force [(Q1: OR 2.40, 95% CI 2.11 to 2.73); (Q2: OR 2.19, 95% CI 1.93 to 2.49); (Q3: OR 1.98, 95% CI 1.74 to 2.26) & (Q4: OR 2.04, 95% CI 1.80 to 2.33)].

Youth in Mpumalanga compared with Limpopo province youth were two times more probable to participate in labour force [(Q1: OR2.44, 95% CI 2.15 to 2.76); (Q2: OR 2.19, 95% CI 1.94 to 2.48); (Q3: OR 2.09, 95% CI 1.85 to 2.36) & (Q4: OR 1.89, 95% CI 1.67 to 2.14)].

Youth in Western Cape compared with Limpopo province youth were two times more probable to participate in labour force [(Q1: OR 2.85, 95% CI 2.44 to 3.33); (Q2: OR 2.71, 95% CI 2.33 to 3.16); (Q3: OR 2.38, 95% CI 2.05 to 2.77) & (Q4: OR 2.47, 95% CI 2.11 to 2.88)].

4.4.3 CONCLUSION

The multiple logistic regression analyses looked at the association of different variables amongst other including age, type of residence, province, population group, gender and educational level with labour force participation. The next chapter will give discussion of the results

CHAPTER 5

DISCUSSION

5.1 INTRODUCTION

This chapter deliberates the meaning of the findings of the study. A close look at the characteristics of the study population revealed that majority of youth aged 15 to 19 are not participating in labour force; with 94% in quarter one (Q2:94.1%, Q3: 87%, Q4: 95%). Lam, et al., (2007) provided reason for non-participation of youth aged 15-19 year (many of these young people were found to be still be involved in their studies) for the period 1996 to 2006 are far lower than those of other age groups. Education also contribute a major role in whether young people pursue and are capable to find job. Young people may elect not to follow employment and to go to school instead; they may choose to work while going to school instead, but may not have chances to work due to a nonexistence of jobs. The increasing rate of school registration has likely influenced the sliding trend in the E/P ratio for 15 to 19 year olds. Moreover, it is also apparent from the study that participation rates rise with age: 15 to 19 years 2.9%; 20 to 24 years 23.2%; 25 to 29 years 34.1% and 30-34 years 39.7%.

This study has shown 55.6% (Q2:55.7%, Q3: 55.7%, Q4: 55.2%) of male youth were participating in the labour force and with 44.4% (Q2:44.3%%, Q3: 44.3%, Q4: 44.8%) of female youth participating. According to Lam, et al., (2007) in their study participation dissimilarities by gender are also apparent. Non-participants are fairly equally divided by gender with only a marginally higher proportion of them being females. According to Lam, et al., (2007) in 1996, 53.8% of nonparticipating young people 15-24 were females, and this proportion has continued fairly stable through to 2006 where 51.4% of non-participants were females. In consideration of the above analysis, the participation arrangements of youth 15-19 and 20-24 are done differently. In addition,

the above study indicates that participation proportions are higher among men throughout the duration of ten years 1996 to 2006. It further shows that participation proportions amplified up until 2003 and declined thereafter (Lam, et al., 2007).

Undoubtedly in the South African context, population group is an important distinguishing factor in the labour market participation and outcomes. This study has also shown that Africans/ Blacks have the lowest youth participation rates with only 46.4%; while the other population groups have higher proportions with Coloured 60.6%, Indian/ Asian 58.2% and White 59.0%. These results confirm what Lam, et al., (2007) found in their study; that African/Black young people aged 15-19 years have the lowest participation proportions while Coloured young people in this cohort have the highest participation proportion. Low participation rates in this age group are not necessarily a bad indication as many of these young people are still going to school. On the other hand, the relatively high rates of Coloured young people participating over the two decades is cause for worry as this shows early departure from studies in a situation of bulk unemployment. In the older (20-24) age group, Black/Africans again show lower participation rates than the other races. However, their participation proportions together with those of Coloureds have largely improved over the time. Unlike with Black/African and Coloureds, the trend in White and Indian participation proportions is less clear. It appears that participation proportions initially increased for white young people in the 1990s and dropped in the 2000s. Blacks/Africans make up by far the biggest number of labour force participants. Having an increase of 17 percentage points in Black/African participation (looking at 1996 and 2006), it is obvious that the increase in general labour force participation for this age group over this decade has been driven by the Black/African race group.

Labour force participation rates of youth in quarter one of 2014 were 49.4%, while the two elements that form part of labour force participation, namely, unemployment and employment were 35.3% and 31.9% respectively. Young people participation proportions have in general been higher in the

2000s than in the 1990s. “According to the October Household Survey (OHS) data sets, in 1995 the participation rate of youth (using the official South African definition of youth of 15 – 34 years old) was 42%, using the official, strict definition of unemployment (requiring active job search). By 1999, this participation rate had increased to 46%. In the 2000s youth participation rates were fairly stable at 52% in 2002 (using the LFS data sets) and 50% in 2005”. In terms of outright numbers, a little more non-participants and less unemployed were captured in 2006 than in 2003. From 1996 to 2000, the growth in the youth participation proportion was primarily in the form of growth in the numbers unemployed.

5.2 LABOUR FORCE PARTICIPATION AND POPULATION GROUP

Cross tabulation also revealed that there is an association between population group and labour market participation among youth in South Africa. This study revealed that participation is less in African/Black than other population groups (African/Blacks 46%, Coloured 61%, Indian/Asian 58% and white 59%). This was confirmed by Cramer’s V coefficient which measures the strength of the association showing that there is weak relationship between youth labour force participation and population group in quarter one to quarter four on data 2014 Quarter Labour Force Survey.

5.3 LABOUR FORCE PARTICIPATION AND GENDER

Cross tabulation also revealed that there is an association between gender and youth labour force participation among youth in South Africa. This study revealed that participation is more in male than female (male 53.3% and female 43.8%). This was confirmed by Cramer’s V coefficient which measures the strength of the association showing that there is weak relationship between youth labour force participation and gender in quarter one to quarter four on data 2014 Quarter Labour Force Survey.

5.4 LABOUR FORCE PARTICIPATION AND EDUCATION LEVEL

Cross tabulation also revealed that there is an association between education level and youth labour force participation among youth in South Africa. This study revealed that participation increased with the increase in level of education (primary or no education 37.6%, secondary education 46.7% and higher education 81.3%). This was confirmed by Cramer's V coefficient which measures the strength of the association showing that there is moderate relationship between youth labour force participation and education level in quarter one to quarter four on data 2014 Quarter Labour Force Survey.

5.5 BIVARIATE ANALYSIS

The study did find support for the research hypothesis and concluded that education level was associated with labour force participation. The study revealed that compared with youth with no or primary education, the youth with secondary education and tertiary education were more probable to participate in labour force. Much international evidence supports the notion that higher educational attainment leads to better employment outcomes, such as higher wages and lower unemployment. For youth, however, this relationship is not always evident. In some selected countries in Africa, secondary and higher education is not related with lower unemployment proportions among young people (Garcio and Fares, 2008). This finding is not consistent with findings from Garcio and Fares (2008) study in that youth with secondary or tertiary education in Burundi, Cameroon, Côte d'Ivoire, Kenya, Madagascar, and Nigeria have higher rates of unemployment than youth with lower educational attainments.

Indeed, in 13 of the 14 countries studied, the rate of unemployment is higher among youth with at least some schooling than among those with no schooling, even though a smaller proportion of school entrants are in the labour force. In Ethiopia, the marginal influence of education on the

likelihood of working was estimated by means of a probit model of employment on a set of control variables for urban and rural areas. The results reveal an undesirable association between education and the employability of youth. One possible explanation for this unexpected outcome is that the more educated young people are, the greater their reservation salary and returns to job hunt. Better-educated youth may be searching for work and not yet employed (Garcio and Fares, 2008).

5.6 MULTIPLE LOGISTIC REGRESSION ANALYSIS

The researcher contention in this study that education level was related with labour market participation among youth in South Africa. After controlling for other factors, the youth with higher education were more probable to participate in labour force matched to youth with no or primary education. The findings are consistent with findings from other researchers. (Mlatsheni and Rospabe, 2002) investigated the link between education and labour market opportunities in Republic of South Africa. The results of the multinomial logit regression clearly indicated that there are greater chances of employment over unemployment within post-secondary higher education. The study findings are that more Coloured youth are participating in labour force that African youth. However, (Mlatsheni and Rospabe, 2002) show that the effect of education on employment is stronger for White youths than it is for African.

The findings were also confirmed by Fernandes-Alcantara (2012) as the educational level increases, the unemployment rate declines and labour force participation proportions increases. Among youth labour force participants without a tertiary qualification in 2009, the unemployment rate was 14.8%; this relates to an unemployment proportion of 10.4% and 5.5% for those with a tertiary qualifications or a bachelor's degree, respectively.

Oosthuizen (2006) embraced the same method as Bhorat and Oosthuizen (2005) when associating OHS 1995 with LFS 2004 September, and consequent very comparable findings. Moreover, Oosthuizen conducted multivariate analyses by analyzing the probit and Heckprobit regressions on labour market participation and employment probabilities correspondingly. He establish that the 15-24 years age group remained the cohort with the lowest probability of participating in the labour force.

However, in this study, after controlling for age, gender, type of place of residence, population group and province, the association between education level and youth labour force participation was statistically significant with p-Values less than 0.001. Mlatsheni and Rospabé (2002) one of the Republic of South African studies focused mainly on how young people fare in the labour market. The results of this multiple logistic regressions of the young comprehensive labour force indicated that those male white, being married household heads, aged 25-29 years, with higher educational achievement, and be located in Western Cape were related with greater probability of either being employees or self-employed. This study findings are consistent with above study by Mlatsheni and Rospabé (2002) in the three variables which were found to be significantly associated with labour force participation male white, higher educational attainment and residing in Western Cape. However, this study did not include the variable marital status which was found to be statistical significant to married household heads.

The research by Dias and Posel (2006) used the October Household Survey in 1994 and Labour Force Survey 2002 September data to determine the association between education and broad unemployment probability. The regression analysis on the broad labour force showed that the likelihood of unemployment reduced across the older age groups, as compared with the age group (16-20 years). This happened in all four races Black/African, Coloureds, Whites and Indian/Asian.

5.7 CONCLUSION

The meaning findings of this study were discussed based on the outcome of univariate analysis, bivariate analysis and multiple logistic regression analysis. The next chapter will give conclusion and recommendations

CHAPTER 6

CONCLUSION AND RECOMMENDATIONS

6.1 CONCLUSION

The main aim of this study was to examine factors related with youth labour force participation in South Africa. This study revealed that age is associated with labour force participation among youth in the Republic of South Africa. The study shown that youth participation in the Republic of South Africa increases with age. The study also found that the labour force participation of males is higher than females' youth.

The study also examined the race factor within the South African context. It was revealed that Africans/Blacks have lowest youth participation rates whereas White community have the highest youth participation rates. Among the nine province of South Africa, this study revealed that the participation of youth is highest in Gauteng. Comparing rural and urban residence, the study found that the participation is higher at urban youth dwellers.

The researcher contention or hypothesis in this study that education level was associated with labour force participation among youth in South Africa was confirmed in all bivariate and multivariate analyses. After controlling for other factors, the youth in higher education were more probable to participate in labour force as matched to youth who have no or primary education. Because, this study used levels of educational achievement as a substitution for skills, this means that the highly skilled youth were more probable to participate in labour market as matched to less skilled youth.

There is well-known acceptance of the shortcomings of the Republic of South Africa's education system. All Stake holders including, business, government, learners and teachers all recognise that skills growth has been far from peak and is in need of serious consideration. Current economic growth in the Republic of South Africa has also been well beneath potential. Even though the low

rate of economic growing has many explanatory reasons, it is therefore concluded from many literatures that a lack of skills within the workforce is one of them.

The NDP pronounces the insufficiencies of the country's education system in detail. It recommends a range of enhancements without which economic development is improbable to meet the proportions essential to facilitate transformation in overall, and, in certain, meaningful drops in the unemployment rate and meaningful improvements in the skills outlines across all racial groups. "Closer to 2030, South Africa should be approaching 'developed world' status, with the quality of life greatly improved, with skilled labour becoming the predominant feature of the labour force and with levels of inequality greatly reduced" (NDP: 157).

6.2 RECOMMENDATIONS

Based from the main finding that the highly educated youth were more probable to participate in labour market as matched to less educated youth, most of the recommendations focused on the issues around development of skills among the youth. This study intensely supports the findings of the NDP that the education system is not sufficiently serving skills expansion, and is in urgent need of restructuring. Employment progression between 1995 and 2013 was completely insufficient to decrease unemployment, further raising the level of urgency with which skills growth should be treated.

The transition to work is difficult for South African young people because of the large number of young people entering the labour market, their lack of skills, unfavourable economic conditions in

most provinces of South Africa, market failures that adversely affect young people outcomes, and a host of other factors. In the Republic of South Africa, a person life chances are tremendously determined by race, birth, and by where a person go to school. And there is also a need to address the structural restrictions of a large, poorly educated, mostly black population without the social capital to get work experience, workplace skills, and job placement. The following are some of the key recommendations that comes from the findings of this study:

Firstly, despite the increase in educational attainment in South Africa, young people continue to leave school unprepared to integrate into the labour market. To reduce school dropout and early transition to work, policies and programs should ease the income constraints poor families' face. The biggest problem in South Africa is high drop-out of young people in school – the majority do not even finish their secondary school, therefore there is a need to for policy and programs to increase school-enrolment. Strategies to reduce the high drop-out rate are needed.

Secondly, public-private partnerships are needed to improve the quality of primary education and increase access to lower-secondary education. For secondary and higher education, school curriculum need to be made more relevant to labour market needs. Providing practical skills—by teaching subjects such as technology, economics, and foreign languages—could better equip young people for the labour market; better integrating vocational and general curriculum could facilitate young people insertion into the work force. In addition to raising enrolment, the Republic of South Africa needs to advance the quality of education systems and the relevance of school curriculum by teaching students the practical thinking and behavioural skills demanded by the labour market, using teaching methods that lead to high learning achievement and blend academic and vocational

curriculum (Garcio, et al., 2008). Building bridges between school and work can simplify the switch of young persons from school to the workplace.

Thirdly, South Africa needs to intensify the second-chance programs which the country is operating in different forms. Back to school campaign targeting young people but attending classes part time in the evenings. The direct reintegration of out-of-work young people into the work force. To limit—and justify—the fiscal burden of second-chance initiatives, all programs must be well targeted, designed to grow skills of young persons, and geared to the needs of the labour market.

This study also supports the NDP's suggestions concerning to South Africa's young people, for whom skills improvement is critical, are the following (NDP, 2011):

- "Improve the school system, including increasing the number of students achieving above 50 percent in literacy and mathematics, increasing learner retention rates to 90 percent and bolstering teacher training.
- Strengthen youth service programmes and introduce new, community-based programmes to offer young people life-skills training, entrepreneurship training and opportunities to participate in community development programmes.
- Strengthen and expand the number of FET colleges to increase the participation rate to 25 percent.
- Increase the graduation rate of FET colleges to 75 percent.
- Provide full funding assistance covering tuition, books, accommodation and living allowance to students from poor families.
- A tax incentive to employers to reduce the initial cost of hiring young labour-market entrants.

- A subsidy to the placement sector to identify, prepare and place matric graduates into work. The subsidy will be paid upon successful placement.
- Expand learnerships and make training vouchers directly available to job seekers.
- A formalised graduate recruitment scheme for the public service to attract highly skilled people.
- Expand the role of state-owned enterprises in training artisans and technical professionals".

If all these proposals can be carried out, there will be more youth labour force participation and the country will do well as far as labour issues are concerned.

The information and analysis presented in this research supports the arguments, in discovery a robust positive association between educational achievement and participation. It would also appear to imply that policy architects seeking to grow participation proportions should consider supporting higher educational achievement as a means of completing this outcome.

Nevertheless, policies intended to grow labour market participation need to be considered in a broader context of social welfare and wellbeing. That is, rather than greater participation being the policy direction in and of itself. The main objective is to remove barricades to participation. Greater participation should be seen as playing a part in attaining better economic and social outcomes and improving individual wellbeing.

6.3 AREAS FOR FURTHER RESEARCH

The study did not look at the misalliance between the skills that young person's hold and those essential by their professions.

Labour market participation by youth, is a substitution indicator of desire in getting employed. Generally, greater labour force participation shows increase desire in getting employed, while declining labour market participation shows noninterest in getting employed. According to

Fernandes-Alcantara (2012) variations in labour force participation proportions, conversely, are not perfect indicators of individual or collective desire in getting employed. For instance, labour force participation proportions may weaken because individuals become dispirited about job forecasts and give up looking for job. Young people may also decide to chase education instead because of the proceeds they will receive later when they are employed.

Whilst the study attempted to offer understanding into the association between level of education and labour force participation, more exploration is needed to provide more thoughtful of the individual elements of labour force participation which are employment and unemployment. This has to be compared to come up with conclusive results.

When interpreting these findings it is critical to take note of the following limitations in the research design and methodology.

7 REFERENCES

1. Altman, M, 2012. **Challenges & opportunities in addressing youth unemployment activating youth: What way forward?** Human Sciences Research Council, Pretoria.
2. Altman, M, 2007. **Youth labour market challenges in South Africa.** Human Sciences Research Council, Pretoria.
3. Ashenfelter, O, and Rouse, C, 1998. **Income, schooling, and ability: Evidence from a new sample of identical twins**. Quarterly Journal of Economics, 113, 253–284.
4. Banerjee, A, Galiani, S, Levinsohn, J, McLaren, Z and Woolard, I, 2007. **Why Has Unemployment Risen in the New South Africa.** National Bureau of Economic Research, Working Paper Series: 13167 http://www.nber.org/papers/w13167
5. Becker, G, S, 1964. **Human capital: a theoretical and empirical analysis.** National Bureau of Economic Research, New York.
6. Blumenfeld, J, 2011. **Youth Unemployment in South Africa and the Wage Subsidy 'Debate.** London
7. Bhorat, H and Oosthuizen, M, 2005. **The post-apartheid South African labour market. DPRU Working Paper 05/93.** Development Policy Research Unit, Cape Town.
8. Burger, R, Van der Berg, S and Von Fintel, D, 2013. **The Unintended Consequences of Education Policies on South African Participation and Unemployment.** Forschungsinstitut zur Zukunft der Arbeit Institute for the Study of Labour. IZA DP No. 7450
9. Burger, R and Woolard, I, 2005. **The state of the labour market in South Africa after the first decade of democracy.** Journal of Vocational Education and Training 57(4), 453-475.
10. Chigunta, F, 2002. **The Socio-Economic Situation of Youth in Africa: Problems, Prospects and Options.** The Socio-Economic Situation of Youth in Africa Draft July 12,

11. Dias, R and Posel, D, 2006. **Unemployment, education and skills constraints in post-apartheid South Africa.** DPRU Working Paper 07/120. Development Policy Research Unit, Cape Town.
12. Du Toit, R, 2003. **Unemployed Youth in South Africa: The Distressed Generation,** A Paper presented at the Minnesota International Couseling Institute (MICI), 27 July – 01 August 2003.
13. Farber, Henry, S, 2003. **NBER Working Paper 9707: Job Loss in the United States 1981 2001.** National Bureau of Economic Research, Cambridge.
14. Fernandes-alcantara, L, Adrienne, 2012. **Youth and the Labour Force: Background and Trends.** Congressional Research Service 7-5700, R42519. CRS Report for Congress, prepared for Members and Committees of Congress
15. Fields, Gary, S, 2000. **The Employment Problem in South Africa.** Cornell University ILR School. DigitalCommons@ILR Collection. Trade and Industry Monitor, 16(3-6).
16. Garcio, Marito, and Fares, Jean, 2008. **Youth in Africa's Labour Market.** Direction in Development (Human Development). The World Bank. Washington, D.C. Green Press Initiative.
17. Harmon, C, and Walker, I, 1995. **'Estimates of the economic return to schooling for the United Kingdom'** American Economic Review, 85, pp 1278–1286.
18. Haldenwang, Bärbel, 1994. **The demography of the youth of South Africa:** Source: Southern African Journal of Demography, Vol. 4, No. 1 (October 1994), pp. 58-82 Published by: Population Association of Southern Africa Stable URL: http://www.jstor.org/stable/20853214.
19. International Labour Organization, 2013. **Global Employment Trends for Youth 2013: A Generation at risk.** International Labour Office. Geneva

20. Jaumotte, F. 2004. **Labour Force Participation of Women. Emperical Evidence on the Role of Policy and other Determinants in OECD Countries.** OECD Economic Studies, No. 37, 2003/2

21. Kennedy, Steven; Stoney, Nicholas and Vance, Leo, 2007. '**Labour Force Participation and the Influence of Educational Attainment,** Economic Roundup, Spring 2008, Department of the Treasury. Canberra.

22. Kleinbaum, David, G and Klein, Mitchel, 2010. **Logistic Regression: Statistics for Biology and Health: A Self-Learning Text**, Third Edition. Springer New York Dordrecht Heidelberg London.

23. Lam, David; Leibbrandt, Murray and Mlatsheni Cecil, 2007. **Education and Youth Unemployment in South Africa.** International Policy Center. Gerald R. Ford School of Public Policy, University of Michigan. IPC Working Paper Series Number 34.

24. Leighton, L and Mincer, J, 1982. **Labour Turnover and Youth Unemployment,** University of Chicago Press, ISBN: 0-226-26161-1, URL: http://www.nber.org/books/free82-1

25. Makiwane, M and Kwizera, S, 2009. **Youth and Well-Being: A South African Case Study, Social Indicators Research,** Vol. 91, No. 2 (Apr., 2009), pp. 223-242, Springer.

26. Mayer, MJ (et.al). 2011. **Towards a youth employment strategy for South Africa.** Development Planning Division Working Paper Series No. 28. Development Bank of Southern Africa.

27. Mincer, J. 1974. **Schooling, Experience and Earnings,** NBER, New-York.

28. Mlatsheni, C & Rospabé, S, 2002. **Why is youth unemployment so high and unequally spread in South Africa?** DPRU Working Paper 02/65. Development Policy Research Unit, Cape Town.

29. Nam, S, 1991. **"Determinants of Female Labour Force Participation: A Study of Seoul, South Korea, 1970–1980.**" Sociological Forum, Vol. 6, No. 4, pp. 641–59.

30. National Planning Commission, 2011. **Diagnostic report**, Pretoria: NPC.

31. National Planning Commission. **National Development Plan: Vision for 2030**. Pretoria: The Presidency, 2011. http://www.npconline.co.za/medialib/downloads/home/NPC%20National%20Development%20Plan%20 ion%202030%20-lo-res.pdf (accessed 11 June 2015).

32. National Youth Development Agency, 2010. **Discussion Paper: Promoting Youth Employment in South Africa.** Office of the Chairperson. Midrand, South Africa.

33. National Youth Development Agency, 2010. **The South African Youth Context: Our Youth. Our Future.** Office of the Chairperson. Midrand, South Africa.

34. Nattrass, N, 2003. **Unemployment and Aids: The Social-Democratic Challenge for South Africa,** Centre for Social Science Research University of Cape Town, CSSR Working Paper No. 43

35. Oosthuizen, M, 2006. **The post-apartheid labour market: 1995-2004**. DPRU Working Paper
06/103. Development Policy Research Unit, Cape Town.

36. Pierce-Brown, R, 1998. **"An Application of Human Capital Theory to Salary Differentials in the Accounting Profession."** Women in Management Review, Vol.13, No. 5, pp. 192–200.

37. Rankin, N, Roberts, G and Schoer, V, 2013. **The Challenges that Young South African's Face in Accessing Jobs: Could a Targeted Wage Subsidy Help?** African Micro-Economic Research Unit (AMERU). University of the Witwatersrand.

38. Schoier, G. (2008). On partial nonresponse situations: the hot deck imputation method. Retrieved 17 July 2008 from: www.stat.fi/isi99 /proceedings/arkisto/varasto/scho0502.

39. Statistics South Africa, 2014. **Employment, unemployment, skills and economic growth: An exploration of household survey evidence on skills development and unemployment between 1994 and 2014.** Statistics South Africa, Pretoria.
40. Statistics South Africa, 2011. **The Quarterly Labour Force Survey (QLFS).** Statistics South Africa, Pretoria
41. Statistics South Africa, 2014. **The Quarterly Labour Force Survey (QLFS).** Statistics South Africa, Pretoria

APPENDIX ONE

Recoding and definition of Independent Variables

VARIABLES	MEASUREMENT	VARIABLE EXTRACTED FROM 2014 QLFS DATA	VARIABLE TRANSFORMATION (RECODING)/ DEFINITION
Education Level	Education level of the participants	Q17EDUCATION	For the purposes of this study the 2014 QLFS variable categories were recoded into the following categories: o No & Primary education (1) o (Secondary education (2) o Higher education (3)
Age	Age of the participants	Q14AGE	The 2014 QLFS variable was then recoded into different variable with the following categories: o 15-19 age group (1) o 20-24 age group (2) o 25-29 age group (3) o 30-34 age group (4)
Gender	Gender of the participants	Q13GENDER	Gender variable was recorded in the 2014 QLFS and categorized as: o Male (1) o Female (2)
Population Group	Population group of the participants	Q15POPULATION	Population group variable was recorded in the 2014 QLFS and categorized as: o African/ Black (1) o Coloured (2) o Indian /Asian (3) o White (4)
Type of Residence	Indicated region of residence of survey participants	Geo-type	Place of residence variable was recorded in the 2014 QLFS and categorized as: o Rural (1) o Urban (2)
Province	Indicated province of residence of the survey participants	Province	Province variable was recorded in the 2014 QLFS and categorized as: o Western Cape (1) o Eastern Cape (2) o Northern Cape (3) o Free State (4) o KwaZulu Natal (5) o North West (6) o Gauteng (7) o Mpumalanga (8) o Limpopo (9)