Namibia 2012 and 2013

Labour Force Surveys

An Analysis of ***Youth Employment and Unemployment***

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Namibia 2012 - 2013 Labour Force Surveys:

An Analysis of Youth Employment and Unemployment

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FOREWORD

Young people entering the labour market are generally considered a population at risk, with high turnover rate between jobs, and increased risk of entering unemployment. In Namibia, there are persistent and frustrating youth unemployment rates yet little is known, surprisingly, on the youth unemployment and any disparities that explain such. Based on this, the Namibia Statistics Agency has generated this report on youth employment and unemployment to fully examine the current situation of youth employment and unemployment. This report is timely to contribute to policy than that may aim at investigating the prevailing youth-adult employment gap, which had not been explored in Namibia.

I would like to thank the consultancy team who worked hard to ensure the production of the Namibia Youth Employment and Unemployment Report. Finally, I wish to acknowledge the Household, Welfare, Labour and Other Social Statistics division for their efforts in analysing the data and producing the report on time. I hope that the findings in this report will be translated into practice in order to ensure that the national developmental issues are addressed fruitfully.

Mr. Sikongo Haihambo

Acting Statistician General

Namibia Statistics Agency

EXECUTIVE SUMMARY

High rates of youth unemployment have been a prominent economic and social issue in the Namibian landscape. Current survey estimates from the Labour Force Survey (LFS), reported by the Namibia Statistics Agency (NSA), show youth unemployment rate range from 39.2% to 43.4% for the youth (individuals aged 15-34 years), between 2012 and 2013. Understanding the patterns, structure and causes of youth employment is essential for designing policy interventions. Moreover, evidence-based planning needs well-synthesized data to diametrically direct the interest of decision-makers. Little is known, nor has there been an attempt to explicitly analyse various aspects of unemployment including duration analysis, skills mismatch, determinants of youth unemployment to inform better policy formulation and decision-making in Namibia.

The main aim of this report was to conduct a detailed analysis of the Labour Force Survey of 2012 and 2013. More specifically, the objectives of the study were:

a. To conduct a desktop literature review on youth employment and unemployment in Namibia and to contrast it with youth unemployment globally and regionally.

b. To analyse youth employment and unemployment in Namibia using the labour force survey data.

c. To determine causes of youth unemployment in Namibia

d. To make policy suggestions for reducing youth unemployment in Namibia.

In carrying out this study, the analysis and reporting addressed the following issues:

a. An evaluation of demographic and structural characteristics, sectorial and spatial distribution of employment opportunities for the youth aged 15-34 years in Namibia.

b. An assessment of unemployment among young people aged 15-34 years in Namibia.

c. An investigation of the causes of youth unemployment in Namibia.

d. Policy proposals on how to reduce youth unemployment in Namibia.

The analysis covered three main components: the analysis of key indicators of labour market (KLIM) pertaining to the youth; the unemployment occurrence and labour market mismatch. The KILM variables were analyzed by key groups. These groups are sex; age (15-24 years for teenage; 20-24 for young adults; 25-34 for mature youth]; educational level; marital status; rural/urban; region; and occupation. The analysis also focused on youth NEETs classified by the same bio-demographic variables.

With regards to unemployment occurrence, the report focused on seven indicators to study unemployment: (i) unemployment occurrence; (ii) unemployment duration; (iii) long-term unemployment; (iv) re-unemployment (first or repeat); (v) unemployment index, (vi) time-related under-employment; and (vii) NEET.

Measures of the labour market skills mismatch studied included the coefficient of variation, proportion of the unemployed to the employed, variance of relative unemployment rate, and mismatch by occupation-by calculating incidence of over-education and under-education, and relative wage returns.

The findings of this study can be summarized in three domains:

Patterns of Youth Employment:

- Having high school education or higher; being married; or being of aged 30-34 years; and living in urban areas promoted youth employment.
- The incidence of employment in the vulnerable sectors of the economy is growing (32% in 2012 and 54.7% in 2013).
- About half of the youth were employed in the informal sectors for both years (2012 and 2013).
- Transitions from spells of unemployment are uneven, with more youth absorbed into employment within a year, after leaving school or in between jobs.

Causes of youth unemployment:

Youth unemployment is systemic, and is highly correlated with education level, and gender. It shows location (rural versus urban and regional) disparities and manifests elements of skills mismatch.

- Unemployment and inactivity are more likely to occur among youths in rural areas; younger youths 15 – 19 years of age, and among the youth with no education or of primary education.
- Persistent high levels of unemployment among female youth, with high occurrence on almost all indicators: unemployment duration; long-term unemployment, first and repeat unemployment, NEET and unemployment index.

Skills Mismatch

- Incidence of over-education and under-education is evident in Namibia, with 14% in 2013 and 20.5% in 2012, while under-education was slightly higher in both years.
- The likelihood of mismatch by occupation was higher in males, but under-education was relatively high in females.
- Educational mismatch has negative consequences / impacts on wages. There was a wage penalty for those over-educated as opposed to those under-educated.
- With regards to permanent jobs, it is evident that companies are correctly matching jobs with education level.
- Considering the coefficient of variation and proportion of the unemployed to that employed, there was an over-supply of youths possessing certain skills – between 2012 and 2013, with unemployed male youth having an education profile different from that of employed population, while the mismatch among female may be attributed to job searching behaviour.

In summary, it has been observed that, in all indicators of skills mismatch, there is strong evidence of labour market mismatch in Namibia. Therefore:

- The empirical analysis suggests that over-education is a sign of market failure or structural macroeconomic bottlenecks in the economy.
- If over-education is an investment in future earning power, mismatch can be considered as temporary and may not require policy interventions, or else,
- Policy makers should focus on reducing the incidence of over-education which reduces workers' welfare and in the long run harms the employers' interests.

Policy Recommendations

- The existing policies on redistribution of resources need to be closely re-examined. High levels of youth unemployment also contribute to poverty and social exclusion.
- Gender policies that address issues affecting male and female youth when it comes to employment and unemployment should be strongly revised. As the findings of this study show, females have a higher rate of unemployment than men. With the strong link between education and employment promoting the inclusion of the girl child into the education system from grass root level.
- There should be a policy where every girl child must go to school, because some households cannot afford to send all their children to school, therefore opting to educate the boy child only. Namibian organizations, churches, unions, employers and government need to promote free education for every single child.
- Although education credentials are important in securing jobs, education alone is not sufficient to meet the skills required.
- Entrepreneurship in Namibia – Incentives should be provided to private sectors or SMEs to encourage employers to introduce and expand quality internship programs that promote student internship that offer experience and translate into skills for job search methods.
- Insertion of orientation programme /work placement schemes – poorly integrated new entrants in job markets often have qualifications but not necessary skills, thus the need for programmes to address transition from education to work place.
- Vocational training in school curricula – strengthen the role and effectiveness of vocational training education. Private sector should own/shape the Vocational training curricula.

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DEFINITIONS AND TERMS

Broad unemployment: applies when a person was available for work in the preceding seven days, but does not require the person actively sought work. This definition of unemployment is appropriate for developing countries where there are limited formal avenues through which people can look for work.

Broad Occupation Groups: A categorization of occupation into skills levels of high skilled non-manual, low-skilled non-manual, skilled manual and unskilled.

Coefficient of variation: an index of dissimilarity and captures the mismatch between skills demand and skills supply.

First unemployment: the incidence of being unemployed for the first time. The first unemployment applies mainly for those in transition between school and work.

Labour Market Mismatch: a condition where employee qualifications do not match job requirements or are not used on the job.

Long-term unemployment: this describes unemployment spell of more than 6 months. Long-term unemployment may bring discouragement to job-seekers, resulting in unemployment scarring.

Mismatch by occupation: compares people with a given education level working at an inappropriate skills level, measured by the broad occupation skills.

Over-education: a situation where an individual has completed more years of education than the current job requires. It is a term often used than over-qualification.

Repeat unemployment: a situation of being unemployed after the initial unemployment occurrence.

Strict unemployment: applies in situations where a person was available for work and also took active steps to find work. Repeat unemployment may inflict setbacks, and may reduce the likelihood of being hired in the future.

Time-related unemployment: is measured as the number of actual hours of work. In Namibia, this is defined as actual hours worked is less than 35 hours per week.

Under-education: occurs where an individual has completed few years of education than the job they are holding.

Unemployment scarring: refers to effect of early unemployment, which have been found detriment to the worker's future employment opportunities [because it reduces the future likelihood of being hired, and inflicts re-employment wages].

Variance of relative unemployment rate: is another measure of dissimilarity like the coefficient of variation, and uses the total unemployment rate as the scaling factor to unemployment rate.

ABBREVIATIONS AND ACRONYMS

ETF	European Training Foundation
GLM	Generalized Linear Model
ILO	International Labour Organization
KILM	Key Indicators of Labour Market
LFS	Labour Force Survey
NEET	Not in Education, Employment or Training
NSA	Namibia Statistics Agency
OECD	Organization for Economic Development
OLS	Ordinary Least Squares
PUE	Proportion of the unemployed to the employed
SACU	Southern African Customs Union
SADC	Southern Africa Development Community
TIIPEG	Targeted and integrated intervention programme for employment generation
TRUE	Time related unemployment
VARUR	Variance of relative unemployment rate

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The report was prepared under the close and direct supervision of Mr. Daniel Oherein (Deputy Director, Labour, Welfare, and other Social Statistics Division of the Namibia Statistics Agency). The preparation process benefited from inputs of various members of the Labour, Welfare and Other Social Statistics division, including, but not limited, to Mr. Onesmus Shalonda and Mrs. Linda Idhogela.

1.1. Background

High rates of youth unemployment have been a prominent economic and social issue in the Namibian landscape. Current model estimates from the International Labour Organization (ILO) show that youth unemployment rates is approximately 30% as of 2012 dropping from 47.7% in 2009, restricted in the age range of 15-24 years (ILO, 2013a,b). However, based on a broader age range, results from the 2013 Labour Force Survey (LFS), reported by the Namibia Statistics Agency (NSA), show youth unemployment rate of 41.7% for individuals aged 15-34 years.

Youth unemployment is not just a Namibian phenomenon. It is among the major challenges facing both developed and developing countries in the world. The problem of youth unemployment is more critical to developing countries due to the high poverty levels requiring all people to work in order to ensure survival (ILO, 2011). According to international labour organization's statistics, global youth unemployment, estimated at 74.5 million in 2013, has increased by 3.4 million from 2007 to 2012 and is expected to continue increasing in the future. Statistics also show that the number of employed youth has declined by 22.9 million in 2012 as compared to 2008 statistics despite the growth of the youth population by 12 million for the same period (ILO, 2013a, b). The striking fact is that youth unemployment is considerably higher than unemployment among adults, reaching 13.1% in 2013, which is 3 times higher than that of adult population.

The consequences of youth unemployment are many. Youth unemployment has become a threat to the social, economic and political stability in most developing countries. The youth unemployment often puts the youth in a disadvantaged position where they are likely to earn lower future earnings or at an increased probability of being unemployed again due to limited experience, or worse still being completely excluded from the labour market. Economically, in sum, youth unemployment has led to the labor market instability, increased welfare costs, erosion of the tax base and unused investments in education and trainings (ILO, 2011). In the long-run, this often leads to marginalized sections of the population.

Understanding the patterns, structure and causes of youth employment is essential for designing policy interventions. However, evidence-based planning needs well-synthesized data to diametrically direct the interest of decision-makers. Results in this regard are mixed. While the NSA, through yearly labour force surveys, has demonstrated that the patterns of youth unemployment in Namibia remain stubbornly high with little change, detailed analysis is missing. On the other hand, the ILO modelled estimates show a decline in youth employment since 2008, nevertheless their results are restricted to UN-defined youth in the age range of 15-24. In both accounts, data inputs are from the national LFS, however, our understanding of the determinants of the youth employment in Namibia is surprisingly limited (Pazvakawambwa and Tjikune, 2013). Little is known on the demographic and structural characteristics, sectorial and spatial distribution of employment opportunities for the youth in the age range 15-34 years in Namibia. Neither have we explicitly analysed various aspects of unemployment including duration analysis, skills mismatch, determinants of unemployment to inform better policy formulation and decision-making in Namibia.

In what follows, the study of trends and patterns of youth unemployment and employment in Namibia is presented and discussed. Critical in this analysis was to capture the causes of youth unemployment for those neither in employment, nor in education or training (NEET).

1.2. Objectives of the Analysis

The main aim was to conduct a detailed analysis of the Labour Force Survey of 2012 and 2013 to generate a report on **"Youth Employment and Unemployment in Namibia".**

More specifically, the objectives of the study were:

- To conduct a desktop literature review on youth employment and unemployment in Namibia and to contrast it with youth unemployment globally and regionally.
- To analyse youth employment and unemployment in Namibia using the labour force survey data.
- To determine causes of youth unemployment in Namibia
- To make policy suggestions for reducing youth unemployment in Namibia.

In carrying out this study, the analysis and reporting addressed the following issues:

- An evaluation of demographic and structural characteristics, sectoral and spatial distribution of employment opportunities for the youth aged 15-34 years in Namibia.
- An assessment of unemployment among young people aged 15-34 years in Namibia.
- An investigation of the causes of youth unemployment in Namibia.
- Policy proposals on how to reduce youth unemployment in Namibia.

1.3. Defining Key Indicators of Labour Market

Accordingly, the analysis was carried out in line with international standards, particularly those propagated by ILO. In line with the objectives, the analysis covered key indicators of the labour market (KILM), particularly covered the following:

a. **Distribution of youth population by primary activity:** The indicator aims to capture the full extent of activity options of the youth population, delineating between "active" economic activities (employment and unemployment) and "inactive" activities (studying and discouragement). The distribution of the youth population by primary activity includes the following categories: (i) Employed, (ii) Unemployed, (iii) Discouraged, and (iv) In School.

b. **Youth unemployment rate:** The unemployment rate is defined as the number of unemployed youth (typically 15-24 years) divided by the youth labour force (employment + unemployment). The unemployment rate is probably the best-known and most used labour market indicator. Together with the employment-to-population ratio, it provides the broadest indicator of labour market performance. A relaxed measure of youth unemployment also applies. The relaxed youth unemployment rate is defined as the number of unemployed youth (typically 15-24 years) plus the number of discouraged youth divided by the youth labour force (employment + unemployment). Such a broad definition is appropriate to capture those without work but available, since in many developing countries, there are limited formal avenues where one can look for work (NSA 2013, 2014).

c. **Youth employment-to-population ratio:** This is the proportion of a country's working-age and young population that is employed. The indicator typically falls between 50 and 75 percent with a higher share indicating that a greater proportion of the youth population that could be working does work. A low ratio indicates that a large share of the population is neither working nor looking for work. In many countries, the ratio is lower for females than for males.

d. **Status of youth workers in employment:** The indicators refer to the proportion of the employed population classified as: (a) wage and salaried workers (employees); (b) employers and own-account workers; and (c) contributing family workers (unpaid family workers). These three groups of workers are presented as percentages of the total employed for both sexes and for males and females.

e. **Youth employment by sector:** The Youth Employment by Sector indicator is also known as 1-Digit Sector Level Indicator (KILM4, ILO). The indicator aims to show where youth are working, i.e. in what specific sector. Aggregate sectors include agriculture, industry, and services, with employment in each category implying differences in terms of pay, job attachment, conditions of work, etc. Looking at youth employment by the 1-digit level over time provides information on which sectors youth are attracted to. Changes over time provide information on possible areas of economic growth or deterioration. The indicator on employment by sector can be used in conjunction with other indicators, in particular employment by status, to identify vulnerable groups in the labour market. In addition, the breakdown of the indicator by sex allows for analysis of gender segregation of employment by specific sector.

f. **Youth employment in public sector:** The public sector plays a significant social and economic role. Past estimates suggest the world share of public employment in total world employment is about 30 percent and varies by level of economic development and the role of the state in the production of goods and services. In this context, this indicator aims at providing information on the share of youth in public employment in order to improve diagnostics of the labor market challenges faced by youth. The indicator can support governments to identify bottlenecks for employment creation and have grounds for further promotion of youth employment in the private sector.

g. **Educational attainment of youth labour force:** Educational attainment reflects the levels and distribution of the knowledge and skills base of the youth labour force. Statistics on levels and trends in educational attainment of the labour force can: (a) provide an indication of the capacity of the country to achieve important social and economic goals; (b) give insights into the broad skill structure of the labour force; (c) highlight the need to promote investments in education for different population groups; (d) support analysis of the influence of skill levels on economic outcomes and the success of different policies in raising the educational level of the workforce; (e) give an indication of the degree of inequality in the distribution of education resources between groups of the population, particularly between men and women, and permits within and between areas (e.g. regions); and (f) provide an indication of the skills of the existing labour force, with a view to discovering untapped potential.

1.4. Methodology

A number of methodological approaches to address objectives were used. In brief, these are summarized below, with an extensive presentation of the techniques given in respective chapters [3, 4 and 5].

1.4.1. Data

This study was based on data drawn from the LFS 2012 and 2013. Both surveys were based on a two-stage cluster design targeted at private households. At first stage, primary sampling units (PSU), usually enumeration areas were selected proportional to size. The PSU were drawn from the master sample frame design for the 2011 Population and Housing Census. At the second stage, a fixed number of households in the chosen PSUs were systematically selected. Subsequently all adult of working age (15 years and above) were asked to participate in the study. A key question which was asked was “Have you worked for pay, or profit or family gain for one hour or more in the last week” (NSA, 2014).

The LFS recorded data on variables such as: demographic characteristics, labour force and inactive population, and employment status, which were critical for the analysis of patterns and causes of unemployment.

1.4.2. Validation of LFS 2012 and 2013 results

Data checks by way of validation of the results of the LFS of 2012 and 2013 was carried out. At this stage, identification of possible determinants of labour market outcomes, in consultation with NSA management, was completed.

1.4.3. **Analysis of Key Indicators of Labour Market**

A summary of youth market experience by re-analyzing and extending the analysis of key indicators of labour market to unravel main causes of youth employment was done. About ten (10) KILM as defined in section 1.3 were analyzed by key groups. These groups are sex; age (15-24 years for teenage; 20-24 for young adults; 25-34 for mature youth]; educational level; marital status; rural/urban; region; and occupation. The analysis also focused on youth NEET classified by the same bio-demographic variables. The results of this analysis are presented in Chapter 3.

1.4.4. **Unemployment occurrence**

We used seven indicators to study for unemployment: unemployment occurrence; unemployment duration; long-term unemployment; re- unemployment (first or repeat), unemployment index, time-related under-employment and NEET. The analysis is covered in Chapter 4.

1.4.5. **Skills Mismatch Analysis**

Various measures of the labour market skills mismatch were studied. These included the coefficient of variation, proportion of the unemployed to the employed, variance of relative unemployment rate, mismatch by occupation-by calculating incidence of over-education and under-education, and relative wage returns. The skills mismatch analysis is given in Chapter 5.

2.1. Local Youth Employment and Unemployment as contrasted to regional and global contexts

2.1.1. Introduction

The chapter explores three main areas namely, definition of youth employment and unemployment in Namibian context, identify currents trends of youth unemployment and the main patterns, structures of unemployment among the youth including perspectives. Accordingly, the chapter relates Namibia's employment and unemployment of the youth context to regional, continental and global perspectives respectively.

The ILO (2006) defined unemployment people as those "that have not worked for more than one hour during the short reference period (generally, the previous week or day) but who are available for and actively seeking work." While this definition has become widely accepted to contextualise unemployment the world over, we have to be wary of the different variables that informs contexts when we define unemployment from one country to another. Singell & Lillydahl (1989) argued that general definitions of unemployment are inadequate for analysing and understanding the problem of youth unemployment, particularly in developing countries such as Namibia. They have called for development, analysis and application of "alternative concepts of satisfactory or unsatisfactory status of young people" respectively (1989:457).

The Namibian government has prioritized unemployment as a socio-economic problem and has since been trying to deal with the matter. While government was commended for creating initiatives to deal with unemployment, especially with recent Targeted Intervention Program for Employment and Economic Growth (TIPEEG) initiative high levels of unemployment persists among the youth. In this context the Labour Resource and Research Institute did an empirical study with recommendations among the unemployed youth in Namibia. The findings of the study highlighted "Namibia's crisis of mass unemployment is affecting the youth severely and can be attributed to a mixture of poor quality output of the education system, a skills mismatch in the labour market and economic structures that prevent the creation of a sufficient number of jobs" (LaRRI 2011: 52). The issue of youth employment and unemployment is experienced globally yet dynamically, thus it is important to study the Namibia case uniquely in relation to the continent and the global world. The above inference is justified by socio-economic cultural circumstances that direct the economy.

2.1.2. Regional and Global unemployment rates in context

While it is advisable to view Namibia situation uniquely, the employment and unemployment set up among the youth cannot be understood in isolation. According to the ILO report of (2004) the world continues to face a worsening youth employment crisis. In fact the labour market outlook for young people worsened in nearly every region of the world Namibia included. The current patterns are clear indicators that there is indeed a crisis of unemployed and underemployed youth.

For instance young people are three times more likely to be unemployed than adults and almost 73 million youth worldwide are looking for work (ILO 2014). The ratio and numbers mentioned here are reason for serious concern, thus governments and stakeholders requires urgent innovations and actions in order to deal with the issue of youth employment and unemployment.

While signs of rising economy are reported on the African continent, unemployment and underemployment rates remain high in Africa. It seems the continent lacks common approval to tackle the job crisis (Chuma 2014). On the other hand Higgins posits that figures about employment and unemployment of youth less widely available for developing countries.

However, data suggests that the gap between youth and adult unemployment rates is wider on the continent than in industrialized nations. Youth unemployment occurs at a rate more than twice that for adults (ILO 2014c). Global employment trends report (2014) of the ILO suggest that should current trends continue, global unemployment is set to worsen further, albeit gradually, reaching more than 215 million jobseekers by 2018. Youth unemployment has since reached 13 .1 % which is almost 3 times as high as adult unemployment rate (ILO b: 2014:11).

Youth unemployment is considered a barrier to the Southern African region's development (Devlin 2013). On the continent some of the highest rates of unemployment are in Southern Africa, where 51 percent of young women and 43 percent of young men are unemployed (Delvin 2013). In sub-Saharan Africa it is reported that "young people under the age of 25 represent 3/5 of sub-Saharan Africa's unemployed population and 70% of the youth population lives on less than $2 a day (African Development Bank, 2014). Difficulties finding and sustaining employment detract from a young person's lifetime productivity and earnings, making it more challenging to escape poverty (Delvin 2013:1).

As of 2014 the youth accounted for 60% of all unemployed Africans (World Bank, 2014). Only a quarter (1/4) of the total labour force has stable wage paying jobs. However youth unemployment in North African countries remains the highest in the world reaching more than 29% in 2013 (ILO, 2014c). Youth unemployment is expected to continue increasing in the future, because currently unemployment was estimated at 74 million in 2013, which showed there was a huge increase by 3.4 million from 2007 to 2012 (ILO 2013).

However, it is important to note that youth on the continent are getting better educated, and the age proportion of 20-24years who complete secondary education will increase from 42% to 59% over the next two years (African Economic Outlook 2012).

2.1.3. **Namibian Context**

Literature about youth unemployment and employment is limited in Namibia. In 2014 the World Bank did an overview study of Namibia. In terms of development the review suggest that although Namibia enjoyed economic growth and prudent macroeconomic policies, these have not generated the jobs needed to overcome the inequitable distributions of income, assets (notably land), and raise living standards in rural areas and among the urban poor. The report notes that at the top of the government's agenda is bringing down the very high unemployment rate. Growth industries generate few new jobs. With this in mind Namibia, is also experiencing the dire straits of youth unemployment.

In Namibia, the unemployment rate measures the number of people actively looking for a job as a percentage of the labour force (NSA, [2011).] The unemployment rate continue to decrease with latest recording said to be just about 28.1% (LFS,2014) compared to 2013 which was 29.6% (LFS, 2013). With such decreases being recorded, unemployment of youth is still rife in Namibia. Ortiz & Cummins (2012) argue that the decrease in unemployment rates can be attributed to prevalent vulnerable employment. In 2011, vulnerable employment accounted for 70% of all jobs growth in sub-Saharan Africa (Ortiz & Cummins, 2012).

According to the SADC International publication "South Africa and Namibia both have a relatively low percentage of working-age population, male and female, working or looking for work. Unemployment among young women is especially high in South Africa, Namibia and Lesotho" (SADC International, 2015). The Namibian labour force of 2004 recorded that the youth unemployment rate in Namibia has the number of women higher than men. Yet 10 years later the findings are still the same because it was recorded that unemployed women accounted for 33.1% compared to 25.8% for men (Nyahungwa 2014).

Various stakeholders have identified unemployment as one of the major issues to be tackled in the years to come (Suonpaa & Matswetu 2012). According to Eita (2010) and Suonpaa & Matswetu (2012), unemployment has had a huge impact on Namibia. Unemployment has drastic impacts on those that are not working. For instance lack of employment could cause 'homelessness, lack of family cohesion, poverty and could possibly affect one's human dignity (Suonpaa & Matswetu, 2012). Therefore the employment and unemployment rates stated in previous paragraphs show that Namibian youth employment is vulnerable and needs as much attention as the rest of the other African countries.

2.2. Main causes of youth unemployment

Unemployment is worldwide phenomenon and is not just experienced in Namibia. There are numerous challenges that the young people are facing when entering the labour market, particularly in developing economies (ILO 2011). "Not only do they need to find a job, and preferably one that corresponds to their level of qualifications, they also want to develop a foundation for a lasting, stable employment relationship that helps them to progress in life (ILO 2011). There are several factors, such as their relative lack of skills, unstable labour market experience and discrimination, which contribute to the difficulty usually faced by young people entering the labour market. According to Higgins (2011) "In developing countries, youth unemployment is compounded by substantial levels of underemployment and poor-quality jobs in the informal sector." Both these phenomena are widespread, which suggests that the problem of integrating young people into the labour market in developing countries is even more serious than would first appear. Africa's youth employment challenges are as diverse as the continent itself" (African Economic Outlook, 2012). Policy factors play an important role in determining unemployment rates (Scarpetta 1996), and further address labour market issues with the aim of facilitating entry into the labour market.

2.2.1. Education

Garcia (2011) states that education and labour market are linked; moreover the malfunctions between education and the labour market complicate the efficient transition from education environment to work environment which lead to high unemployment (Pazvakawambwa and Tjikune 2012).

According to a study done by the Labour Resource and Research Institute (LaRRI) on youth and unemployment in Namibia; "In Sub-Saharan Africa there is a link between high unemployment and education...The low level of education of young people is a significant factor in the longer unemployment spells they face" (LaRRI 2011: 4). According to the findings of the LaRRI research, 'The crisis of youth unemployment in Namibia' in 2011 youth education in Africa remains below average, in Sub-Saharan Africa youth literacy is 76.8% which is lower than Latin America (94.8%) and the Caribbean, in East Asia and the Pacific it is 98%. In many African countries education is a major and important determinant for securing a formal job. Thus youth unemployment in Africa remains significantly higher among the less educated than among the more educated (LaRRI 2011: 5).

Suonpaa & Matswetu (2012: 9) have identified several reasons for unemployment in Namibia. They stated that one of the key reasons why youth unemployment is being experienced at the high rates "is the lack of skills amongst job seekers and especially those with no formal training." Suonpaa & Matswetu (2012) also state that the Namibian economy base is narrow and of which this could hamper the development pace of the country. Suonpaa & Matswetu (2012: 10) identified that; the "problematic nature of Namibian education (access, equity, quality and efficiency), lack of ambition or will to work, corruption in the recruitment policies such as nepotism and favouritism, lack of experience and globalization and technological advances, over qualification and lack of experience" are some of the major factors contributing to high unemployment rates in Namibia.

2.2.2. **Inefficient labour markets**

According to the Economist (2013), South Asia, the Middle East and Africa are regions where almost half of the world's young population is, they are also the regions with the fastest growing populations. Therefore it is crucial that the labour market be efficient enough to accommodate the upcoming youth labour force. However, reports have shown that the labour markets are inefficient and hence have caused a major fall in accommodating the youth (Economist 2013).

Looking at the economic set up of most countries in Africa "The poorest African countries have very low unemployment rates alongside a large informal sector that employs up to 90% of the working age population" (Economic Outlook 2012), yet in middle income countries, the informal sectors are relatively smaller and hence do not absorb young workers as they do in poor countries.

It seems integration into the labour market is not a guided transition, therefore creating an inefficient labour market. General Labour market reforms according to Lindbeck (2014) have affected current policies and have seen employment opportunities for the young people affected by structural changes in the labour market. "Entries to the labour market for young people have disappeared without being replaced with other entries" (Lindbeck 2014: 1). There is a lack of adequate and proper guidance for the youth from the time they leave schools to the time they find work. According to Barbagelata (2012: 3) "Inadequate training—or the lack of training more generally—is one of the reasons why young people struggle in their search for employment." The gap between the two calls for policies of strategic frameworks that aim to bridge that gap between school and the world of work.

The State of the African Youth report (2011) revealed that "African youth also have inadequate participation in decision making and social dialogue at local, national and regional levels.", and that this has had a huge impact on integration of the youth as part of the working force and therefore failure to address the issues that affect the youth and employment. Namibia needs to actively engage its youth in social dialogue at all levels and create an atmosphere where the youth and government dialogue on what's needed and what can be done to address the issue of inefficient labour market.

2.2.3. **Growing skills mismatch**

Young people should be able to make an easy transition from school to work with the skills and knowledge they would have acquired (UNECA 2005, UNFP African Youth Report 2011). However, inability to do so has seen the youth giving up on searching for jobs, incompetence in the job market and having employers not consider school leavers for jobs as they lack experience and can be seen as an expense or liability (Flanagan 1995). According to a study commissioned by Namibia Employers Federation in 2010, done by Institute of Public Policy Research (IPPR), there is a skill gap that has seen many companies (which were part of the study) stating that "critical vacancies that require specialist skills they cannot fill." This study predicted that five years later there would still be this skill gap of degreed professionals and special skills jobs in Namibia.

According to the report by the Guardian in 2014, "Youth remain almost twice as likely to be unemployed than their elders. This is partly because of a mismatch between their skills and what is required for available employment opportunities" (Amare 2014:1). A lot of countries in the region have reported that there is growing mismatch of skills but more research within the Namibian context needs to be done to further substantiate this claim. Therefore more research needs to be on this claim as there is not enough literature with detailed country by country analysis of the skills mismatch though it is normally referred to as one of the major causes of unemployment.

2.2.4. **"Population Bulge"**

The increasing population in Sub-Saharan Africa is seen as one of the reasons for the rising rate of youth unemployment (UNFPA Report 2011, Amare 2014). "Sub-Saharan Africa has the fastest population growth projected between now and 2050 and the highest youth population in the world. It is crucial that governments factor this 'youth bulge' into national and social development planning" (Amare 2014). However the correlation of population growth and employment is not always direct and simple but does give indication to possible policy needs, estimates on number of jobs to be created and strategic frameworks that address the needs that come with population increase. According to the 2011 Namibia Population and Housing census, Namibia is a nation of young people, with 37% of the total population being 15 years of age and below a median age of 21.

"Persistently high unemployment suggests a lack of effective policy interventions. To date, policies that have been implemented have largely been supply-side initiatives aimed at the structural causes of youth unemployment (Oosthuizen and Cassim 2014: 1). Therefore, there is a need to identify and propose policies that can help do away with the lack of effective policy interventions.

2.2.5. **Economic and financial crisis**

According to Atwoli (2014) the global economic and financial crisis adversely affected Africa because the continent invested very heavily in its informal economy. Atwoli suggests that what has to happen is to make sure that the informal economy is formalized. This process will help to create sustained employment on the continent especially for youth and women.

Namibia in 2012 was one of the countries with the largest youth share in their respective populations which was affected by the prolonged effects of the 2008 global economic crisis (Ortiz 2012). When the economic crisis hit, there was high numbers of youth being unemployed, because there were limited job opportunities. Economically, in sum, youth unemployment has led to the labour market instability, increased welfare costs, erosion of the tax base and unused investments in education and trainings (ILO, 2011).

3.1. 3.1 General characteristics of youth employment in 2012 and 2013

3.1.1. Labour Force

While the foregoing chapter presented the structural challenges relating to youth unemployment, this chapter will dwell on the characteristics of Namibia youth employment between 2012 and 2013. Labour force is derived from a person's activity status, i.e. employed, unemployed and inactive. The first two categories constitute the labour force.

Table 1 and 2 present the youth population in labour force by sex, age-group and area for 2012 and 2013 respectively. Youth in the labour force slightly increased from 753,805 in 2012 to 767,214 in 2013, an overall increase of 13,409. The number of female youth in the labour force was higher for both 2012 (387,181) and 2013 (402,675) as compared to males 366,624 and 364,539 in 2012 and 2013 respectively. While there has been an increase of 15,494 female youth in labour force, the number of male youth in the labour force declined by 2,085 in 2013. Youth labour force is high in urban areas as compared to rural areas for both 2012 and 2013, however, despite it being high the number of youth in labour force in urban areas has declined by 27,988 between 2012 and 2013. The decline is high (22,139) for male youth than female youth (5,849). In 2012 the number of youth in labour force in the age-groups of 15 – 19 and 20 – 24 was higher as compared to 2013, whereas in 2013 the number of youth in labour force was higher for the age groups 25 – 29 and 30 – 34 as compared to 2012.

Table 1: Youth population in labour force, by sex, age group, and area (broad definition), 2012

		Urban			Rural			Total	
Age group	Female	Male	Total	Female	Male	Total	Female	Male	Total
Numbers									
15-19	56,259	51,848	108,107	62,209	63,601	125,810	118,468	115,448	233,916
20-24	63,994	60,860	124,854	41,853	39,523	81,376	105,848	100,383	206,231
25-29	53,755	52,688	106,443	34,797	29,049	63,846	88,553	81,737	170,290
30-34	43,194	42,054	85,248	31,118	27,005	58,123	74,312	69,056	143,368
Total	217,202	207,450	424,652	169,977	159,178	329,155	387,181	366,624	753,805
Percentage									
15-19	25.9	25.0	25.5	36.6	40.0	38.2	30.6	31.5	31.0
20-24	29.5	29.3	29.4	24.6	24.8	24.7	27.3	27.4	27.4
25-29	24.7	25.4	25.1	20.5	18.2	19.4	22.9	22.3	22.6
30-34	19.9	20.3	20.1	18.3	17.0	17.7	19.2	18.8	19.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table 2: Youth population in labour force, by sex, age group, and area (broad definition), 2013[1]

		Urban			Rural			Total	
	Female	Male	Total	Female	Male	Total	Female	Male	Total
Age group				**Number**					
15-19	45,473	38,666	84,139	63,007	66,882	129,889	108,480	105,548	214,028
20-24	63,626	57,285	120,911	50,907	46,115	97,022	114,533	103,401	217,934
25-29	55,799	47,260	103,059	40,388	34,409	74,797	96,187	81,670	177,857
30-34	46,455	42,100	88,555	37,019	31,820	68,839	83,475	73,920	157,395
Total	**211,353**	**185,311**	**396,664**	**191,321**	**179,226**	**370,547**	**402,675**	**364,539**	**767,214**
Percentage									
15-19	21.5	20.9	21.2	32.9	37.3	35.1	26.9	29.0	27.9
20-24	30.1	30.9	30.5	26.6	25.7	26.2	28.4	28.4	28.4
25-29	26.4	25.5	26.0	21.1	19.2	20.2	23.9	22.4	23.2
30-34	22.0	22.7	22.3	19.3	17.8	18.6	20.7	20.3	20.5
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

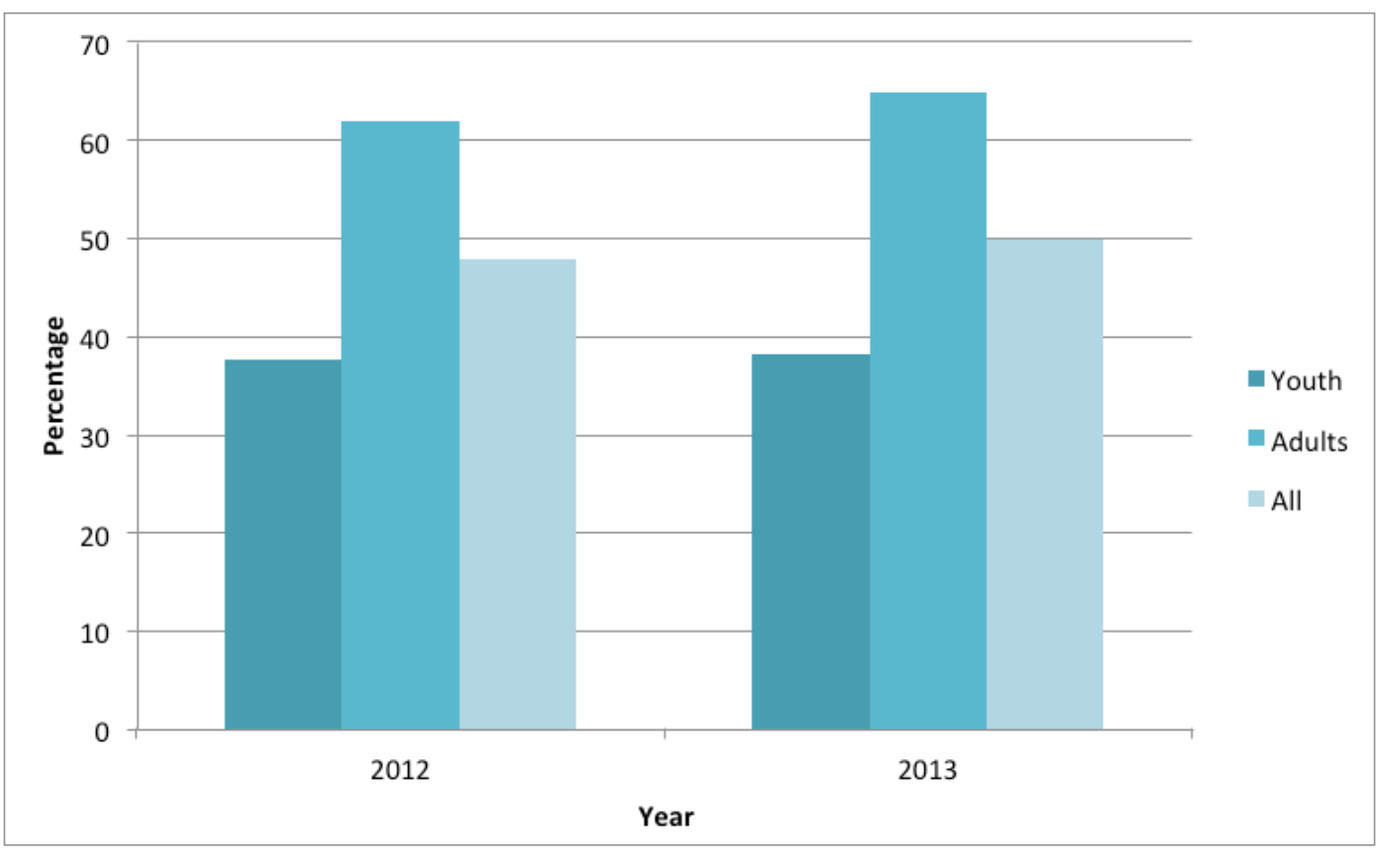
[1]UNLESS OTHERWISE STATED, ALL TABLES AND FIGURES WERE PRODUCED USING THE 2012 AND 2013 LABOUR FORCE SURVEYS

Comparison between youth and adult labour force revealed that the labour force among adults was slightly higher than among youth, with a net change of 5.8% among adults as compared to 4.6% among youth (Table 3). Figure 1 shows the overall slight improvement for the youth and adults LFPR for 2012 and 2013 respectively

Table 3: Comparing labour force by sex, area among youth and adults, 2012 and 2013

	Namibia		Urban			Rural	
Year	Total	Female	Male	Total	Female	Male	Total
Youth							
2013	767,214	53.3	46.7	51.7	51.6	48.4	48.3
2012	753,805	51.1	48.9	56.3	51.6	48.4	43.7
Change	13,409	2.1	-2.1	-4.6	0.0	0.0	4.6
Adult							
	Namibia		Urban			Rural	
Year	Total	Female	Male	Total	Female	Male	Total
2013	598,096	51.1	48.9	42.3	57.9	42.1	57.7
2012	546,204	51.1	48.9	48.0	59.2	40.8	52.0
Change	51,892	0.0	0.0	-5.8	-1.3	1.3	5.8

Figure 1: Change in labour force participation rate, 2012 and 2013



3.1.2. Labour force participation rate (LFPR)

Labour force participation rate is defined as the proportion of those employed over the labour force. Between 2012 and 2013 there was a slight increase in the labour force participation rate from 37.7% in 2012 to 38.3% in 2013 an increase of 10 340 of the employed youth. LFPR increased slightly from 2012 to 2013 in both urban and rural areas as observed in Table 4 and 5 respectively.

Table 4: Youth labour force participation rate, by age group and area, 2012

		Urban			Rural			Total	
Age group	Employed	Labour force	LFPR %	Employed	Labour force	LFPR %	Employed	Labour force	LFPR %
15-19	8,620	108,107	8.0	9,057	125,810	7.2	17,676	233,916	7.6
20-24	44,511	124,854	35.7	27,699	81,376	34.0	72,211	206,231	35.0
25-29	64,549	106,443	60.6	33,596	63,846	52.6	98,147	170,290	57.6
30-34	59,163	85,248	69.4	36,666	58,123	63.1	95,828	143,368	66.8
Total	**176,843**	**424,652**	**41.6**	**107,018**	**329,155**	**32.5**	**283,862**	**753,805**	**37.7**

Table 4 shows that youth LFPR was 37.7% in 2012 but there were variations among regions. Youth LFPR in urban areas was compared to those in rural areas (41.6% and 32.5% respectively). The highest youth LFPR was recorded in Kunene, Otjozondjupa and Erongo (55.7; 53.3 and 52.4 percent respectively), while Ohangwena (23.2%) and Omusati (25.9%) had the lowest youth LFPR (Table 5). In comparison to one year back, the 2013 youth LFPR was 38.3% a slight increase for both male and female LFPR.

Table 5: Youth labour force participation rate, by age group and area, 2013

		Urban			Rural			Total	
Age group	Employed	Labour force	LFPR %	Employed	Labour force	LFPR %	Employed	Labour force	LFPR %
15-19	5,139	84,139	6.1	8,041	129,889	6.2	13,181	214,028	6.2
20-24	42,193	120,911	34.9	31,242	97,022	32.2	73,435	217,934	33.7
25-29	65,305	103,059	63.4	37,838	74,797	50.6	103,143	177,857	58.0
30-34	61,594	88,555	69.6	42,849	68,839	62.2	104,443	157,395	66.4
Total	**174,231**	**396,664**	**43.9**	**119,970**	**370,547**	**32.4**	**294,202**	**767,214**	**38.3**

In 2012 female youth LFPR in Kavango, Ohangwena, Omaheke, Omusati and Oshikoto exceeded that of males (Table 6). In comparison to 2013, regions with higher female youth LFPR were Kavango; Khomas; Kunene; Ohangwena and Omusati (Table 7). n 2013 there were slight changes in terms of the regional variations, with Omaheke (58.8%), Erongo (52.3%) and //Karas (49.5%) recording the highest youth LFPR and Omusati and Ohangwena being the lowest (22.0% and 22.0%)

Table 6: Youth labour force participation rate by region and sex (2012)

		Female			Male			Total	
Region	Employed	Labour force	LFPR %	Employed	Labour force	LFPR %	Employed	Labour force	LFPR %
//Karas	4,794	12,013	39.9	5,836	10,662	54.7	10,630	22,675	46.9
Erongo	10,908	26,271	41.5	18,658	30,159	61.9	29,566	56,430	52.4
Hardap	4,590	12,771	35.9	8,653	15,202	56.9	13,243	27,973	47.3
Kavango	13,206	42,700	30.9	9,901	33,132	29.9	23,107	75,832	30.5
Khomas	29,675	89,200	33.3	41,753	92,694	45.0	71,428	181,894	39.3
Kunene	5,118	10,232	50.0	6,762	11,100	60.9	11,880	21,332	55.7
Ohangwena	9,152	39,122	23.4	7,464	32,571	22.9	16,616	71,693	23.2
Omaheke	2,760	9,300	29.7	5,318	10,654	49.9	8,078	19,954	40.5
Omusati	9,705	35,744	27.2	7,336	30,129	24.3	17,041	65,873	25.9
Oshana	13,923	38,170	36.5	10,229	30,246	33.8	24,152	68,416	35.3
Oshikoto	9,258	29,787	31.1	8,674	28,037	30.9	17,932	57,824	31.0
Otjozondjupa	10,077	23,476	42.9	16,541	26,497	62.4	26,618	49,973	53.3
Zambezi	6,851	18,396	37.2	6,722	15,545	43.2	13,573	33,941	40.0
Total	**130,017**	**387,182**	**33.6**	**153,847**	**366,628**	**42.0**	**283,864**	**753,810**	**37.7**

Table 7: Youth labour force participation rate by region and sex (2013)

		Female			Male			Total	
Region	Employed	Labour force	LFPR %	Employed	Labour force	LFPR %	Employed	Labour force	LFPR %
//Karas	7,301	17,012	42.9	8,278	14,443	57.3	15,579	31,455	49.5
Erongo	14,338	31,460	45.6	18,770	31,883	58.9	33,108	63,343	52.3
Hardap	4,378	12,815	34.2	6,582	12,826	51.3	10,960	25,641	42.7
Kavango	13,208	43,955	30.0	9,38	34,650	26.9	22,516	78,605	28.6
Khomas	33,468	82,272	40.7	39,648	79,366	50.0	73,116	161,638	45.2
Kunene	5,348	15,546	34.4	6,882	12,878	53.4	12,230	28,424	43.0
Ohangwena	11,200	41,699	26.9	5,819	35,683	16.3	17,019	77,382	22.0
Omaheke	5,353	11,066	48.4	7,733	11,184	69.1	13,086	22,250	58.8
Omusati	10,576	39,113	27.0	4,769	30,706	15.5	15,345	69,819	22.0
Oshana	12,603	36,904	34.2	10,250	28,671	35.8	22,853	65,575	34.9
Oshikoto	9,348	28,872	32.4	11,807	30,001	39.4	21,155	58,873	35.9
Otjozondjupa	8,633	24,802	34.8	15,545	25,817	60.2	24,178	50,619	47.8
Zambezi	6,318	17,159	36.8	6,741	16,431	41.0	13,059	33,590	38.9
Total	**142,072**	**402,675**	**35.3**	**152,132**	**364,539**	**41.7**	**294,204**	**767,214**	**38.3**

Figure 2 shows youth LFPR by age-groups and sex for 2012 and 2013 for urban areas. All three line graphs shows an increasing trend for males and females for all age groups. However male youth LFPR is generally higher than that of female in urban areas. There is a wide gap between male youth LFPR for 2013 as compared to female youth LFPR for 2012 and 2013.

Figure 2: Labour force participation rate by age groups, sex and year

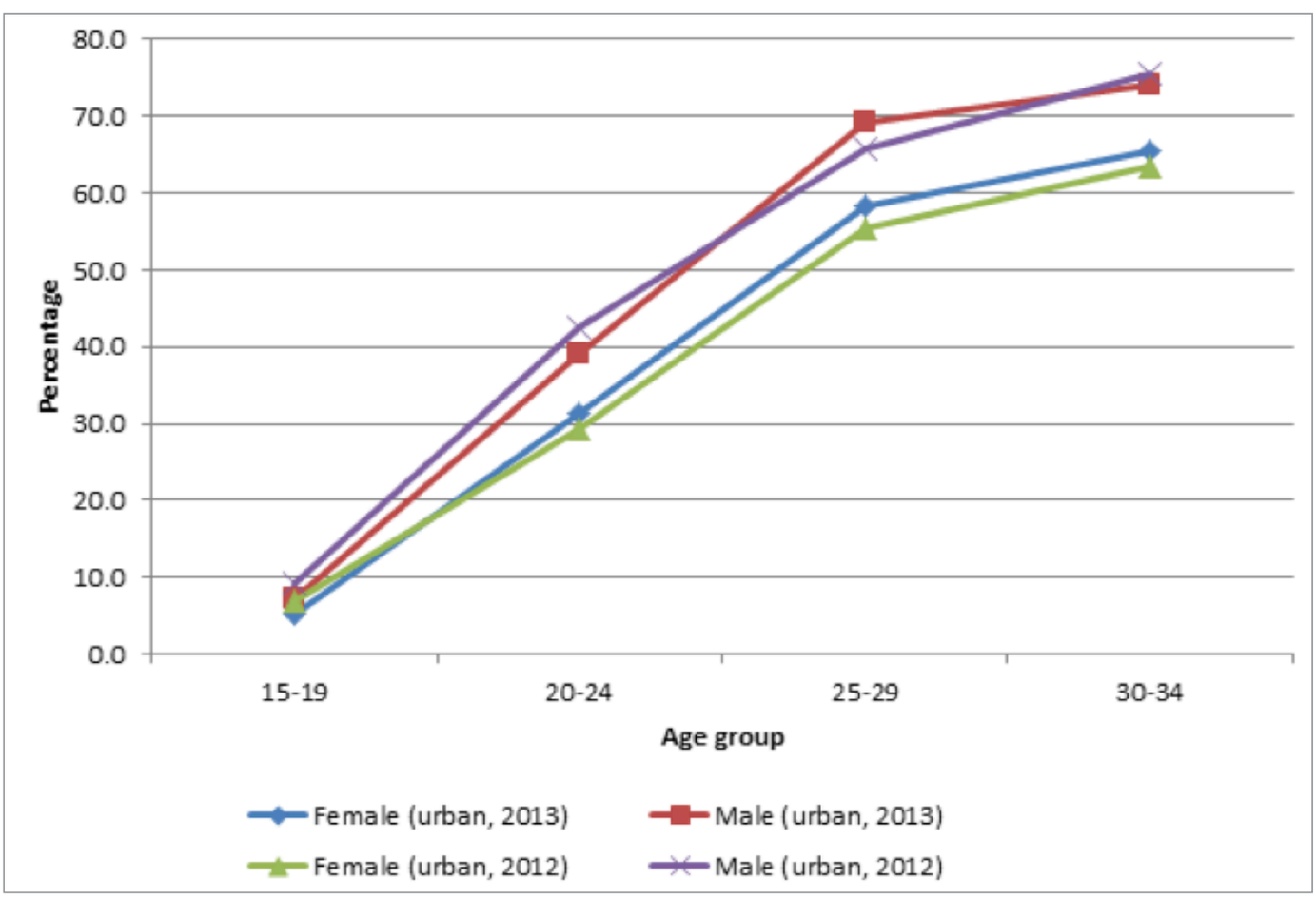
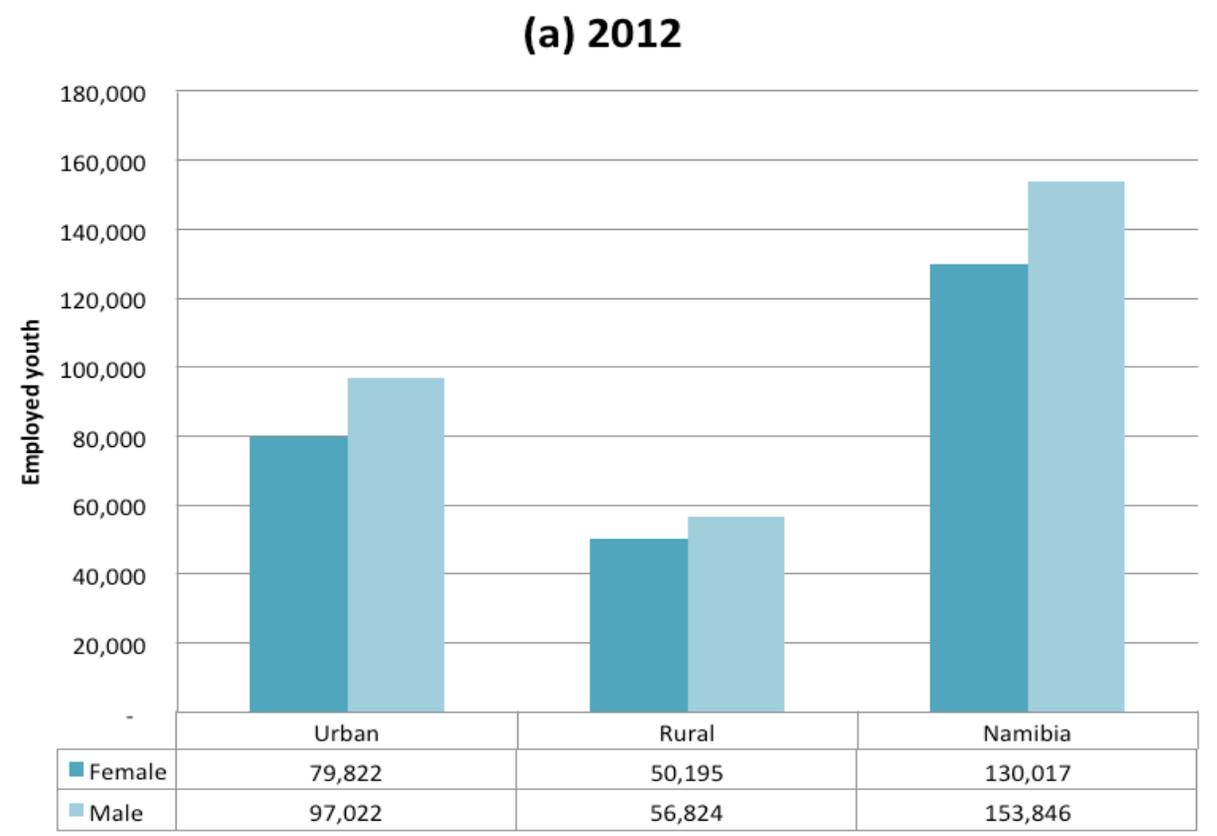
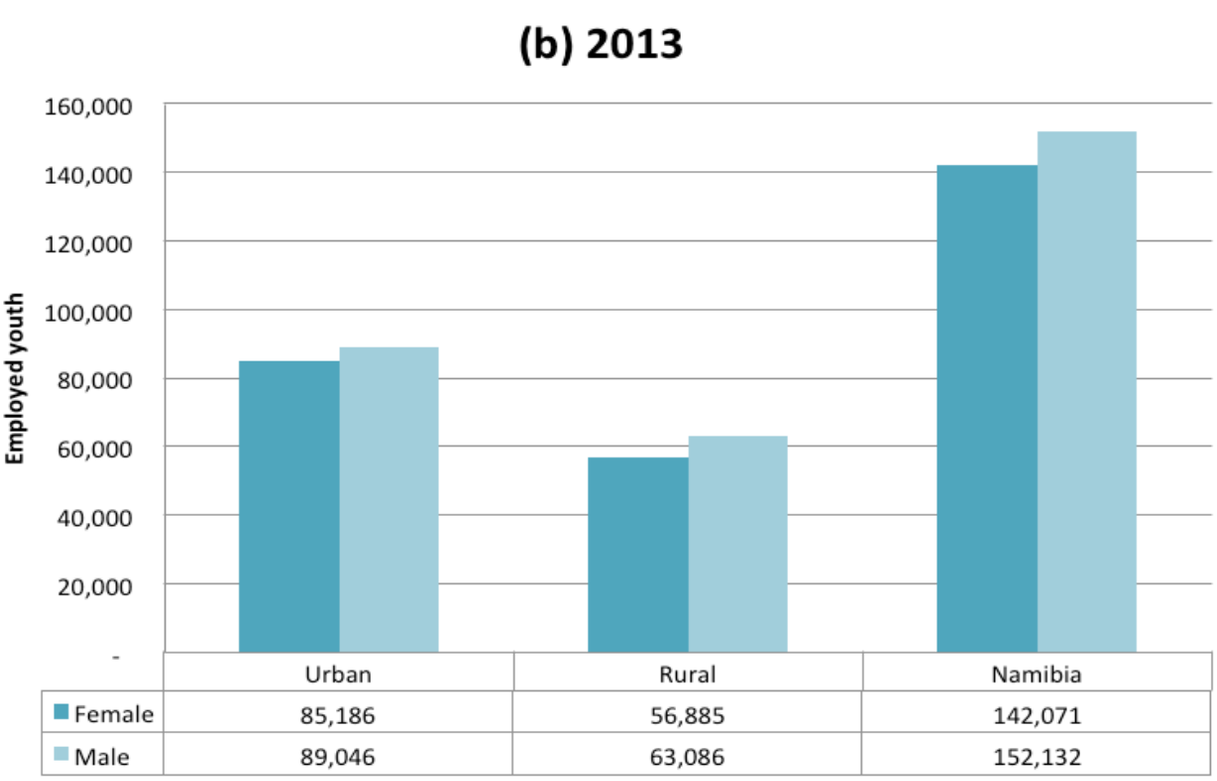


Figure 3 (a) and (b) shows the number of employed youth by year, area and sex. The number of employed youth was high for male in both urban and rural areas. However the number of employed male youth in urban areas declined from 97,022 in 2012 to 89,046 in 2013. The overall increase in the employed youth in 2013 was due to the increase in the number of employed female youth.

Figure 3: Youth employment (number), by area and year



	Urban	Rural	Namibia
Female	79,822	50,195	130,017
Male	97,022	56,824	153,846



	Urban	Rural	Namibia
Female	85,186	56,885	142,071
Male	89,046	63,086	152,132

Table 8 provides information on the educational level of the employed youth population for 2012 and 2013. Surprisingly of those employed youth in 2012 and 2013, 7% and 7.3% of them received no education and this figure increased between the periods under study, an issue of much concern. The majority of the employed youth for both 2012 and 2013 only had junior secondary school certificates (38.9% and 39.3%) respectively. More than a quarter of the employed youth completed senior secondary in both years, whereas 6% and 8% had university level.

Table 8: Youth Employed by level of education, and year (2012, 2013)

	2012		2013	
Highest education completed	Number	Percentage	Number	Percentage
None	19592	7.0	21572	7.3
Primary	45461	16.2	50408	17.1
Junior secondary	109288	38.9	115645	39.3
Senior secondary	80983	28.8	75231	25.6
After Std 10	2191	0.8	3969	1.3
University	15479	5.5	22205	7.5
Postgrad	2162	0.8	1698	0.6
Teacher training	4409	1.6	2254	0.8
Don't know	1315	0.5	1222	0.4
Total	**280,880**	**100.0**	**294204**	**100.0**

Table 9 gives information on the occupation in which the employed youth are engaged by year. In 2012 and 2013 the majority of female youth were in elementary occupations (24.9% and 26.3%) whereas male were in the crafts and trade (25% and 23.1%). However in 2013 more male youth were in elementary occupations (23.9%). The largest group of youth occupation for both 2012 and 2013 is elementary occupation with 23.8% a slight increase of 23.9%.

Table 9: Youth employed by occupation and sex (number and percentage), 2012 and 2013

	Year 2012						Year 2013					
	Female		Male		Total		Female		Male		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Armed forces	424	0.3	1139	0.7	1563	0.6	816	0.6	1849	1.2	2665	0.9
Legislators & Managers	2172	1.7	3255	2.1	5427	1.9	3032	2.1	2279	1.5	5311	1.8
Professionals	11339	8.7	8144	5.3	19483	6.9	10419	7.3	9181	6.0	19600	6.7
Technicians & Associate professionals	7251	5.6	6719	4.4	13970	4.9	7971	5.6	6877	4.5	14848	5.0
Clerks	14752	11.3	6735	4.4	21487	7.6	17377	12.2	3899	2.6	21276	7.2
Services & Sales	29504	22.7	21364	13.9	50868	17.9	34012	23.9	21270	14.0	55282	18.8
Skilled Agriculture	24326	18.7	24145	15.7	48471	17.1	23038	16.2	22977	15.1	46015	15.6
Craft & Trade	7328	5.6	38435	25.0	45763	16.1	6855	4.8	35113	23.1	41968	14.3
Machine Operators	557	0.4	8529	5.5	9086	3.2	522	0.4	11676	7.7	12198	4.1
Elementary	32363	24.9	35224	22.9	67587	23.8	37379	26.3	36328	23.9	73707	25.1
Total	**130016**	**100.0**	**153742**	**100.0**	**283758**	**100**	**142071**	**100**	**152133**	**100**	**294204**	**100**

3.1.3. Employment in Informal and Vulnerable Sectors

In many developing countries the informal sector of the economy is very dynamic and is most important as it employs a great number of people despite its low contribution to GDP. While there has been a lot of debate on the definition of the informal sector, this sector is mostly best defined based on its characteristics and composition, primarily the lack of social protection; low level of technology, high prevalence of micro enterprises, its domination by unskilled labour and its domination by women.

Table 10 shows that in 2012, 53.2% in comparison to 58.2% in 2013 of employed youth in Namibia were in the informal sector. While there were no differences in informal employment between male and female in 2012, in 2013 there were more female youth (58.9%) than male youth (57.6%) with both proportions approaching 60%. In 2013, the proportion of female youth in rural areas has grown to more than ¾ from 71.7% in 2012. Contrary to common believes, there were more youth in the rural areas in informal employment (76.2%) as compared to urban areas (45.8%) in 2013. Omusati (83.1%); Kunene (75.6%); Kavango (74.5%) and Zambezi (74.1%) were regions with the highest number of youth in informal employment for the year 2013, while the in 2012 the order was Kunene (76.7%); Oshikoto (71.6%); Ohangwena (68.6%) and Zambezi (67.3%).

Table 10: Informal employment by area, sex and year

	YEAR 2012			2013		
	Informal employment 2012			Informal employment 2013		
	Female	Male	Total	Female	Male	Total
Namibia	**69136**	**81824**	**150960**	**83611**	**87564**	**171175**
Urban	33141	41065	74206	39146	40607	79753
Rural	35995	40759	76754	44465	46957	91422
Region						
//Karas	2307	2777	5084	3000	3764	6764
Erongo	3621	9567	13188	5776	7436	13212
Hardap	1615	4477	6092	2766	4365	7131
Kavango	8093	4811	12904	10530	6241	16771
Khomas	10110	15780	25890	14038	17831	31869
Kunene	3840	5274	9114	3838	5407	9245
Ohangwena	6196	5199	11395	8770	3924	12694
Omaheke	1486	3546	5032	3000	5981	8981
Omusati	6625	4454	11079	8824	3931	12755
Oshana	7652	4874	12526	7296	6628	13924
Oshikoto	6586	6262	12848	6378	7917	14295
Otjozondjupa	5995	10676	16671	4914	8938	13852
Zambezi	5008	4125	9133	4480	5202	9682
Percentage						
Namibia	**53.2**	**53.2**	**53.2**	**58.9**	**57.6**	**58.2**
Urban	41.5	42.3	42.0	46.0	45.6	45.8
Rural	71.7	71.7	71.7	78.2	74.4	76.2
Region						
//Karas	48.1	47.6	47.8	41.1	45.5	43.4
Erongo	33.2	51.3	44.6	40.3	39.6	39.9
Hardap	35.2	51.7	46.0	63.2	66.3	65.1
Kavango	61.3	48.6	55.8	79.7	67.0	74.5
Khomas	34.1	37.8	36.2	41.9	45.0	43.6
Kunene	75.0	78.0	76.7	71.8	78.6	75.6
Ohangwena	67.7	69.7	68.6	78.3	67.4	74.6
Omaheke	53.8	66.7	62.3	56.0	77.3	68.6
Omusati	68.3	60.7	65.0	83.4	82.4	83.1
Oshana	55.0	47.6	51.9	57.9	64.7	60.9
Oshikoto	71.1	72.2	71.6	68.2	67.1	67.6
Otjozondjupa	59.5	64.5	62.6	56.9	57.5	57.3
Zambezi	73.1	61.4	67.3	70.9	77.2	74.1

Table 11 presents information on the industry in the informal sector in the informal in which the youth are engaged in by year. In 2012 and 2013 most youth (85.8% and 84.4%) were in agriculture, forestry and fishing sector. In 2012 Information and Communication was the lowest as only 12.6% of the youth were employed in that category, whereas in 2013 the lowest category was the electricity, gas, steam and air conditioning.

Table 11: Informal sector employment by Industry by year

Industry	Year=2012				Year=2013		
	Informal employed	Total	%		Informal employed	Total	%
Agriculture, forestry and fishing	51639	60177	85.8		54567	64621	84.4
Mining and quarrying	2303	6000	38.4		1310	6683	19.6
Manufacturing	6823	14049	48.6		7087	15760	45.0
Electricity, gas, steam and air conditioning supply	651	1369	47.6		125	860	14.5
Water supply; sewerage, waste management and remediation activities'	583	990	58.9		877	1123	78.1
Construction	9905	23853	41.5		17572	26904	65.3
Wholesale and retail trade; repair of motor vehicles and motorcycles	20332	41471	49.0		23679	40527	58.4
Transportation and storage	3483	9344	37.3		5535	10589	52.3
Accommodation and food service activities	13756	22897	60.1		11965	19599	61.0
Information and communication	430	3414	12.6		430	2583	16.6
Financial and insurance activities	970	6599	14.7		1392	9364	14.9
Real estate activities	56	350	16.0		66	123	53.7
Professional, scientific and technical activities	547	3449	15.9		533	3499	15.2
Administrative and support service activities	7079	15494	45.7		7452	20093	37.1
Public administration and defence; compulsory social security	3523	13484	26.1		1774	11846	15.0
Education	1966	13838	14.2		2288	14556	15.7
Human health and social work activities	1264	7474	16.9		1169	5377	21.7
Arts, entertainment and recreation	519	1583	32.8		1433	2087	68.7
Other service activities	2649	5527	47.9		5962	8592	69.4
Private households	22281	32143	69.3		24515	26674	91.9
Extraterritorial organizations and bodies	99	198	50.0		141	267	52.8
Total	**150858**	**283703**	**53.2**		**169872**	**291727**	**58.2**

Table 12 and 13 provide information on the proportion of those youth in relatively precarious working situations, vulnerable employment as referred to is measured as the sum of own account workers and those contributing as family workers as a proportion of total employment. In 2012, 68,386 youth were in vulnerable employment. In 2013 this figure more than tripled to reach 228,392. Most of the vulnerable workers are female (42.8%). In 2012 most female youth (42.6%) were in the category other own account whereas in 2013 these vulnerable youth were in the subsistence with no employees category (54.4%). The majority of the vulnerable employed youth in 2013 was in the rural areas (79.3%) and mainly found in Omusati region (20.9%).

Table 12: Youth in vulnerable employment by sex by year

		Year 2012			Year 2013	
Vulnerable employment	Female	Male	Total	Female	Male	Total
Subsistence No Employees	13890	8236	22126	81714	42473	124187
Other Own Account	16995	12149	29144	46159	24843	71002
Unpaid Family Subsist	4872	6055	10927	14874	10516	25390
Unpaid Family Other	3967	2222	6189	4476	3337	7813
Total	**39724**	**28662**	**68386**	**147223**	**81169**	**228392**
Percentage						
Vulnerable employment	Female	Male	Total	Female	Male	Total
Subsistence No Employees	35.0	28.7	32.4	55.5	52.3	54.4
Other Own Account	42.8	42.4	42.6	31.4	30.6	31.1
Unpaid Family Subsist	12.3	21.1	16.0	10.1	13.0	11.1
Unpaid Family Other	10.0	7.8	9.1	3.0	4.1	3.4
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100**

Table 13: Youth in vulnerable employment by area by year

	Year =2012		Year =2013	
Area	Vulnerable employment	%	Vulnerable employment	%
Namibia	**68386**	**100.0**	**228390**	**100.0**
Urban	22916	33.5	47176	20.7
Rural	45469	66.5	181215	79.3
//Karas	377	0.6	2435	1.1
Erongo	2391	3.5	6653	2.9
Hardap	1148	1.7	2523	1.1
Kavango	11288	16.5	35254	15.4
Khomas	6679	9.8	16465	7.2
Kunene	4218	6.2	8752	3.8
Ohangwena	7292	10.7	39277	17.2
Omaheke	1375	2.0	6392	2.8
Omusati	6418	9.4	47668	20.9
Oshana	7042	10.3	22047	9.7
Oshikoto	7591	11.1	21010	9.2
Otjozondjupa	5562	8.1	8039	3.5
Zambezi	7005	10.2	11875	5.2

3.2. Youth Employment Characteristics and Barriers

Studies of labour force have identified main correlates of employment, hence barriers to employment in the general population and marginalized groups, particularly the youth. Studies that focus on the youth show that personal characteristics and location play an important aspect to being in employed. Personal characteristics include education attainment and marital status, and job location attributes include industry and occupation.

Adequate education has consistently been found to be one of the most important factors. Those who have high school graduates have higher employment rates than those who dropped out of school, nevertheless education alone does not protect female youth from employment hardships to the same extent as male youth and vice versa. In light of these recent studies, we expect to find different levels of association between labour market outcomes and sex among the youth.

Earnings attainment is the widely studied labour market outcome that takes into account gender-disparities. Studies have shown that disparities may also exist with regards to length of the job spell. In addition to education and gender, marital status in another personal characteristic associated with labour market outcomes. For instance, labour behavior of married women is often constrained by family responsibilities, e.g. caring for children. In such cases women are likely to stay at home, thus keeping the levels of employment low. Furthermore labour market experience plays an important part in securing jobs, more generally, those who have accumulated labour market have an improved employment position.

3.2.1. Job characteristics among employed youth

Table 14 examines job characteristics by education of youth in 2013. Male youth with high school education or more earned the highest wages as compared to female.

The Labour Act of 2007, Public Service Act of 1995, Affirmative Action Act of 1995, Social Security Act of 1994, Marriage Persons Equality Act of 1996 and the National Gender Policy are some of the mechanisms instituted by government to promote equitable employment. While many of the above instruments are partly aimed to redress inequalities in employment and especially gender balance in decision making, foster fairness in recruitment, selection, appointment, training, promotion and equitable remuneration. The Social Security Act provides some safeguards against loss of income, due to sickness, pregnancy, injury and old age. Female youth with high school education or more are likely to have social security. It is worth mentioning that contributions by employers and employees to the Social Security are much low compared to health insurance and pensions. Similarly female are more likely to participate due to maternity benefits, however this has its own limitations as women with good jobs tend to lose out.

There are few differences in the youth's industry and occupation category. Male youth with high school education or less are likely to be employed as skilled manual. As shown elsewhere, the informal industry is dominated by low educated participants with females being the majority (89%). Youth with high school education or more are more likely to be on permanent contracts.

Table 14: Characteristics of Job by Education level by Sex, 2013

	Female		Male	
	Education level		Education level	
Job characteristics	<High school	High school or more	<High school	High school or more
Average salary	970.85	5,542.29	1,421.41	6,871.00
Median salary	600.00	2,000.00	900.00	2,500.00
Provided health insurance	2.9	27.4	4.8	29.5
Provided pension	3.5	28.6	5.5	29.6
Social security	18.7	60.1	22.7	58.6
Occupation				
Elementary	39.1	23.4	42.0	16.5
Skilled manual	43.9	16.2	49.2	44.4
Low skilled non-manual	15.7	41.2	7.7	20.5
High skilled non-manual	1.3	19.2	1.1	18.6
Industry				
Formal	10.8	48.2	19.2	52.5
Informal	89.2	51.8	80.7	47.5
Contract				
Limited duration	11.3	13.6	13.3	15.2
Permanent	28.0	56.9	32.2	56.4
Unspecified	60.8	29.4	54.5	28.3

Table 15: Characteristics of Job by Marital status by Sex, 2013

	Female		Male	
	Marital status		Marital status	
Job characteristics	Married	Others	Married	Others
Average salary	7,683.28	4,492.65	9,052.05	4,802.72
Median salary	3,500.00	1,500.00	3,000.00	1,800.00
Provided health insurance	34.9	20.8	36.1	22.3
Provided pension	40.0	20.5	41.0	22.6
Social security	59.5	46.6	74.6	51.3
Occupation				
Elementary	28.5	17.8	25.0	16.7
Skilled manual	17.9	3.6	46.5	43.2
Low skilled non-manual	39.4	23.8	16.6	16.6
High skilled non-manual	14.2	22.4	11.9	23.4
Industry				
Formal	56.8	51.8	64.9	62.4
Informal	43.2	49.0	35.1	37.6
Contract				
Limited duration	13.3	13.5	15.1	10.2
Permanent	51.3	64.8	47.7	62.9
Unspecified	35.4	21.6	37.2	26.9

3.2.2. **3.2.2 Determinants of Youth Employment**

Employment opportunities that the youth have can stem from a variety of factors. Tables 16 and 17 present multivariate logistic models for youth employment. Table 16 focuses on 2013 LFS data, where the outcome is the probability of being in employment. Results show that, among females, the probability of employment was 1.57 times higher for the youth who obtained high school education compared to those who did not. However, surprisingly, the opposite is true among males, in which the likelihood of employment was lower for high school graduates compared to those who dropped-out. Having social responsibility, such as marriage, promoted employment for both females and males in 2013. Particularly in males, the odds were much higher for married males to be in employment as opposed to being not married (OR=2.77, 95% CI: 2.68-2.86). As for females, the odds were slightly lower compared to males, although still high for married compared to the unmarried females (OR=1.61, 95% CI: 1.58-1.65).

With regards to age, as expected, the chance of employment increased by age for both females and males. Similarly, the probability of employment was 1.29 times higher for females and 1.38 times higher among males in urban areas relative to their counterparts in rural areas. Table 16 also reveals that region differences were evident. For females, the odds of employment were high in Zambezi, Erongo, //Karas, Khomas, and Omaheke compared to females interviewed in Otjozondjupa. On the other hand, employment for males was high only in Omaheke compared to Otjozondupa, while it remained lower in all regions.

Table 16: Determinants of youth employment: Logistic regression on 2013 data

Variable		Female				Male	
	OR	95% CI			OR	95% CI	
Education							
High school or higher	1.57	1.54	1.59		0.87	0.86	0.89
Less than high school	1.00				1.00		
Marital status							
Married	1.61	1.58	1.65		2.77	2.68	2.86
Not married	1.00				1.00		
Age							
<20 yrs	1.00						
20-29 yrs	11.44	11.11	11.77		11.44	11.16	11.73
30-34 yrs	25.87	25.08	26.70		26.16	25.42	26.92
Residence							
Urban	1.29	1.27	1.31		1.38	1.36	1.41
Rural	1.00				1.00		
Region							
Zambezi	1.09	1.05	1.14		0.46	0.44	0.48
Erongo	1.57	1.52	1.62		0.95	0.92	0.98
Hardap	0.97	0.93	1.02		0.70	0.67	0.73
//Karas	1.41	1.35	1.47		0.89	0.85	0.93
Kavango	0.81	0.78	0.83		0.24	0.23	0.25
Khomas	1.28	1.25	1.32		0.66	0.64	0.68
Kunene	0.98	0.94	1.02		0.76	0.73	0.79
Ohangwena	0.69	0.67	0.71		0.13	0.12	0.13
Omaheke	1.76	1.68	1.84		1.48	1.41	1.55
Omusati	0.69	0.67	0.72		0.12	0.12	0.13
Oshana	0.97	0.94	1.01		0.37	0.36	0.38
Oshikoto	0.90	0.87	0.93		0.43	0.41	0.44
Otjozondjupa	1.00				1.00		

Table 17: Determinants of youth employment: Logistic regression on 2012 data

Variable	Female			Male		
	OR	95% CI		OR	95% CI	
Education						
High school or higher	0.92	0.91	0.94	0.73	0.72	0.74
Less than high school	1.00			1.00		
Marital status						
Married	1.71	1.67	1.75	4.96	4.74	5.20
Not married	1.00			1.00		
Age						
<20 yrs	1.00			1.00		
20-29 yrs	9.62	9.37	9.87	9.86	9.63	10.09
30-34 yrs	21.11	20.52	21.73	21.63	21.05	22.23
Residence						
Urban	1.23	1.20	1.25	0.89	0.87	0.91
Rural	1.00			1.00		
Region						
Zambezi	0.93	0.89	0.98	0.39	0.37	0.41
Erongo	0.96	0.93	1.00	0.93	0.89	0.97
Hardap	0.85	0.81	0.90	0.98	0.93	1.02
//Karas	0.87	0.83	0.91	0.80	0.76	0.84
Kavango	0.78	0.75	0.81	0.29	0.28	0.30
Khomas	0.65	0.63	0.67	0.50	0.48	0.51
Kunene	1.74	1.65	1.83	0.85	0.81	0.90
Ohangwena	0.59	0.57	0.62	0.22	0.21	0.22
Omaheke	0.58	0.55	0.61	0.63	0.60	0.66
Omusati	0.71	0.68	0.74	0.25	0.24	0.26
Oshana	0.98	0.95	1.02	0.34	0.33	0.36
Oshikoto	0.81	0.78	0.84	0.35	0.33	0.36
Otjozondjupa	1.00			1.00		

The findings in Table 17 show that in 2012, education was not a promoter of employment for both females and males. The odds were estimated as 0.92 (95% CI: 0.91-0.94) and OR=0.73 (95% CI: 0.72-0.74) for female and males respectively.

3.2.3. Determinants of spell of length of employment

The spell of youth employment was analysed using ordinal regression model. Table 18 shows how different variables affect the probability of being employed within a specific time period for 2013 for males and females. The odds of employment increased with time. Most visible is the significant change in the gradient as the duration of employment move from less than one year to being employed for 1 – 2 years and further being employed for 3 – 5 years and 6 – 10 years. The change is remarkably greater for females than males.

The spell of employment for youth with contracts of limited duration was much shorter, whereas those with permanent contracts as expected was much longer. Similarly, employed married youth were more likely to stay in employment much longer than those in other marital categories. The results for education are somewhat contradictory to what is generally known of the effects of education. Youth with no education were more likely to remain in employment for longer as compared to those with tertiary education.

The odds for female with no education were three times than those with higher education. A possible explanation could be that of job hopping with improvement in education. In terms of industry, the spell of employment was longer for employed youth in the informal sector. This was similar to residence, were the spell of employment was much longer if they stayed in urban areas.

Further, Table 18 shows that overall, for both males and females, earning do little to influence longer stay on the job, particularly for those earning less than N$1000 or less, or more generally below N$10,000 as opposed to those earning more than N$10,000. Nevertheless, as earnings increase the chance of staying on the job increases, towards stability.

In most regions, except for Hardap and Oshikoto, male youth were likely to stay longer in employment. Female youth in //Karas region were significantly more likely to stay longer in employment (OR=1.47; (95% CI: 1.37, 1.57). Table 18 further shows that the spell of employment varied by age. The odds were lower in lower ages as compared to those aged 30-34 years. However there were increasing changes in the gradient with improvement in age.

Table 18: Spell of employment among the youth in Namibia in 2013, and its determinants

		Male			Female	
Variable	OR	95% CI		OR	95% CI	
Threshold						
< 1yr	0.31	0.29	0.33	0.37	0.34	0.41
1-2 yrs	1.26	1.18	1.34	1.44	1.32	1.58
3-5 yrs	5.30	4.96	5.67	9.38	8.58	10.26
6-10 yrs	21.71	20.23	23.31	39.29	35.77	43.16
Type of Contract						
Limited duration	0.59	0.57	0.61	0.37	0.36	0.39
Permanent	1.72	1.67	1.76	1.86	1.80	1.92
Unspecified	1.00			1.00		
Marital Status						
Never married	0.88	0.86	0.91	0.90	0.86	0.93
Married	1.00	0.95	1.04	1.54	1.48	1.62
Others	1.00			1.00		
Education						
None	1.66	1.57	1.76	3.03	2.79	3.29
Primary	1.67	1.58	1.76	2.93	2.73	3.13
Secondary	1.36	1.30	1.42	2.52	2.41	2.64
Higher	1.00			1.00		
Occupation						
Elementary	0.71	0.68	0.74	0.90	0.86	0.94
Skilled manual	0.63	0.60	0.65	1.01	0.95	1.07
Low-skilled non-manual	0.59	0.57	0.61	0.81	0.78	0.84
High-skilled non-manual	1.00			1.00		
Earnings						
<$1000	0.35	0.33	0.37	0.19	0.18	0.20
$1000-3999	0.51	0.49	0.54	0.35	0.33	0.37
$4000-6999	0.53	0.50	0.55	0.60	0.57	0.63
$7000-9999	0.70	0.67	0.74	0.72	0.68	0.77
$10000+	1.00			1.00		
Industry						
Informal	1.93	1.88	1.98	1.93	1.87	1.99
Formal	1.00			1.00		
Residence						
Urban	1.04	1.01	1.07	0.97	0.94	1.01
Rural	1.00			1.00		
Age						
< 20 yrs	0.22	0.21	0.23	0.06	0.06	0.07
20-24 yrs	0.42	0.41	0.43	0.27	0.26	0.28
25-29 yrs	0.62	0.61	0.64	0.61	0.59	0.63
Region						
Zambezi	1.14	1.06	1.22	0.63	0.58	0.68
Erongo	1.13	1.08	1.18	0.67	0.63	0.71
Hardap	0.88	0.83	0.94	0.61	0.56	0.66
//Karas	2.26	2.15	2.39	1.47	1.37	1.57
Kavango	1.25	1.18	1.34	0.84	0.78	0.90
Khomas	1.14	1.09	1.19	0.62	0.59	0.65
Kunene	1.18	1.11	1.26	0.88	0.81	0.95
Ohangwena	1.26	1.18	1.35	0.84	0.78	0.90
Omaheke	1.54	1.45	1.63	0.67	0.62	0.72
Omusati	1.62	1.49	1.75	0.76	0.70	0.81
Oshana	1.29	1.23	1.37	0.68	0.64	0.73
Oshikoto	0.68	0.65	0.72	0.68	0.64	0.74
Otjozondjupa	1.00			1.00		

3.3. Inactive youth

The inactive youth population defined as those not economically active due to schooling or inability to take up jobs due to health, physical or mental challenges, etc. As observed from Table 19 and 20, the female youth account for thve majority of the inactive population, i.e. 40.4% in 2012. In 2013 the situation changed where the majority of the inactive youth population was now males, 34.8%.

Inactive youth population varies by urban and rural areas for both 2012 and 2013. In 2012 female inactive youth was higher in urban areas whereas in rural areas the proportion of male inactive youth was higher. The regions with high female inactive youth were Kavango; Ohangwena; Omaheke; Omusati; Oshana; Oshikoto and Otjozondjupa. As compared to 2013, female inactive youth population was higher than male in urban areas, a pattern also observed in 2012. However for rural areas it was the male inactive youth that had a higher proportion than females, 41.0%. In 2013 regions such as Kavango; Ohangwena; Omusati; Oshana; Oshikoto and Zambezi female inactive youth was lower than males.

Table 19: Inactive Youth population by region, sex and area, 2012

	Female		Male		Total	
Area/Region	Number	%	Number	%	Number	%
Namibia	**156259**	**40.4**	**141463**	**38.6**	**297722**	**39.5**
Urban	77471	35.7	67257	32.4	144728	34.1
Rural	78787	46.4	74208	46.6	152995	46.5
//Karas	4072	33.9	3166	29.7	7238	31.9
Erongo	7039	26.8	5804	19.2	12843	22.8
Hardap	4115	32.2	3519	23.1	7634	27.3
Kavango	19426	45.5	16791	50.7	36217	47.8
Khomas	37533	42.1	31744	34.2	69277	38.1
Kunene	2301	22.5	2130	19.2	4431	20.8
Ohangwena	23079	59.0	20192	62.0	43271	60.4
Omaheke	2747	29.5	3167	29.7	5914	29.6
Omusati	17236	48.2	16606	55.1	33842	51.4
Oshana	15164	39.7	13103	43.3	28267	41.3
Oshikoto	12279	41.2	14031	50.0	26310	45.5
Otjozondjupa	5413	23.1	5499	20.8	10912	21.8
Zambezi	5855	31.8	5711	36.7	11566	34.1

Table 20: Inactive Youth Population by Region, Sex and Area, 2013

	Female		Male		Total	
Area/Region	Number	%	Number	%	Number	%
Namibia	**136085**	**33.80**	**126852**	**34.8**	**262937**	**34.3**
Urban	61387	29.0	53423	28.8	114810	28.9
Rural	74698	39.0	73427	41.0	148125	40.0
//Karas	5558	32.7	3652	25.3	9210	29.3
Erongo	7587	24.1	7163	22.5	14750	23.3
Hardap	3747	29.2	2640	20.6	6387	24.9
Kavango	16049	36.5	14378	41.5	30427	38.7
Khomas	24406	29.7	21710	27.4	46116	28.5
Kunene	2894	18.6	2361	18.3	5255	18.5
Ohangwena	19270	46.2	20460	57.3	39730	51.3
Omaheke	2114	19.1	1816	16.2	3930	17.7
Omusati	17200	44.0	16880	55.0	34080	48.8
Oshana	11858	32.1	10118	35.3	21976	33.5
Oshikoto	11754	40.7	12665	42.2	24419	41.5
Otjozondjupa	7900	31.9	6177	23.9	14077	27.8
Zambezi	5748	33.5	6832	41.6	12580	37.5

Table 21 and 22 present the inactive youth population by sex and area for 2012 and 2013. The results show that those in the age group 15–19 are the most inactive for both years, 69.7% and 71.0% respectively. The percent of inactive youth is high in urban areas for both years for the age group 20 – 24 as compared to rural areas. While there is no clear distinction in terms of the percentage of inactive population between male and female in urban areas for both years, in the rural areas there is a high percentage of inactive male youth population.

Table 21: Inactive youth population (and percentage) by age-group, sex and area, 2012

			Urban					Rural				
Age group	Female	%	Male	%	Total	%	Female	%	Male	%	Total	%
15-19	44293	57.2	42489	63.2	86782	60.0	52906	67.2	53694	72.4	106600	69.7
20-24	22919	29.6	16649	24.8	39568	27.3	13549	17.2	12986	17.5	26535	17.3
25-29	6012	7.8	5185	7.7	11197	7.7	6675	8.5	4585	6.2	11260	7.4
30-34	4247	5.5	2934	4.4	7181	5.0	5657	7.2	2943	4.0	8600	5.6
Total	**77471**	**100.0**	**67257**	**100.0**	**144728**	**100.0**	**78787**	**100.0**	**74208**	**100.0**	**152995**	**100.0**

Table 22: Inactive youth population (and percentage) by age-group, sex and area, 2013

			Urban					Rural				
Age group	Female	%	Male	%	Total	%	Female	%	Male	%	Total	%
15-19	35158	57.3	30546	57.2	65704	57.2	51577	69.0	53662	73.1	105239	71.0
20-24	17224	28.1	17460	32.7	34684	30.2	14713	19.7	13897	18.9	28610	19.3
25-29	5541	9.0	3595	6.7	9136	8.0	4835	6.5	3714	5.1	8549	5.8
30-34	3464	5.6	1822	3.4	5286	4.6	3573	4.8	2154	2.9	5727	3.9
Total	**61387**	**100.0**	**53423**	**100.0**	**114810**	**100.0**	**74698**	**100.0**	**73427**	**100.0**	**148125**	**100.0**

Table 23 and 24 presents the reasons for inactivity among youth in 2012 and 2013. As noted in the previous Tables 21 and 22, that the majority of the inactive population were those in the age-group 15 – 19, this correlates with the reason that more than three-quarter of the inactive youth are students. The percentage of students is high for males in both urban and rural areas for both 2012 and 2013, but nearing 90% in 2013. The next category of the inactive youth is home maker, which is 12.5% and 9.6% in 2012 and 2013 respectively. About 4% and 6% of the youth were inactive due to illness or disability 1n 2012 and 2013 respectively.

Table 23: Inactive youth population by sex, area and reason for inactivity, 2012

			Numbers			
		Urban			Rural	
Reason for inactive	Female	Male	Total	Female	Male	Total
Ill/Disabled	2111	2407	4518	3053	3265	6318
Homemaker	14274	5054	19328	12707	5744	18451
Student	65708	60290	125998	57359	59855	117214
Others	3554	3350	6904	3948	1939	5887
Total	**85647**	**71101**	**156748**	**77067**	**70803**	**147870**
Reason for inactive			**Percentage**			
Ill/Disabled	2.5	3.4	2.9	4.0	4.6	4.3
Homemaker	16.7	7.1	12.3	16.5	8.1	12.5
Student	76.7	84.8	80.4	74.4	84.5	79.3
Others	4.1	4.7	4.4	5.1	2.7	4.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Table 24: Inactive youth population by sex, area and reason for inactivity, 2013

			Numbers			
		Urban			Rural	
Reason for inactive	Female	Male	Total	Female	Male	Total
Ill/Disabled	2827	2390	5217	3904	4170	8074
Homemaker	7511	2854	10365	10017	3881	13898
Student	47853	45812	93665	57739	63377	121116
Others	1809	1008	2817	1216	539	1755
Total	**60000**	**52064**	**112064**	**72876**	**71967**	**144843**
Reason for inactive			**Percentage**			
Ill/Disabled	4.7	4.6	4.7	5.4	5.8	5.6
Homemaker	12.5	5.5	9.2	13.7	5.4	9.6
Student	79.8	88.0	83.6	79.2	88.1	83.6
Others	3.0	1.9	2.5	1.7	0.7	1.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

4.1. Introduction

Young people entering the labour market are generally considered a population at risk, with high turnover rate between jobs and increased risk of entry unemployment. In Namibia, there is stubborn and frustratingly persistent youth unemployment of about 40% (41.7% in 2013 and 39.2% in 2014). The prevailing youth-adult unemployment/ employment gap has not been investigated. In some areas, this has been attributed to low search skills and low experience (ILO, 2015). Surprisingly little is known on the youth, its gender and geographical disparities remain to be explored. This chapter examines determinants and disparities in youth unemployment in Namibia for the years 2012 and 2013, and for female and male separately.

4.2. Unemployment indicators

We used seven indicators for unemployment as response variables. First, the ***unemployment occurrence***, which is measured as a three categorical variable which takes the value of 1 if employed, 2 if unemployed (using the broad definition), and 3 if inactive. Second, ***unemployment duration*** which is a six-level ordinal outcome that captures the length of unemployment spell: <1 month, 1-3 months, 3-6 months, 6-12 months, 12-24 months, and 24 months or more. Third, related to the unemployment duration, is ***long-term unemployment***, which is described as unemployment spell of more than 6 months (coded as 1 and 0 otherwise). Fourth, ***re- unemployment (first or repeat)***, which takes the value of 1 if a worker was unemployed and has been unemployed in the last 12 months (first) or employed in the last 12 months (repeat), and 0 otherwise. The first unemployment applies mainly for those in transition between school and work.

To capture the combined effects of these unemployment indicators, we constructed an ***unemployment index***, as a fifth indicator. To do so we first standardized the individual unemployment indicators to have a mean of zero and variance of 1. We then used principal component analysis to generate a factor score, which was then categorized into two groups. The index indicates the extent, to which a worker is unemployed, and a value of 1 can be interpreted as severe or frequent spells of unemployment, while a value of 0 suggest shorter spells or first spell of unemployment. Long-term unemployment and repeat unemployment are describe to have a scarring effect on the worker and may discourage the worker from actively searching for work.

Next, as a sixth indicator, we consider ***time-related under-employment*** is measured as the number of actual hours of work. In the Namibia context, this is defined as 1 if actual hours worked is less than 35, or zero otherwise. Lastly, we evaluate factors and disparities associated with being ***NEET*** (as a seventh) response variable that capture youth unemployment.

4.3. Unemployment Occurrence

In this section we investigate factors associated with unemployment occurrence, focusing on broad unemployment and not economically active youth compared to those employed (as a reference group). A multinomial regression is applied to capture these outcomes. Table 25 presents results on factors associated with being unemployed or inactive. For females, those residing in urban as opposed to being in rural areas were less likely to be unemployed or inactive compared to being employed. On the other hand, for males, they were at risk of being unemployed or inactive. The results also show regional disparities in the risk of being unemployed or inactive. The risk of being unemployed or inactive was high, regardless of gender, in Zambezi, Hardap, Ohangwena, Omaheke, Omusati and Oshikoto regions.

Table 25: Regression estimates for unemployed and not economically active among male and female in 2012.

			Female							Male			
	Unemployed			Not Economically Active				Unemployed			Not Economically Active		
Variable	RRR	95% CI		RRR	95% CI			RRR	95% CI		RRR	95% CI	
Place of residence													
Urban	0.99	0.97	1.02	0.77	0.75	0.79		1.36	1.33	1.40	1.06	1.03	1.09
Rural	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Region													
Zambezi	1.17	1.12	1.23	1.31	1.23	1.39		2.05	1.93	2.17	2.97	2.79	3.17
Erongo	1.11	1.06	1.16	1.50	1.41	1.58		1.00	0.95	1.05	0.94	0.89	1.00
Hardap	1.22	1.16	1.29	1.71	1.60	1.83		1.09	1.03	1.15	0.81	0.76	0.87
Karas	0.99	0.93	1.04	2.55	2.39	2.73		1.04	0.97	1.11	1.50	1.40	1.61
Kavango	0.98	0.94	1.03	2.47	2.35	2.60		2.74	2.61	2.88	4.95	4.69	5.23
Khomas	1.21	1.17	1.25	4.01	3.82	4.20		1.51	1.45	1.57	2.64	2.52	2.77
Kunene	0.62	0.59	0.66	0.49	0.45	0.53		1.20	1.13	1.28	1.01	0.93	1.09
Ohangwena	1.06	1.01	1.11	4.28	4.06	4.51		2.49	2.36	2.62	7.76	7.34	8.20
Omaheke	1.87	1.76	1.99	1.93	1.79	2.09		1.38	1.30	1.47	1.54	1.43	1.65
Omusati	1.26	1.20	1.32	2.77	2.62	2.92		3.01	2.86	3.17	4.91	4.64	5.20
Oshana	0.91	0.87	0.95	1.91	1.82	2.01		2.57	2.45	2.69	3.49	3.30	3.68
Oshikoto	1.21	1.16	1.27	2.03	1.92	2.14		2.12	2.01	2.23	3.28	3.10	3.46
Otjozondjupa	1.00	.	.	.	.	.		1.00	.	.	1.00	.	.
Age group (years)													
15-19	4.04	3.90	4.18	51.04	49.29	52.86		2.14	2.06	2.22	52.02	50.13	53.98
20-24	2.85	2.78	2.92	4.82	4.69	4.96		1.95	1.90	2.00	4.02	3.89	4.15
25-29	1.43	1.40	1.47	1.16	1.12	1.19		1.31	1.28	1.35	1.26	1.21	1.30
30-34	1.00	.	.	.	.	.		1.00	.	.	1.00	.	.
Education level													
None	12.44	11.45	13.51	2.92	2.74	3.11		3.28	3.03	3.54	0.55	0.51	0.59
Primary	12.25	11.36	13.22	2.48	2.36	2.60		5.70	5.31	6.12	1.21	1.14	1.28
Secondary	9.66	8.99	10.39	1.60	1.53	1.67		4.52	4.22	4.84	1.45	1.38	1.53
Tertiary	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Marital status													
Never married	0.89	0.87	0.92	1.74	1.68	1.79		2.05	1.98	2.12	4.13	3.90	4.36
Married	0.70	0.67	0.72	0.99	0.94	1.03		0.52	0.49	0.55	0.59	0.54	0.65
Others	1.00			1.00				1.00	.	.	1.00	.	.

In other regions such as Erongo, the risk of being unemployed was high for both groups, but lower risk of inactivity was observed among males in the same region. On the other hand, for Oshana the probability of being unemployed was much lower for females and higher for males, but for inactivity, we find that the probability was higher for both sexes, when compared with individuals from Otjozondjupa region. Regions like //Karas only showed significant association with inactivity for both male and female, while in other regions such as Kunene females were at a lower risk for both unemployment and inactivity.

The risk of unemployment and inactivity was relatively high in the younger years for both females and males and reduced with increasing age. For inactivity in particular, be it female or male, the risk was at least 50 times higher in the 15-19 years age group compared to those aged 30 to 34 years. A similar pattern was observed when one compares across education level, such that the risk was more elevated for those without or with primary education compared to those with tertiary education. And this was particularly true for females as opposed to males. In fact for males, in Table 45, we observe that the chance of inactivity was lower for those with no formal education relative to those with tertiary education. With regards to marital status, findings indicate that being in married reduced the risk of unemployment or inactivity for both females and males, although this effect is marginal for females reporting inactivity. For never married women, the risk is lower for unemployment, but increased for inactivity, whereas for males, the risk of was higher for both categories of being unemployed or inactive among the never married.

Table 26 presents summaries of regression estimates for the unemployed or inactive youth in 2013 using the LFS in Namibia. With regards to place of residence, the results are similar to those in 2012 survey, in which females were at a reduced risk of unemployment or economic inactivity in urban areas compared to those females in rural areas, but were elevated for males, in urban areas than those in rural areas, for both unemployment and inactivity. These findings, however, differed by region. Females were less likely to be unemployed or inactive in Zambezi, Erongo, Karas (for unemployment only), Omaheke and Oshikoto (for unemployment only) than their counterparts in Otjozondjupa. On the other hand, males were predominantly at a higher risk of unemployment or economic inactivity in most regions. The exceptions are Hardap (for inactivity only), and Omaheke regions.

Similar to the 2012 results, young age was associated with high risk of unemployment or inactivity, and this risk reduced with increased age. For females, for instance the risk of unemployment was about 6 times, while inactivity was 97 times higher for the 15-19 years compared to those in age group 30-34 years. As for males, the risk of unemployment and inactivity was 4 times and 107 times higher in the 15-19 years group as opposed to the 30-34 years. Being less educated also increased the chance of unemployment and economic inactivity for females (with exception of those with secondary education under economic inactivity), but for males, this pattern was manifested in the unemployment group. The probability of being inactivity was much lower at all levels of education against being in the tertiary among males. Turning to marital status, the relationship between unemployment and being married was that those married were less likely to be unemployed or inactive for both females and males. Unmarried males were at an increased risk of being unemployed or inactive, nevertheless, this was reversed for the never married females, whose risk of unemployed was lower.

Table 26: Regression estimates for the unemployed or inactive youth in 2013.

				Female						Male			
		Unemployed			Not Economically Active			Unemployed			Not Economically Active		
Variable		RRR	95% CI		RRR	95% CI		RRR	95% CI		RRR	95% CI	
Place of residence													
Urban		0.83	0.81	0.85	0.78	0.76	0.80	1.10	1.08	1.13	1.32	1.28	1.36
Rural		1.00	.	.	1.00	.	.	1.00	.	.	1.00	.	.
Region													
Zambezi		0.89	0.85	0.94	0.94	0.89	1.00	1.95	1.84	2.07	4.18	3.93	4.46
Erongo		0.80	0.77	0.83	0.65	0.62	0.69	1.12	1.07	1.18	1.27	1.20	1.34
Hardap		1.21	1.14	1.27	0.96	0.90	1.03	1.98	1.87	2.10	0.92	0.86	0.99
Karas		0.65	0.61	0.68	1.11	1.04	1.17	1.10	1.03	1.16	1.42	1.33	1.51
Kavango		1.00	0.96	1.04	0.92	0.87	0.96	5.68	5.41	5.95	6.51	6.16	6.87
Khomas		1.03	0.99	1.07	1.10	1.06	1.16	1.81	1.73	1.88	1.89	1.80	1.98
Kunene		1.19	1.13	1.25	0.45	0.42	0.48	1.92	1.81	2.03	1.08	1.00	1.16
Ohangwena		0.98	0.94	1.02	1.47	1.40	1.55	5.84	5.56	6.14	11.87	11.23	12.55
Omaheke		0.72	0.68	0.76	0.43	0.40	0.46	0.77	0.72	0.82	0.72	0.66	0.77
Omusati		0.96	0.92	1.01	1.12	1.07	1.18	6.64	6.30	7.00	9.96	9.40	10.56
Oshana		1.24	1.19	1.29	1.29	1.22	1.35	2.82	2.69	2.95	3.31	3.14	3.50
Oshikoto		0.85	0.81	0.89	1.12	1.07	1.19	1.68	1.60	1.77	3.19	3.02	3.36
Otjozondjupa		1.00	.	.	1.00	.	.	1.00	.	.	1.00	.	.
Age group (years)													
15-19		5.66	5.46	5.87	96.54	92.84	100.40	3.64	3.51	3.77	107.82	103.32	112.53
20-24		3.09	3.02	3.15	6.23	6.05	6.43	2.01	1.96	2.06	7.88	7.59	8.18
25-29		1.46	1.43	1.49	1.38	1.34	1.43	1.15	1.12	1.18	1.44	1.38	1.51
30-34		1.00	.	.	1.00	.	.	1.00	.	.	1.00	.	.
Education level													
None		8.26	7.80	8.75	1.87	1.77	1.98	7.01	6.47	7.60	0.36	0.34	0.38
Primary		6.90	6.55	7.26	1.35	1.30	1.42	8.44	7.82	9.12	0.48	0.45	0.50
Secondary		4.81	4.59	5.05	0.93	0.89	0.96	8.41	7.81	9.06	0.55	0.52	0.57
Tertiary		1.00	.	.	1.00	.	.	1.00	.	.	1.00	.	.
Marital status													
Never married		0.93	0.91	0.95	1.01	0.98	1.05	2.63	2.54	2.73	3.33	3.14	3.53
Married		0.80	0.78	0.82	0.45	0.43	0.47	0.98	0.93	1.03	0.56	0.51	0.61
Others		1.00			1.00			1.00	.	.	1.00	.	.

4.4. Unemployment duration

The duration of unemployment was analysed using a sequential ordinal regression (often called proportional odds regression), as the time was measured in interval categories of 1 to 6, as explained in Section 4.2. An alternative was to use a proportion hazards regression if time was measured in actual days, weeks or month. Table 27 shows how different variables affect the probability of being unemployed within a specific time period for both 2012 and 2013, with separate models for female and male in each year.

Table 27: Unemployment duration in female and males in 2012 and 2013

	Year 2012							Year 2013					
		Female			Male				Female			Male	
Variable	OR	95%CI		OR	95% CI			OR		95%CI	OR	OR	95% CI
Threshold													
<1 month	0.009	0.007	0.011	0.013	0.011	0.016		0.027	0.024	0.030	0.071	0.060	0.083
1-3 months	0.028	0.022	0.034	0.051	0.041	0.063		0.079	0.072	0.088	0.184	0.157	0.216
4-6 months	0.040	0.033	0.050	0.091	0.073	0.113		0.135	0.122	0.149	0.302	0.258	0.354
7-12 months	0.102	0.083	0.126	0.191	0.154	0.236		0.293	0.265	0.324	0.553	0.472	0.648
1- 2 years	0.336	0.273	0.411	0.672	0.542	0.832		0.828	0.750	0.914	1.525	1.302	1.786
>2 years	1.000			1.000				1.000			1.000		
Place of residence													
Urban	1.065	1.012	1.121	0.891	0.835	0.951		0.781	0.758	0.805	0.813	0.783	0.845
Rural	1.000			1.000				1.000			1.000		
Region													
Zambezi	0.721	0.648	0.802	1.534	1.351	1.744		1.023	0.950	1.102	1.121	1.019	1.234
Erongo	0.574	0.528	0.625	0.862	0.782	0.951		0.714	0.672	0.758	0.782	0.724	0.844
Hardap	0.496	0.448	0.549	0.470	0.417	0.531		0.408	0.381	0.437	0.293	0.270	0.319
Karas	0.412	0.370	0.459	0.419	0.358	0.490		0.381	0.355	0.410	0.587	0.535	0.645
Kavango	0.760	0.694	0.833	1.624	1.454	1.813		0.930	0.878	0.984	1.194	1.110	1.283
Khomas	0.641	0.596	0.690	1.349	1.241	1.465		1.112	1.053	1.174	0.833	0.779	0.890
Kunene	0.816	0.705	0.946	0.996	0.868	1.143		1.212	1.130	1.300	2.974	2.678	3.307
Ohangwena	1.200	1.079	1.334	2.140	1.889	2.425		0.921	0.866	0.980	1.399	1.294	1.511
Omaheke	0.598	0.527	0.678	1.038	0.850	1.267		0.495	0.458	0.535	1.003	0.896	1.123
Omusati	0.925	0.828	1.034	1.353	1.185	1.543		1.306	1.225	1.394	0.827	0.766	0.893
Oshana	1.067	0.975	1.166	1.797	1.623	1.988		1.670	1.573	1.775	1.531	1.419	1.652
Oshikoto	0.398	0.361	0.440	3.740	3.225	4.341		1.168	1.091	1.251	1.271	1.168	1.384
Otjozondjupa	1.000			1.000				1.000			1.000		
Age group (years)													
15-19	0.311	0.290	0.334	0.417	0.383	0.455		0.363	0.348	0.379	0.671	0.640	0.704
20-24	0.489	0.463	0.517	0.786	0.740	0.835		0.541	0.523	0.560	0.711	0.685	0.739
25-29	0.688	0.651	0.728	0.942	0.883	1.004		0.733	0.706	0.760	0.815	0.782	0.850
30-34	1.000			1.000				1.000			1.000		
Education level													
None	1.474	1.249	1.740	1.754	1.489	2.065		4.904	4.464	5.382	1.898	1.644	2.192
Primary	0.876	0.766	1.003	1.660	1.445	1.908		2.936	2.699	3.190	1.381	1.204	1.584
Secondary	1.001	0.883	1.135	0.966	0.848	1.100		2.203	2.036	2.382	1.122	0.980	1.283
Tertiary	1.000							1.000			1.000		
Marital status													
Never married	0.745	0.708	0.783	1.137	1.054	1.224		0.953	0.919	0.988	2.455	2.309	2.612
Married	0.852	0.784	0.927	1.131	0.963	1.327		1.487	1.419	1.560	1.986	1.818	2.168
Others	1.000			1.000				1.000			1.000		

In the Table 27, the odds of unemployment increased, as expected, with duration (based on the threshold values), but overall remained below OR=1.00 in 2012, but rise above OR=1.00 in 2013 for males only. What is particularly notable is the percentage change in the thresholds as duration of unemployment moves from less than 1 month to the second level (1-3 moths) and further to the third step (4-6 months). For both female and male in 2012 and 2013, the odds changed by at least 160%, as one moves from period 1 to 2, but this was receded to below 80% for all groups as they move from period 2 to three. The likelihood of staying unemployed for all groups for a period of 1 year to 2 years increased by 230% and 250% in 2012 for female and males respectively, while in 2013, the change was estimated at 183% and 176% for females and males respectively.

Most variables affect the duration of unemployment in a similar way. Females that reside in urban areas compared to those in rural areas, for the year 2012, were more likely to stay longer. The spell of unemployment, however, was shorter for males in 2012 and for both females and males in 2012, if they stay in urban areas as opposed to rural areas. In most regions, females sampled in 2012 were more likely to have a shorter duration of unemployment of 24 months or less. The only region where they were more likely to stay longer than 24 months was in Ohangwena (OR=1.20, 95% CI: 1.08, 1.33) and Oshana (though not significant at 5%). For males in the same survey year, 2012, tends to have longer spells of unemployment in 8 regions (Zambezi, Kavango, Khomas, Ohangwena, Omaheke, Omusati, Oshana, and Oshikoto) compared to their counterparts in Otjozondjupa. Shorter spells of unemployment among males was estimated in Erongo, Hardap, Karas, and Kunene (but was not significant). In 2013, females were more likely to have shorter spells in Erongo, Hadarp, Karas, Kavango, Ohangwena and Omaheke (Table 27), but longer in other regions. For males, shorter spells were obtained in the following regions: Erongo, Hardap, Karas, Khomas and Omusati.

Table 27 further shows that the duration of unemployment also varied by age of the respondent, but the odds was lower in all age groups of less than 30 years compared to those aged 30-34 years, for both 2012 and 2013. In other words, age was not much of a risk factor to duration of unemployment. With regards to education, the risk of longer spells of unemployment was more established for those with no education or lower levels of education for both females and males. In 2013, the odds for females were much higher, with those with no education, estimated to have odds of about 5 times of staying unemployed longer than those with tertiary education, while men in the same year and category were about 2 times more likely to have longer spells of unemployment. Being married or never married compared to other forms of marital status produced varied results. For females in 2012, for instance, they were associated with shorter spells of unemployment for both never married and married, but for males, the probability was higher for both groups but slightly higher for the never married. For 2013, the pattern is the same for males. However among females, the never married showed a strong likelihood of being unemployed for a shorter period, on the other hand the married were more likely to stay longer. A possible explanation among females is that the married might be supported by their spouses.

4.5. **Long-term unemployment among youth**

Long-term unemployment may bring discouragement to the job-seekers. Long term unemployment refers to being without a job for 6 months or more. Table 28 examines variables that jointly affect long-term unemployment. Regressions are estimated separately for female and male, for each year and odds ratios are presented. In 2012, the probability of long term unemployment was high in urban areas (though not significant), but was lower in 2013 for both female and male. Results also indicate that females were more likely to stay unemployed for more than 6 months in all regions except in Khomas (OR=0.75, 95% CI: 0.67-0.84). When compared to results in Table 28, one can interpret these finding to mean that females are staying unemployed for periods of more than 6 months but less than 24 months.

Considering the thresholds in Table 27, it can be argued further that the chance of being employed increases within the first 1 year of being unemployed. Turning to males in the same year, the likelihood of longer unemployment was much lower in most regions, except for those in Erongo (OR=1.21), Ohangwena (OR=1.53), Omusati (OR=2.29), Oshana (OR=1.78), and Oshikoto (OR=1.80). For the year 2013, the pattern is reversed. The odds of longer unemployment is reduced for females in all regions except in Khomas (though not statistically significant), Kunene and Oshana. For males, most regions were associated with increased odds of long-term unemployment, with exception of Karas and Omaheke.

Long-term unemployment increased with age in a non-linear way, with females in 2012 across all age groups at lower probability of long-term unemployment. Education level was strongly associated with long-term unemployment, with the odds of long-term unemployment, diminishing as education level increases, regardless of sex in 2012. This result is not surprising since high education may lead to more opportunities. In 2013, on the other hand, across all education levels and for both female and male, the chance of long term-unemployment was quite high relative to those obtained in 2012. For females, for instance this was 7 times higher for those without any formal education compared to those with tertiary education and 11 times higher for men without formal education as opposed to those with tertiary education. In general the pattern remains as in 2012, in that the odds of long-term unemployment diminished with increase education levels. With regards to marital status, the results confirm what was obtained in Table 27, married men more were more likely to stay longer than 6 months in unemployment.

Table 28: Probability of being in long-term unemployment among youth for 2012 and 2013, and between female and male

	Year 2012							Year 2013					
	Female			Male				Female			Male		
Variable	OR	95%CI		OR	95% CI			OR	95%CI		OR	95% CI	
Place of residence													
Urban	1.05	0.96	1.15	1.07	0.97	1.19		0.84	0.82	0.85	0.96	0.94	0.98
Rural	1.00			1.00				1.00	.	.	1.00	.	.
Region													
Zambezi	2.64	2.12	3.29	0.64	0.51	0.80		0.84	0.80	0.88	1.26	1.19	1.34
Erongo	2.23	1.91	2.62	1.21	1.01	1.44		0.88	0.85	0.92	1.00	0.95	1.05
Hardap	1.44	1.20	1.72	0.54	0.45	0.64		0.98	0.94	1.03	1.42	1.34	1.51
Karas	1.22	1.02	1.48	0.27	0.22	0.34		0.50	0.48	0.53	0.88	0.83	0.94
Kavango	1.03	0.88	1.20	0.51	0.43	0.61		0.96	0.92	0.99	2.79	2.67	2.92
Khomas	0.75	0.67	0.84	0.61	0.53	0.70		1.01	0.98	1.05	1.46	1.40	1.52
Kunene	2.38	1.70	3.32	0.43	0.35	0.53		1.39	1.33	1.46	1.97	1.86	2.08
Ohangwena	1.07	0.91	1.27	1.53	1.25	1.86		0.77	0.74	0.80	2.16	2.07	2.26
Omaheke	1.38	1.11	1.73	0.30	0.23	0.40		0.83	0.78	0.87	0.81	0.76	0.87
Omusati	2.39	1.93	2.96	2.29	1.78	2.95		0.89	0.86	0.93	2.14	2.04	2.25
Oshana	1.43	1.24	1.65	1.78	1.49	2.12		1.14	1.10	1.18	2.14	2.05	2.25
Oshikoto	1.13	0.94	1.35	1.80	1.79	1.81		0.73	0.70	0.76	1.37	1.30	1.44
Otjozondjupa	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Age group (years)													
15-19	0.46	0.40	0.53	0.78	0.68	0.88		0.37	0.36	0.38	0.30	0.29	0.31
20-24	0.39	0.35	0.43	1.42	1.29	1.56		1.72	1.69	1.76	1.11	1.09	1.14
25-29	0.49	0.44	0.54	1.27	1.15	1.40		1.37	1.35	1.40	1.07	1.04	1.10
30-34	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Education level													
None	3.18	2.19	4.62	1.48	0.98	2.23		7.18	6.78	7.60	10.83	9.91	11.85
Primary	0.58	0.47	0.71	0.20	0.15	0.28		6.22	5.91	6.55	11.12	10.21	12.12
Secondary	0.58	0.48	0.71	0.23	0.17	0.31		5.07	4.83	5.33	10.31	9.48	11.22
Tertiary	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Marital status													
Never married	0.77	0.71	0.84	0.92	0.82	1.03		1.02	1.00	1.04	2.84	2.72	2.96
Married	0.86	0.73	1.01	13.48	8.25	22.03		1.05	1.02	1.08	1.37	1.29	1.45
Others	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.

4.6. First and repeat unemployment among the youth

Repeat unemployment inflicts setbacks, and may reduce the likelihood of being hired in future. In Table 29 and 30 we distinguish first and repeat unemployment as these are recognized to have different disruptive effects.

Table 29: Probability of first unemployment among youth for 2012 and 2013, and between female and male

	Year 2012							Year 2013					
	Female			Male				Female			Male		
Variable	OR	95%CI		OR	95% CI			OR	95%CI		OR	95% CI	
Place of residence													
Urban	0.92	0.84	1.01	0.76	0.66	0.88		0.86	0.85	0.88	0.95	0.93	0.98
Rural	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Region													
Zambezi	0.89	0.72	1.11	4.66	3.29	6.62		0.87	0.83	0.91	1.24	1.17	1.31
Erongo	1.15	0.97	1.36	1.33	1.02	1.72		0.93	0.89	0.96	0.92	0.88	0.97
Hardap	0.27	0.23	0.32	2.15	1.58	2.92		1.11	1.06	1.17	1.61	1.52	1.71
Karas	0.45	0.37	0.55	4.01	2.71	5.94		0.57	0.54	0.60	0.94	0.88	1.00
Kavango	1.05	0.87	1.27	3.93	2.90	5.34		1.05	1.01	1.09	3.09	2.96	3.23
Khomas	0.64	0.56	0.73	0.59	0.49	0.71		0.97	0.94	1.01	1.51	1.44	1.57
Kunene	1.07	0.80	1.42	0.13	0.10	0.17		1.49	1.42	1.55	1.95	1.84	2.06
Ohangwena	0.23	0.19	0.27	0.94	0.71	1.24		0.80	0.77	0.83	2.19	2.09	2.29
Omaheke	0.51	0.42	0.64	0.10	0.07	0.14		0.79	0.75	0.83	0.81	0.76	0.87
Omusati	1.12	0.89	1.40	0.19	0.15	0.24		0.94	0.90	0.97	2.53	2.42	2.66
Oshana	0.52	0.44	0.61	1.01	0.81	1.27		1.21	1.17	1.26	2.22	2.12	2.33
Oshikoto	1.28	1.01	1.62	4.52	3.13	6.51		0.78	0.75	0.82	1.25	1.19	1.31
Otjozondjupa	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Age group (years)													
15-19	0.79	0.69	0.90	1.40	1.18	1.68		0.43	0.42	0.44	0.32	0.31	0.33
20-24	0.79	0.71	0.87	2.87	2.53	3.25		1.87	1.83	1.90	1.14	1.11	1.16
25-29	0.66	0.60	0.73	1.28	1.14	1.44		1.38	1.35	1.41	1.09	1.06	1.12
30-34	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Education level													
None	7.95	5.59	11.31	3.04	1.98	4.66		7.11	6.72	7.53	9.85	9.06	10.71
Primary	4.36	3.31	5.74	0.57	0.40	0.83		6.40	6.07	6.75	9.58	8.84	10.38
Secondary	2.97	2.30	3.84	0.58	0.41	0.83		5.22	4.96	5.48	8.92	8.25	9.65
Tertiary	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Marital status													
Never married	0.94	0.86	1.04	1.46	1.26	1.70		0.94	0.91	0.96	2.56	2.45	2.66
Married	1.05	0.89	1.25	0.18	0.14	0.24		1.01	0.98	1.04	1.19	1.13	1.25
Others	1.00	.	.	1.00	.	.		1.00	.	.	1.00.	.	.

The likelihood of first-time unemployment was much lower in urban areas for both male and female in 2012 and 2013 (Table 23). Compared across regions, the chance of first-time unemployment for females was lower in 7 regions (Zambezi, Hardap, Karas, Khomas, Ohangwena, Omaheke, and Oshana), but higher in another 5 regions (Erongo, Kavango, Kunene, Omusati, and Oshikoto) relative to those in Otjozondjupa. Almost similar regional patterns were persistent in 2013. For males, 5 regions (Khomas, Kunene, Ohangwena, Omaheke, and Omusati) were estimated to have reduced odds of first time unemployment, while in 2013, first time unemployment was lower in three regions only (Erongo, Karas and Omaheke). The risk of first-time unemployment increased with age, but reduced with education level. Married men in 2012 had a lower probability of first-time unemployment (OR=0.18, 95% CI: 0.14-0.24), while for the never married women in 2013 were of the same direction of association (OR=0.94, 95% CI: 0.91-0.96).

Table 30: Probability of repeat unemployment among youth for 2012 and 2013, and between female and male

	Year 2012							Year 2013					
	Female			Male				Female			Male		
Variable	OR	95%CI		OR	95% CI			OR	95%CI		OR	95% CI	
Place of residence													
Urban	1.04	0.94	1.15	1.89	1.63	2.21		1.71	1.62	1.80	1.81	1.71	1.91
Rural	1.00	.		1.00	.	.		1.00			1.00		
Region													
Zambezi	1.15	0.92	1.43	0.44	0.31	0.63		1.12	1.00	1.25	0.88	0.77	1.01
Erongo	1.03	0.87	1.21	0.53	0.41	0.68		0.74	0.68	0.82	1.13	1.03	1.25
Hardap	4.60	3.85	5.50	0.38	0.28	0.51		1.70	1.53	1.89	2.79	2.52	3.08
Karas	2.67	2.20	3.25	0.11	0.08	0.15		1.30	1.18	1.45	1.12	0.99	1.26
Kavango	0.50	0.40	0.62	0.35	0.26	0.48		0.71	0.65	0.79	0.91	0.82	1.01
Khomas	1.42	1.23	1.64	1.04	0.87	1.26		0.70	0.64	0.76	0.85	0.77	0.93
Kunene	0.87	0.65	1.15	5.98	4.66	7.67		1.63	1.47	1.81	0.68	0.58	0.80
Ohangwena	5.33	4.50	6.32	1.38	1.05	1.81		0.75	0.68	0.83	0.97	0.87	1.08
Omaheke	1.79	1.45	2.22	8.92	6.65	11.96		1.73	1.55	1.92	0.80	0.68	0.93
Omusati	0.63	0.49	0.80	1.75	1.32	2.33		0.57	0.51	0.64	1.15	1.02	1.29
Oshana	1.09	0.92	1.30	0.90	0.72	1.13		0.35	0.31	0.39	0.28	0.24	0.32
Oshikoto	0.55	0.42	0.73	0.02	0.01	0.03		0.62	0.55	0.70	0.89	0.79	1.00
Otjozondjupa	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Age group (years)													
15-19	0.93	0.81	1.07	1.27	1.06	1.52		0.22	0.21	0.24	0.21	0.19	0.23
20-24	1.01	0.91	1.11	0.38	0.33	0.43		1.17	1.11	1.24	1.26	1.19	1.34
25-29	1.27	1.14	1.40	1.10	0.97	1.25		1.31	1.24	1.38	1.26	1.19	1.34
30-34	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Education level													
None	0.11	0.07	0.15	0.44	0.30	0.67		1.81	1.60	2.06	2.95	2.36	3.70
Primary	0.17	0.13	0.23	1.06	0.75	1.51		1.80	1.61	2.01	7.97	6.53	9.73
Secondary	0.26	0.20	0.34	1.21	0.86	1.69		1.66	1.50	1.84	7.30	6.01	8.87
Tertiary	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Marital status													
Never married	1.00	0.91	1.10	0.55	0.48	0.64		1.09	1.03	1.16	1.15	1.07	1.24
Married	1.07	0.90	1.27	0.09	0.06	0.15		0.82	0.76	0.89	0.93	0.83	1.04
Others	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.

Table 30 now presents results on variables associated with repeat unemployment. For both years, and regardless of sex, the chance of repeated unemployment was high in urban areas than for those in rural areas. Females in 2012 were more likely to experience repeated unemployment if they were from Zambezi, Erongo, Hardap, Karas, Khomas, Ohangwena, Omaheke and Oshana. Repeat unemployment was more prevalent among males in 2012 in the regions of Khomas, Kunene, Ohangwena, Omaheke and Omusati. On the other hand, in 2013, female experienced repeated unemployment in Zambezi, Hardap, Karas, Kunene, and Omaheke, while for males this was more common in Erongo, Hardap, Karas, and Omusati. For both years and sexes, repeat unemployment was more prevalent in older young individuals than young workers. Table 30 further shows that those with as education level increases, the odds of repeated unemployment increases, and it is more pronounced in males than females, and much higher in 2013 as opposed to 2013. Turning to marital status, we observe that prevalence of repeated unemployment was much lower for the married in 2013 (for both male and female), but lower for both married and never married males in 2012.

4.7. NEET individuals' labour market

The youth not in education, employment and training (NEET) rate is intended to reflect those youth who are not part of the labour force for reasons other than education and training (NSA, 2015). The NEET is defined as a percentage given by the formula:

$$NEET(\%) = \frac{Number\ of\ UE\ youth + Number\ of\ EIA\ youth - Number\ of\ UE\ and\ EIA\ youth\ who\ are\ in\ Education\ or\ Training}{Total\ Number\ of\ Youth}$$

where

UE: Number of Unemployed youth

EIA: Number of youths economically inactive

In this section we consider factors associated with NEET labour market. Between 2012 and 2013, NEET ranged from 33 % to 34%. Figure 4 clearly show region variation in NEETs, with 2012 estimated to have relatively lower proportion of NEET than in 2013. Figure 5 shows the NEET by education level. NEETS decline with increasing education. However NEET was higher for those with senior secondary education; Std. 10 and university education in 2012 than in 2013. About a fifth of the youth with Std. 10 (Grade 12) in 2012 were not in education, employment or training, and the NEET was about 10% for those with postgraduate training in 2013.

Figure 4: Percentage distribution of NEETs in 2012 and 2013 across the 13 regions.

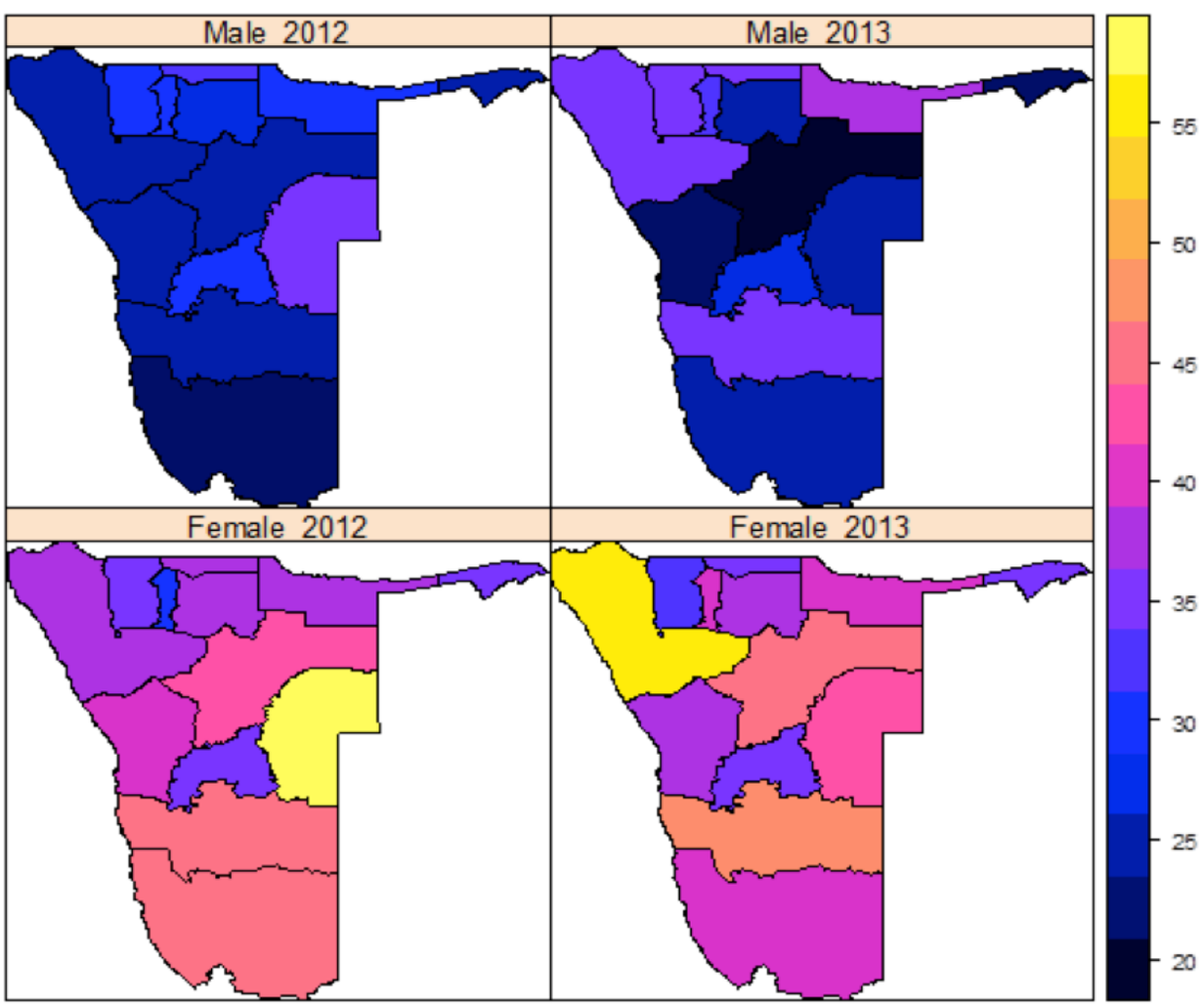


Figure 5: Percentage distribution of NEETS by education level by year

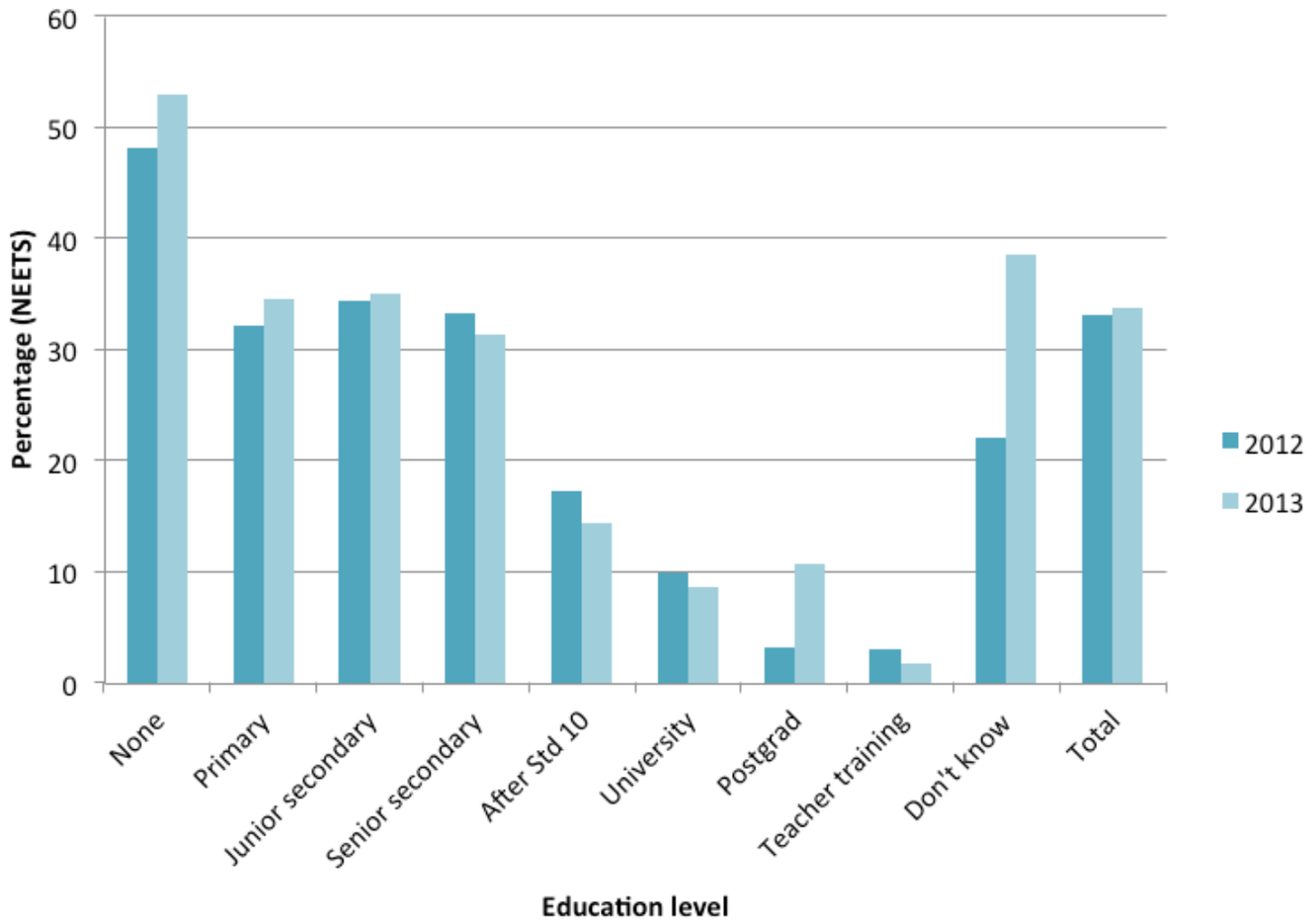


Table 31 presents NEET by age in 2012, generally NEET peaks among youth aged 21 and 22 years, 49.1% and 50.4% respectively. A similar pattern was observed among male youth in 2012, but the pattern is different for female youth. A high NEET rate among female was observed from the age of 21 – 24. Generally NEET was high for female (37.6%) as compared to males (28.2%) in 2012. In 2013, NEET rate was high (45.9%) for youth aged 22, the percentage was much higher (55.3%) for females than males (35.9%) of the same age (Table 32). Female youth aged 20 – 23 had a NEET of over 50 percent.

Table 31: NEET by age and sex, 2012

		NEET			Total Youth			Percentage	
Age	Female	Male	Total	Female	Male	Total	Female	Male	Total
15	1606	1321	2927	26571	26160	52731	6.0	5.0	5.6
16	2007	2083	4090	23078	22192	45270	8.7	9.4	9.0
17	3017	2784	5801	20017	22881	42898	15.1	12.2	13.5
18	8275	5862	14137	24184	25114	49298	34.2	23.3	28.7
19	9350	6069	15419	24619	19102	43721	38.0	31.8	35.3
20	10360	8086	18446	23122	22090	45212	44.8	36.6	40.8
21	11879	8672	20551	21590	20249	41839	55.0	42.8	49.1
22	13010	10274	23284	23983	22195	46178	54.2	46.3	50.4
23	10526	7855	18381	19997	20595	40592	52.6	38.1	45.3
24	8830	5241	14071	17157	15254	32411	51.5	34.4	43.4
25	8763	6304	15067	18443	17478	35921	47.5	36.1	41.9
26	8811	4641	13452	17416	14875	32291	50.6	31.2	41.7
27	7574	6133	13707	18071	16620	34691	41.9	36.9	39.5
28	7795	5374	13169	19001	17821	36822	41.0	30.2	35.8
29	6514	4915	11429	15622	14943	30565	41.7	32.9	37.4
30	7407	3941	11348	18780	15868	34648	39.4	24.8	32.8
31	4783	3426	8209	12557	12343	24900	38.1	27.8	33.0
32	5944	4047	9991	16832	15615	32447	35.3	25.9	30.8
33	4959	2941	7900	13133	12350	25483	37.8	23.8	31.0
34	4141	3471	7612	13011	12881	25892	31.8	26.9	29.4
Total	**145 551**	**103 440**	**248 991**	**387 184**	**366 626**	**753 810**	**37.6**	**28.2**	**33.0**

Table 32: NEET by age and sex, 2013

		NEET			Total Youth			Percentage	
Age	Female	Male	Total	Female	Male	Total	Female	Male	Total
15	1195	1660	2855	22882	22126	45008	5.2	7.5	6.3
16	3075	2809	5884	24216	21053	45269	12.7	13.3	13.0
17	3116	3840	6956	20155	20592	40747	15.5	18.6	17.1
18	6738	4188	10926	21092	20480	41572	31.9	20.4	26.3
19	8569	6856	15425	20136	21297	41433	42.6	32.2	37.2
20	11491	7158	18649	22913	20763	43676	50.2	34.5	42.7
21	12479	6818	19297	24269	20165	44434	51.4	33.8	43.4
22	11898	7370	19268	21505	20506	42011	55.3	35.9	45.9
23	12357	9179	21536	24158	24110	48268	51.2	38.1	44.6
24	10479	6983	17462	21688	17857	39545	48.3	39.1	44.2
25	9745	6688	16433	20246	19073	39319	48.1	35.1	41.8
26	8259	5323	13582	17690	14178	31868	46.7	37.5	42.6
27	8516	5281	13797	19723	16589	36312	43.2	31.8	38.0
28	8123	4715	12838	20334	16759	37093	39.9	28.1	34.6
29	7202	5226	12428	18195	15070	33265	39.6	34.7	37.4
30	7621	4818	12439	19965	18296	38261	38.2	26.3	32.5
31	6240	4126	10366	15293	15473	30766	40.8	26.7	33.7
32	5812	4783	10595	16670	13651	30321	34.9	35.0	34.9
33	6067	3063	9130	15670	14020	29690	38.7	21.8	30.8
34	5656	3700	9356	15875	12479	28354	35.6	29.6	33.0
Total	**154 638**	**104 584**	**259 222**	**402 675**	**364 537**	**767 212**	**38.4**	**28.7**	**33.8**

Table 33 presents NEET by region and sex by year. NEET is higher for females as compared to males. Nearly two thirds (57%) of the female youth in Omaheke were not in education, employment or training, whereas Oshana region recorded the lowest NEET in 2012. Male youth in //Karas region recorded the lowest (22.4%) NEET in 2012. There were not many differences in NEET in 2012 between urban and rural. In 2013, NEET was highest (46.2%) in Kunene region compared to others, and also highest (56.4%) among females in Kunene region (Table 34). In 2013, NEET between urban and rural varied with urban female having a NEET of 36.7% as compared to the rural female, an NEET of 40.3%

Table 33: NEET by area and sex, 2012

		NEET			Total Youth			Percentage	
Area	Female	Male	Total	Female	Male	Total	Female	Male	Total
Namibia	**145548**	**103439**	**248987**	**387179**	**366625**	**753804**	**37.6**	**28.2**	**33.0**
Urban	80444	58278	138722	217202	207450	424652	37.0	28.1	32.7
Rural	65104	45161	110265	169977	159175	329152	38.3	28.4	33.5
//Karas	5326	2393	7719	12012	10662	22674	44.3	22.4	34.0
Erongo	10770	7394	18164	26271	30159	56430	41.0	24.5	32.2
Hardap	5667	3800	9467	12771	15203	27974	44.4	25.0	33.8
Kavango	16394	10068	26462	42700	33132	75832	38.4	30.4	34.9
Khomas	31668	26538	58206	89200	92694	181894	35.5	28.6	32.0
Kunene	3856	2842	6698	10232	11099	21331	37.7	25.6	31.4
Ohangwena	14763	10809	25572	39121	32571	71692	37.7	33.2	35.7
Omaheke	5297	3712	9009	9300	10653	19953	57.0	34.8	45.2
Omusati	12709	9352	22061	35743	30128	65871	35.6	31.0	33.5
Oshana	11132	8673	19805	38169	30246	68415	29.2	28.7	28.9
Oshikoto	11356	7773	19129	29786	28037	57823	38.1	27.7	33.1
Otjozondjupa	10133	6349	16482	23476	26497	49973	43.2	24.0	33.0
Zambezi	6477	3736	10213	18397	15544	33941	35.2	24.0	30.1

Table 34: NEET by area and sex, 2013

		NEET			Total Youth			Percentage	
Area	Female	Male	Total	Female	Male	Total	Female	Male	Total
Namibia	**154637**	**104586**	**259223**	**402675**	**364539**	**767214**	**38.4**	**28.7**	**33.8**
Urban	77482	51485	128967	211353	185312	396665	36.7	27.8	32.5
Rural	77155	53101	130256	191322	179227	370549	40.3	29.6	35.2
//Karas	7025	3691	10716	17011	14443	31454	41.3	25.6	34.1
Erongo	12080	6774	18854	31461	31883	63344	38.4	21.2	29.8
Hardap	6035	4415	10450	12816	12826	25642	47.1	34.4	40.8
Kavango	17630	12801	30431	43955	34650	78605	40.1	36.9	38.7
Khomas	28477	21328	49805	82272	79367	161639	34.6	26.9	30.8
Kunene	8772	4356	13128	15546	12878	28424	56.4	33.8	46.2
Ohangwena	14097	12087	26184	41699	35682	77381	33.8	33.9	33.8
Omaheke	4722	2717	7439	11066	11184	22250	42.7	24.3	33.4
Omusati	12772	10679	23451	39112	30707	69819	32.7	34.8	33.6
Oshana	14786	9395	24181	36904	28670	65574	40.1	32.8	36.9
Oshikoto	10773	7446	18219	28872	30001	58873	37.3	24.8	30.9
Otjozondjupa	11387	5366	16753	24801	25817	50618	45.9	20.8	33.1
Zambezi	6081	3531	9612	17160	16431	33591	35.4	21.5	28.6

Table 35 presents results on the logit model for determinants of being NEET or otherwise for 2012 and 2013. As before separate estimates are given for females and males.

In 2012, the characteristics that raised the probability of being NEET relative to not NEET among females were residence in Erongo, Hardap, Karas, Ohangwena and Omaheke regions (compared to Otjozondjupa region), as well as having age within the range of 20-24, and 25-29 years (relative to being of age between 30 and 34 years), having no education or having primary education or secondary education as opposed to having tertiary education. Among males in 2012, the probability of being a NEET was higher if the individual worker was in urban area (OR=1.26) as opposed to being in rural areas, as well as residing in any of these regions: Zambezi, Hardap, Kavango, Khomas, Ohangwena, Omaheke, Omusati, Oshana and Oshikoto (relative to being located in Otjozondjupa region). At the same time the odds increased for those aged 20-24 and 25-29 years as opposed to those in the age band 30 to 34 years. Similar pattern, as of females, was observed when compared across education level, with the no education, primary education and secondary education being an increased risk compared to those with tertiary education. Males who were never married were more likely to be NEET than those in other forms of marital status, while being married was associated with a lower risk of being a NEET.

With respect to the factors impacting the probability of being NEET, in 2013, it was estimated that females were more likely to be NEETs in Hardap and Kunene regions. Again being of age 20-24 and 25-29 years increased the probability of being a NEET, relative to being in aged 30-34 years. With regards to education level, the probability was 22 times higher for those without education compared to those with tertiary education, whereas for the primary and secondary education the odds were about 12 times and 8 times higher when compared with those females who attained tertiary education. In 2013, marital status of females was not associated with an elevated probability of being a NEET. For males in 2013, the chance of being a NEET was increased if one was residing in urban areas as opposed to being in rural areas. In relation to region, the patterns were similar to those observed in 2012, such that the odds of being a NEET increased in all regions with the exception of Erongo (relative to Otjozondjupa region). The NEET male youth in 2013 shared similar traits to the NEET in 2012, when it comes to age and education level. The probability of being a NEET increased with age, while decreased with education attainment, although these remained high in all categories of education, when compared to those males with tertiary education. In contrast to those in other forms of marital status, male NEETs who were never married or married were at an increased risk of being a NEET (Table 35).

Table 35: Factors associated with NEET individuals' labour market in 2012 and 2013, for female and male

	Year 2012							Year 2013					
	Female			Male				Female			Male		
Variable	OR	95%CI		OR	95% CI			OR	95%CI		OR	95% CI	
Place of residence													
Urban	0.93	0.91	0.95	1.26	1.23	1.29		0.81	0.79	0.82	1.13	1.11	1.16
Rural	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Region													
Zambezi	0.93	0.89	0.97	1.26	1.20	1.32		0.67	0.64	0.70	1.19	1.13	1.25
Erongo	1.12	1.08	1.17	0.99	0.95	1.03		0.85	0.82	0.88	0.89	0.85	0.93
Hardap	1.34	1.27	1.40	1.08	1.03	1.14		1.14	1.08	1.19	2.10	2.00	2.20
Karas	1.23	1.17	1.29	1.03	0.97	1.09		0.85	0.81	0.88	1.21	1.15	1.27
Kavango	0.96	0.93	1.00	1.94	1.86	2.02		0.75	0.73	0.78	2.56	2.46	2.66
Khomas	0.96	0.93	0.99	1.26	1.22	1.30		0.83	0.80	0.85	1.32	1.27	1.37
Kunene	0.73	0.70	0.77	0.97	0.92	1.02		1.16	1.11	1.21	1.50	1.43	1.58
Ohangwena	1.06	1.02	1.10	2.06	1.98	2.14		0.63	0.61	0.65	2.10	2.02	2.18
Omaheke	1.95	1.85	2.05	1.57	1.49	1.65		0.81	0.77	0.85	1.01	0.96	1.07
Omusati	0.94	0.90	0.98	1.90	1.82	1.98		0.59	0.57	0.61	2.30	2.21	2.39
Oshana	0.70	0.67	0.73	1.57	1.51	1.64		0.95	0.92	0.98	1.75	1.68	1.82
Oshikoto	1.00	0.96	1.04	1.57	1.51	1.64		0.75	0.72	0.77	1.28	1.22	1.33
Otjozondjupa	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Age group (years)													
15-19	0.41	0.40	0.42	0.31	0.30	0.31		0.43	0.42	0.44	0.36	0.35	0.37
20-24	1.84	1.80	1.88	1.38	1.35	1.41		2.03	1.99	2.07	1.18	1.15	1.21
25-29	1.38	1.35	1.40	1.25	1.22	1.28		1.40	1.37	1.43	1.19	1.16	1.22
30-34	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Education level													
None	20.58	19.27	21.99	8.58	8.01	9.19		22.05	20.82	23.34	10.65	10.03	11.30
Primary	9.30	8.77	9.86	7.02	6.58	7.49		11.96	11.35	12.59	6.94	6.56	7.34
Secondary	7.86	7.42	8.31	5.04	4.73	5.37		7.98	7.60	8.39	5.50	5.22	5.81
Tertiary	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Marital status													
Never married	0.78	0.76	0.79	2.16	2.10	2.23		0.73	0.71	0.74	2.68	2.59	2.77
Married	0.67	0.65	0.69	0.56	0.53	0.59		0.77	0.75	0.79	1.25	1.19	1.31
Others	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.

4.8. Time-related under-employment (TRUE)

Time related under-employment (TRUE) is another important indicator in the labour market. The International Labour Organisation define it as an indicator that relates to the number of employed persons whose hours of work in the reference period are insufficient in relation to a more desirable employment situation in which the person is willing and available to engage (ILO, 2015). In Namibia, this refers to those working less than 35 hours a week. The analysis was undertaken based on the 2012 and 2013 LFS data to investigate how place of residence, region of residence, age, education level and marital status impacted on the probability of being in time-related under-employment. The question we try to address are two. First, are there any differences in time-related underemployment between males and females? Second, do the effects of personal characteristics on time-related under-employment vary between 2012 and 2013?

Table 36 gives results on the logit model fitted on TRUE. The pattern of association between males and females is similar when one considers the place of residence. The probability of time-related under-employment is low for both males and females in 2012 and 2013. However, with respect to region of residence, the probability of TRUE was higher for both female and male, in 2012, in the regions of Zambezi, Hardap, Kavango, Khomas, Kunene, Ohangwena, Omusati and Oshikoto. In 2013, the pattern changed, with high probability of TRUE established for both female and male, in Erongo, Kavango, Ohangwena and Omusati regions.

Table 36: Time related unemployment in 2012 and 2013.

	Year 2012							Year 2013					
	Female			Male				Female			Male		
Variable	OR	95%CI		OR	95% CI			OR	95%CI		OR	95% CI	
Place of residence													
Urban	0.471	0.453	0.49	0.529	0.506	0.553		0.293	0.282	0.305	0.542	0.516	0.568
Rural	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Region													
Zambezi	2.84	2.63	3.07	6.46	5.92	7.06		0.85	0.77	0.93	4.05	3.71	4.42
Erongo	0.87	0.80	0.95	1.56	1.42	1.72		1.26	1.16	1.37	1.52	1.38	1.66
Hardap	1.46	1.32	1.62	1.28	1.15	1.43		1.51	1.37	1.66	0.41	0.35	0.48
Karas	0.51	0.45	0.58	0.34	0.28	0.41		0.38	0.35	0.42	0.38	0.33	0.44
Kavango	2.17	2.03	2.33	9.21	8.50	9.98		1.23	1.14	1.32	6.04	5.57	6.54
Khomas	1.47	1.38	1.58	1.23	1.13	1.34		0.86	0.80	0.93	1.90	1.75	2.06
Kunene	1.49	1.36	1.62	2.51	2.28	2.77		0.77	0.70	0.85	0.91	0.81	1.02
Ohangwena	1.24	1.15	1.34	2.59	2.36	2.85		2.11	1.96	2.28	3.72	3.40	4.08
Omaheke	0.60	0.52	0.69	0.84	0.73	0.96		0.51	0.46	0.57	0.25	0.21	0.29
Omusati	2.06	1.91	2.22	4.24	3.88	4.63		2.02	1.87	2.18	5.37	4.90	5.89
Oshana	0.79	0.73	0.86	1.15	1.03	1.28		0.95	0.88	1.04	1.80	1.64	1.98
Oshikoto	1.83	1.69	1.97	5.37	4.94	5.84		0.79	0.73	0.86	3.61	3.33	3.90
Otjozondjupa	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Age group (years)													
15-19	1.61	1.52	1.72	1.09	1.02	1.17		1.24	1.15	1.33	3.09	2.89	3.30
20-24	1.17	1.12	1.22	0.81	0.77	0.85		0.93	0.89	0.96	1.34	1.28	1.41
25-29	1.19	1.14	1.23	0.92	0.88	0.96		0.98	0.95	1.02	1.02	0.97	1.06
30-34	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Education level													
None	1.96	1.79	2.14	1.29	1.18	1.41		2.61	2.39	2.85	1.57	1.44	1.71
Primary	2.73	2.54	2.93	1.12	1.03	1.22		3.60	3.34	3.88	1.99	1.85	2.15
Secondary	1.49	1.39	1.59	0.97	0.90	1.05		1.89	1.77	2.03	1.11	1.04	1.19
Tertiary	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Marital status													
Never married	0.68	0.65	0.71	1.14	1.08	1.20		0.65	0.62	0.68	0.81	0.76	0.85
Married	0.88	0.83	0.92	0.87	0.81	0.93		1.45	1.38	1.51	1.16	1.09	1.24
Others	1.00			1.00				1.00			1.00		

In the Table 36, personal characteristics (age, education level and marital status) are associated with time-related underemployment, for both male and female, and between 2012 and 2013. Results show that females across all age groups in 2012 were at high risk of time-related under-employment, however, in 2013, it was only those aged between 15-19 were at high risk (relative to those aged 30-34 years). For males, in 2012, the probability of being in TRUE was much higher in the 15-19 year olds, but lower in 20-24 and 25-29 age groups. In contrast, in 2013, the risk was high across all age groups.

With regards to education level, both females and males, in 2012 and 2013, were more prone to be engaged in visible under-employment, but the odds were much higher in 2013 as compared to 2012 (Table 36). This pattern was persistent across all education levels, except for males in 2012, where it was estimated that those with secondary education were at a relatively lower probability (not statistically significant) of TRUE relative to those with tertiary education. The effect of marital status was mixed. Females, whether married or never married in 2012 were less likely to be associated with TRUE, while for males in the same year, we observed a higher probability for those never married, but lower probability for those married. Come 2013, a higher impact of TRUE was manifested in the married women and men, while the never married women and men were at a lower risk of TRUE.

4.9. **Unemployment Index**

In this section we consider an overall index of youth unemployment in 2012 and 2013. The index considers three items: (i) current unemployment status based on the broad definition; (ii) length of time being unemployed; and (iii) whether the worker worked the past 12 months. The index was derived as =1 to define persistent and severe unemployment and 0=intermittent unemployment or none.

In 2012, severe unemployment was registered at 53.9% (52.7% in females and 55.5% in males), while in 2013, this was at 59.6% (62.7% in females and 56.1% in males). Figure 6 shows the percentage distribution of severe/persistent youth unemployment by region. The severity of unemployment was relatively lower among males in 2013 compared to 2012. The least proportion of males was observed in Omaheke region. Regions such as Omusati and Ohangwena had a relatively low proportion of unemployed youth, but thus changes to be among the highest in 2013 among males. With respect to females, again, a relatively high proportion was observed in Ohangwena and Omusati.

Table 37 displays results of a logistic regression estimating the effects of place of residence, region of residence, age, education level and marital status on severity of unemployment. In 2012, among female, the characteristics that raised the probability of severe unemployment were being of young age, being not educated, and being unmarried. Those aged 15-19, 20-24 and 25-29 compared to those aged 30-34 years were 4.7, 2.1 and 1.2 times at higher odds of severe unemployment. Females who were not educated were relatively high risk (though not statistically significant) compared to those who attained tertiary education. Similarly the never married females compared to others were at an elevated risk of severe unemployment. All regions, expect for Kunene and Oshikoto, were associated with increased risk of severe unemployment. For males, in the same year, factors impacting on severe unemployment were being in urban areas (as opposed to residing in rural areas), being in Erongo, Hardap, Karas, Kavango, Khomas, Kunene and Omaheke regions relative to residing in Otjozondjupa region. Equally, males who were young (be in in the age range 15-19 or 20-24 or 25-29 years) were more prone to severe unemployment that those who achieved tertiary education. However, we did not find any increasing effect of education level. Being never married, on the other hand, impacted on the probability of severe unemployment for both males and females in 2012.

Figure 6: Percentage distribution of severe unemployment among the youth in 2012 and 2013.

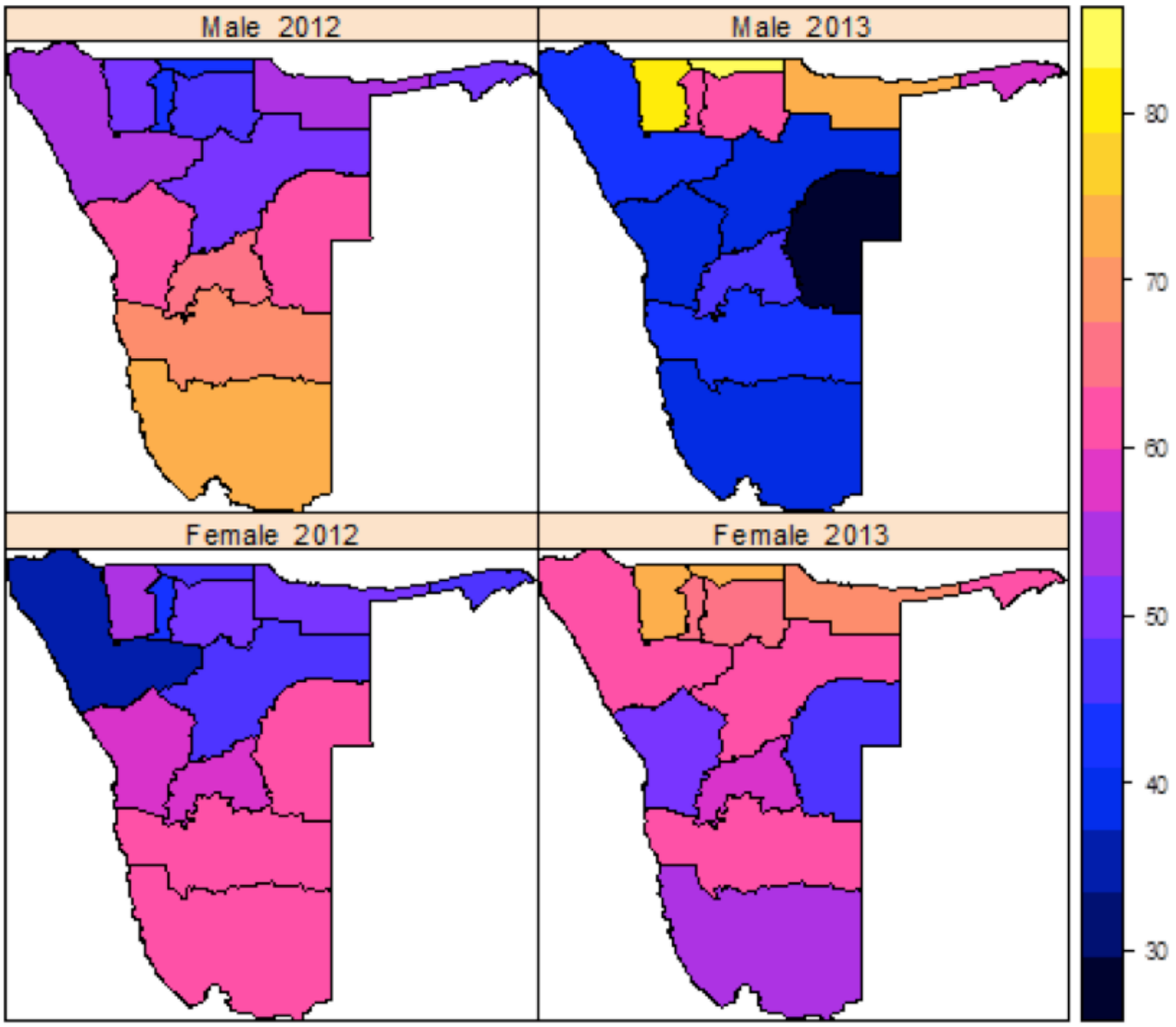


Table 37 further shows results on severe unemployment in 2013. For females, the risk was higher in 5 regions, namely Hardap, Khomas, Ohangwena, Omusati and Oshana. The effect of age remained higher but much elevated compared to what was established in 2012 for the same group (females). For instance, in 2012 the odds were 4.7 times higher, but in 2013 this was 25.4 times. Overall the youth at all ages (relative to being in the 30-34 age group) were at increased risk of severe unemployment. In relation to education level, the female youth in 2013 shared similar traits to those in 2013. Having no education or low levels of education was more likely to exert severe unemployment, than having higher education. A more stable family relationship, in a form of being married cushioned against severe unemployment for the female youth. With respect to male youth in 2013, we noted that severe unemployment was certain for those in urban areas compared to being in rural areas. The male youth in most regions in Namibia are prone to severe unemployment, with exception of Omaheke. Unemployed male youth aged 15-19 years was 19.9 times more likely to face severe unemployment than those in 30-34 years group. The risk was also seen to decrease with increasing age. Males across all educational levels were prone to severe unemployment, as well as males who were never married were equally at high probability of severe unemployment.

Table 37: Odds ratios of logistic regression predicting overall youth unemployment in 2012 and 2013.

	Year 2012							Year 2013					
	Female			Male				Female			Male		
Variable	OR	95%CI		OR	95% CI			OR	95%CI		OR	95% CI	
Place of residence													
Urban	0.99	0.96	1.03	1.32	1.27	1.38		0.79	0.78	0.81	1.11	1.08	1.13
Rural	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Region													
Zambezi	1.06	0.99	1.14	0.89	0.82	0.98		0.93	0.89	0.98	2.87	2.73	3.02
Erongo	1.59	1.49	1.70	1.53	1.41	1.66		0.77	0.74	0.80	1.19	1.14	1.24
Hardap	1.88	1.73	2.04	1.84	1.66	2.03		1.08	1.02	1.13	1.29	1.23	1.36
Karas	1.99	1.82	2.17	2.50	2.21	2.82		0.76	0.73	0.79	1.22	1.16	1.28
Kavango	1.10	1.04	1.18	1.09	1.01	1.18		0.99	0.96	1.03	6.37	6.10	6.66
Khomas	1.58	1.49	1.67	1.38	1.29	1.48		1.08	1.05	1.12	1.97	1.90	2.04
Kunene	0.54	0.49	0.60	1.30	1.16	1.45		0.87	0.83	0.91	1.67	1.58	1.76
Ohangwena	1.04	0.96	1.12	0.80	0.74	0.88		1.22	1.17	1.27	8.03	7.68	8.39
Omaheke	1.64	1.51	1.78	1.70	1.52	1.90		0.58	0.55	0.61	0.79	0.74	0.84
Omusati	1.21	1.12	1.29	0.94	0.87	1.03		1.11	1.06	1.15	7.34	7.00	7.69
Oshana	0.83	0.78	0.89	0.66	0.61	0.72		1.36	1.31	1.41	3.28	3.15	3.42
Oshikoto	1.10	1.02	1.17	0.91	0.83	0.99		0.95	0.91	0.99	2.48	2.37	2.59
Otjozondjupa	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Age group (years)													
15-19	4.79	4.56	5.02	3.42	3.24	3.62		25.43	24.66	26.23	20.59	19.98	21.21
20-24	2.05	1.98	2.13	1.60	1.53	1.67		3.75	3.67	3.82	2.99	2.92	3.06
25-29	1.23	1.18	1.28	1.15	1.09	1.20		1.40	1.37	1.43	1.15	1.13	1.18
30-34	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Education level													
None	1.01	0.88	1.15	0.45	0.39	0.51		3.64	3.49	3.81	1.15	1.10	1.20
Primary	0.68	0.60	0.77	0.62	0.55	0.70		2.92	2.82	3.03	1.37	1.32	1.42
Secondary	0.78	0.70	0.88	0.87	0.77	0.98		2.02	1.96	2.09	1.44	1.39	1.49
Tertiary	1.00	.	.	1.00	.	.		1.00	.	.	1.00	.	.
Marital status													
Never married	1.21	1.16	1.25	1.20	1.13	1.28		1.01	0.99	1.03	2.99	2.89	3.11
Married	0.89	0.84	0.94	1.00	0.88	1.13		0.75	0.73	0.77	0.87	0.83	0.92
Others	1.00			1.00				1.00			1.00		

5.1. Introduction

The skills mismatch refers to the poor incongruence or incompatibility between skills needs of the labour market and the supply of skills coming from educational institutions (ETF, 2012; ILO, 2015). The mismatch is often given as an explanation for high youth unemployment rates in the world. The issue of skills mismatch has come to the fore following the global economic crisis of 2008-2009 (ILO, 2015), nevertheless skills mismatch are always present due to the rigidities in the labour market (ETF, 2012). Measuring skills mismatch has been an on-going area of research. Presently, there are no internationally agreed methods to measure skills mismatch, but all measures encompass imbalances between skills demanded and supplied. Mismatch can be measured along several axes, using proxies such as qualifications, years of schooling and occupations. Qualification is a formal recognition of someone possessing a given set of skills. It is therefore construed that one spending more years at school should have obtained more skills, and similarly someone in a high-skilled non-manual occupation group can be interpreted to possess a given skills set.

The most fundamental distinction of mismatch are, first, under-education and over-education, in which an under-educated person does not possess skills required for a given job, while an over-educated person is someone who has skills beyond what is required for the position at hand. Second, mismatch can be distinguished between horizontal and vertical mismatch. According to the European Training Foundation (2012), a vertical mismatch occurs when there is a discrepancy between the levels of education which a person has, and the requirements of the job held by the person. A horizontal mismatch, in contrast, refers to disparities between types of skills which the person has attained and the requirements of the job. Put differently, vertical skills mismatch can be defined as "does the person have right skills for the job?", and horizontal mismatch can be put as "is the job right for the skills the person has?"

The extent of skills mismatch in the Namibian labour market is unknown. This chapter aims to describe the skills mismatch among the youth in Namibia using five measures: (a) coefficient of variation, (b) proportions of unemployed versus employed, (c) variance of relative unemployment rates, (d) mismatch by occupation, and (e) relative wages by education levels.

5.2. Coefficient of variation

This is an index of dissimilarity and captures mismatch between skills demand (defined by the skills of the employed) and skills supply (defined by the skills of the unemployed). The skills in each group is proxied by education attainment, and is defined as (ILO, 2015):

$$CVAR = \frac{1}{2} \sum_{i=1}^{k} \left| \frac{E_i}{E} - \frac{U_i}{U} \right|$$

where i is an indicator of education level (none, primary, secondary or tertiary); Ei/E is the proportion employed and U_i/U is the proportion unemployed with education level i. The index measures the relative position of different labour market groups. Put differently, the index looks at the difference in the distribution of those employed and unemployed within respective education groups. The higher the number, the greater the difference between the skills possessed by the employed people and the skills of those unemployed. Accordingly, the extent to which the distributions are different can be interpreted as a measure of ineffectiveness caused by the mismatch of supply and demand of skills in the labour market.

Figure 6 shows the coefficient of variation index by sex and year. Between 2012 and 2013, the mismatch has declined (0.57 in 2012 and 0.40 in 2013). The difference is largely driven by men, as shown in Figure 7. The plot suggests that unemployed men have an education profile which is different from that of the employed population in general. The mismatch among women might be due to the job searching behaviour in such that women are not actively looking for work or do not generally form part of the labour force, as such data does not show any mismatch for women between 2012 and 2013.

Figure 7: Coefficient of variation by gender and year

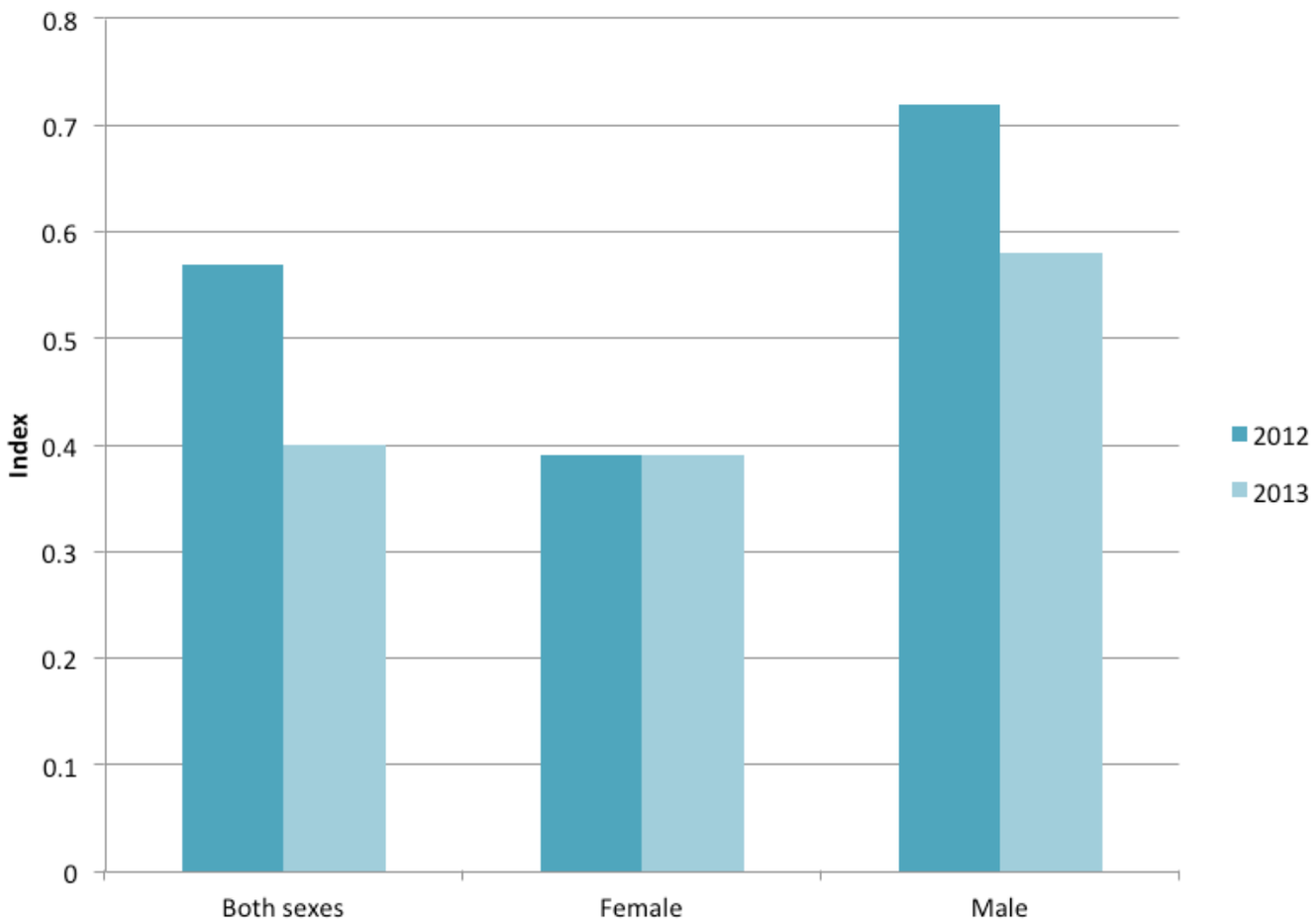
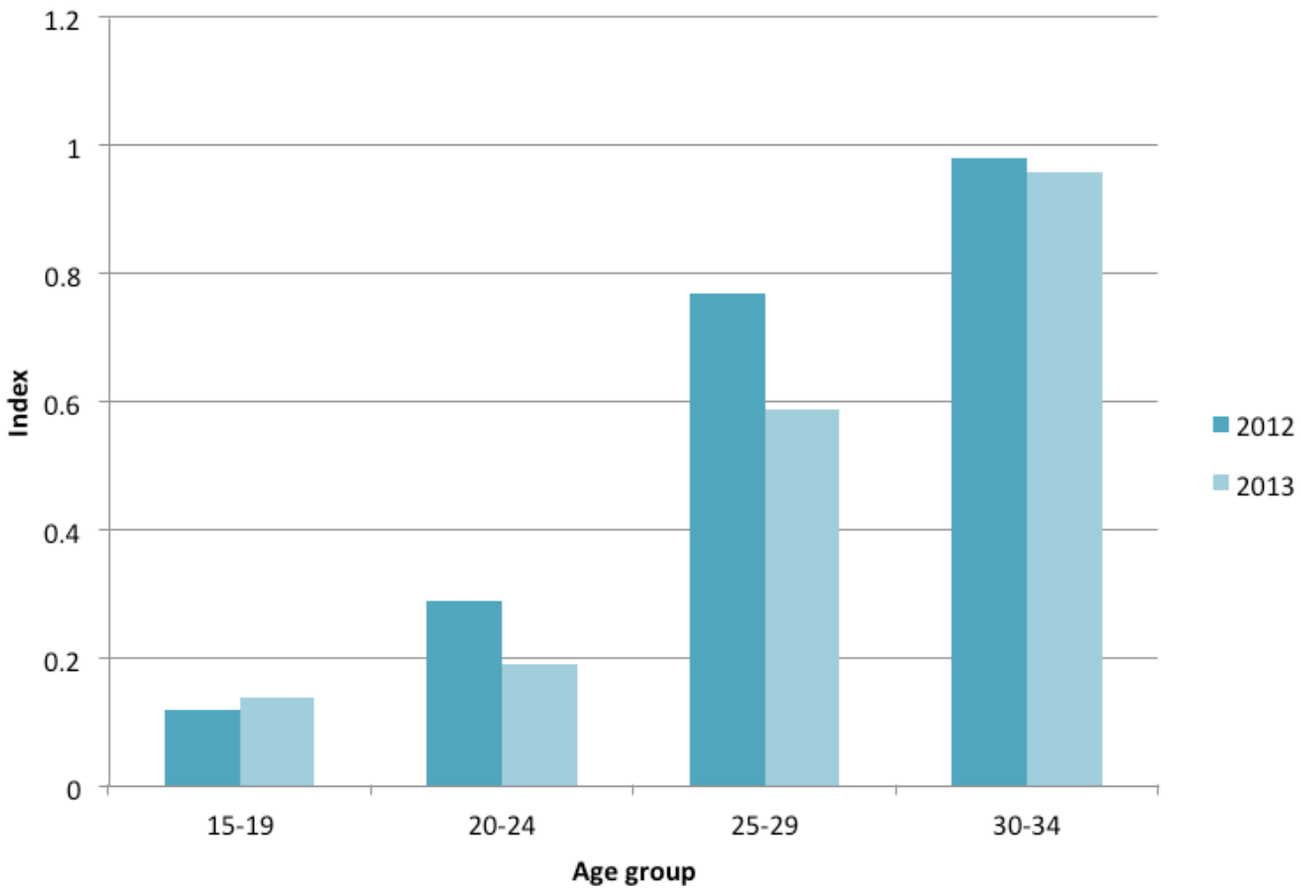


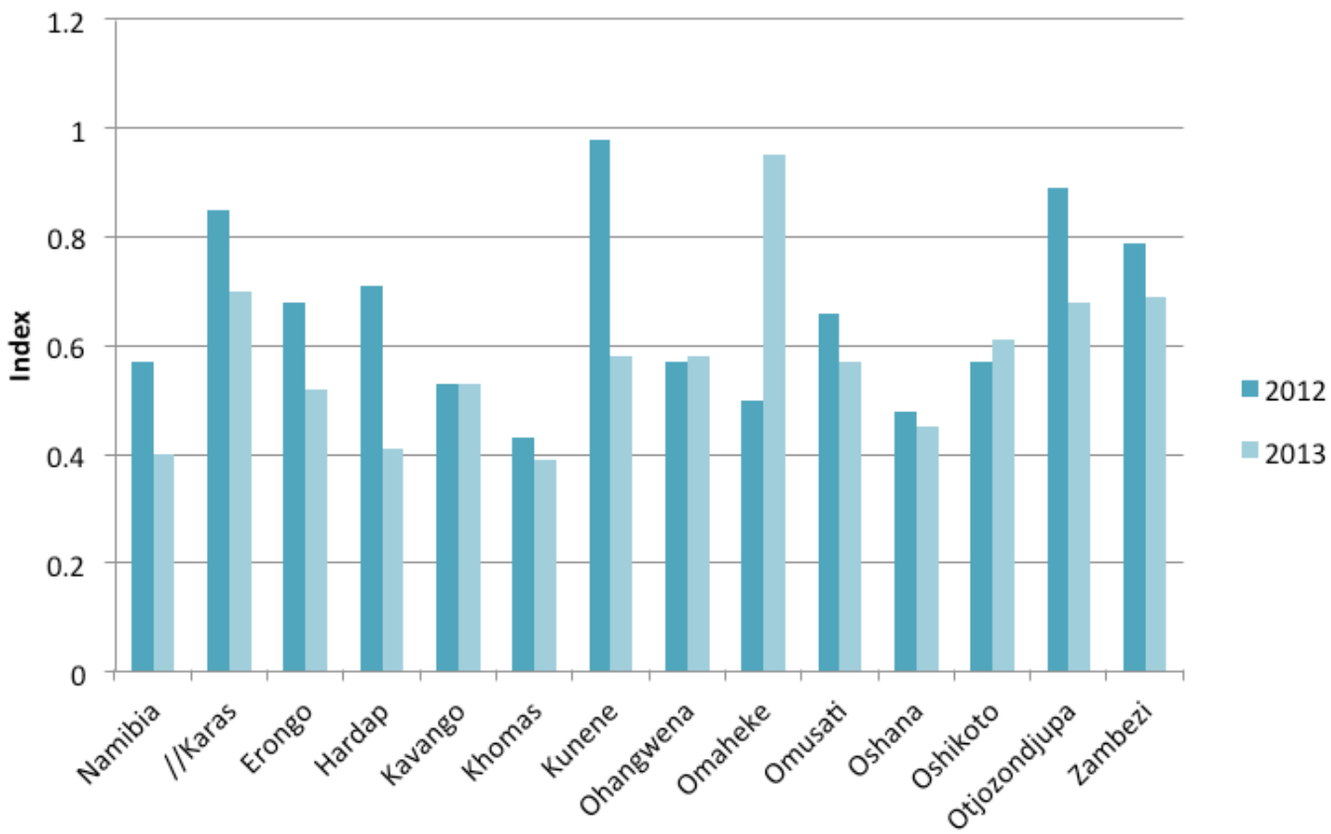
Figure 8 presents the coefficient of variation by age group. From the Figure, it is possible to isolate that the highest variation is in age group 30-34, and in fact has been rising from the youngest age groups. One thing that should be mentioned is that the young people struggle to get into the labour market, and the data may not show this variation. Comparing between the two years, the only substantial variation can be pinpointed in the age group of between 25 and 29 years, although such variation is displayed in the age group 20 to 24. In both age groups, the mismatch was higher in 2012 than in 2013.

Figure 8: Coefficient of variation by age and year



In Figure 9, it is possible to see the variation in youth skills mismatch across regions in Namibia. In general, the mismatch declined in Namibia between 2012 and 2013 survey years. However, this decline is not uniform for all regions. In Kunene region, the index was close to 1.0 in 2012, while in 2013 it declined to 0.58. In Hardap the index was established at 0.71 in 2012 and decreased by 0.3 points in 2013. A similar picture was seen in Otjozondjupa, of which in 2013 the index was estimated as 0.89, and mismatched decreased by about 20 point in 2012. For some regions there was an increase, the greatest increase between 2012 and 2013 can be seen in Omaheke (a difference of 0.45), followed by Oshikoto (0.04) and Ohangwena (0.01). In Kavango region, there was difference in mismatch between the years.

Figure 9: Coefficient of variation by region and year.

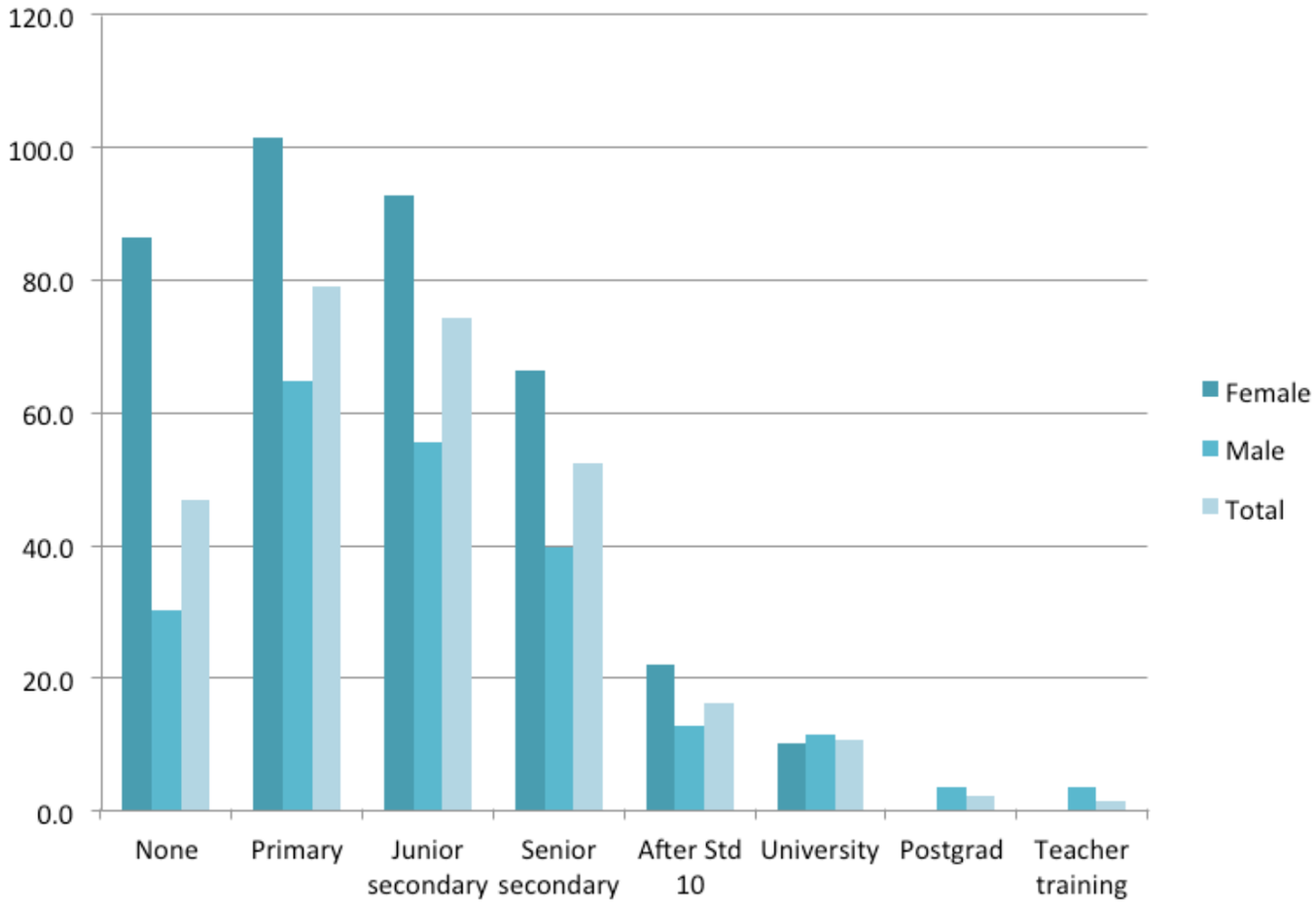


5.3. **Proportion of unemployed versus employed**

The coefficient of variation, in Section 5.2, provides the first measure of mismatch, however, it is not possible to establish the direction of mismatch, that is, whether the supply of highly educated youth is high compared to demand or there are fewer low-skilled workers. To compensate for this defect, the coefficient of variation is interpreted together with the proportion of unemployed and employed (PUE).

The PUE index provides the location of mismatch, by comparing the unemployed to the employed in each education category. A higher value at any given education level, would suggest that there are more unemployed than employed in that education level. This can be interpreted as an excess supply for those youth possessing those skills. Figure 10 shows that females were in excess supply, in 2012, for the lowest categories (no education, primary education, junior secondary, and senior secondary). For the education attainment at tertiary level, the level of excess supply was relatively small, below 10, such that women who attained university education or have postgraduate education or have teacher training, there is no excess supply.

Figure 10: The proportion of unemployed to employed by sex, 2012.



In 2013, the picture is similar (Figure 11). The unemployed women are in excess supply at the lowest categories of education. The index is higher than that observed in 2012 since the proportion of those unemployed to the employed exceeded 100, particularly for those with no formal education or primary education level. This phenomenon continued to the other end of education level, except for those in category "after standard 10", where men were in excess supply. In general, for both 2012 and 2013, the over-supply of skills in revealing in the lower education levels of no education, primary or junior secondary for both men and women.

Figure 11: The proportion of unemployed to employed by sex, 2013.

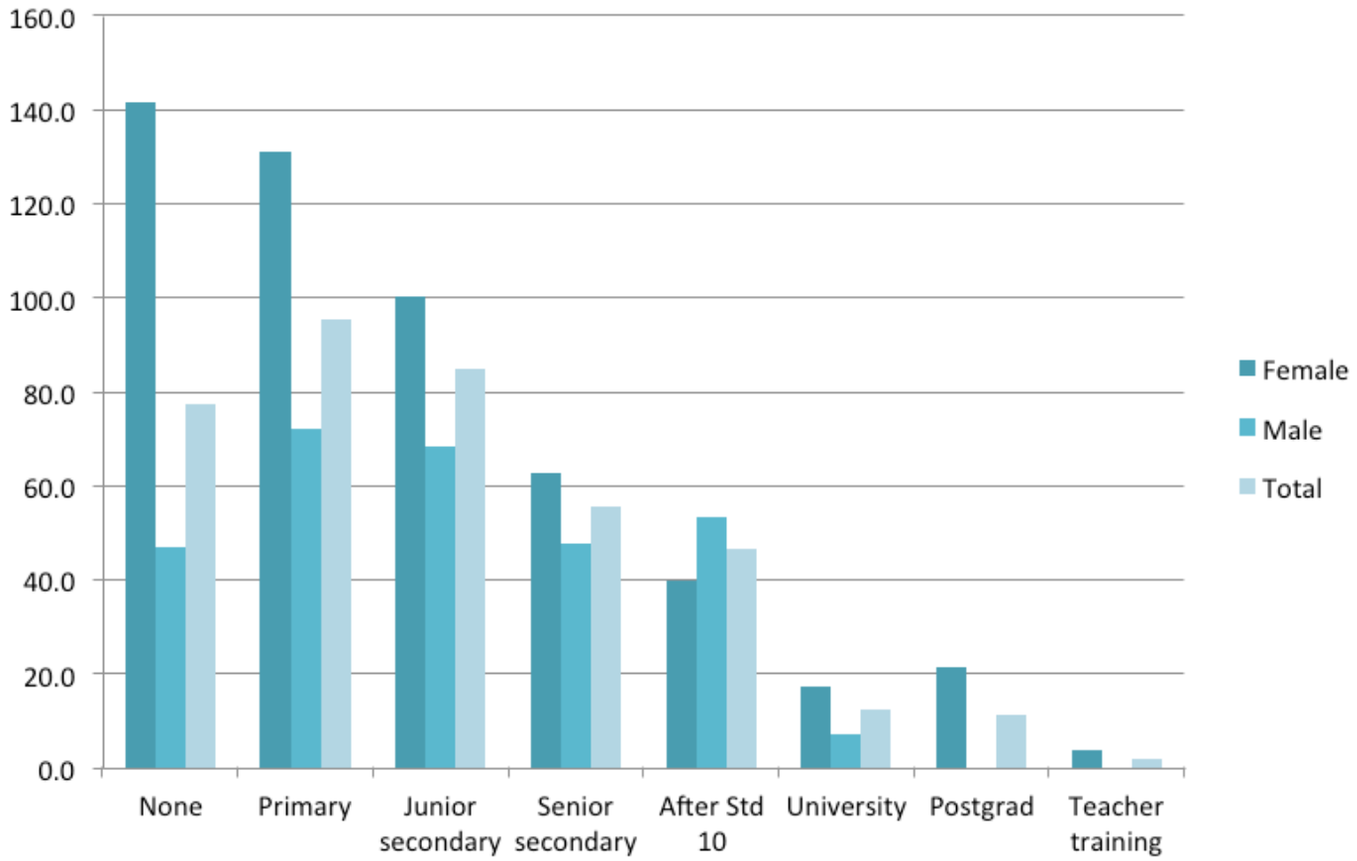
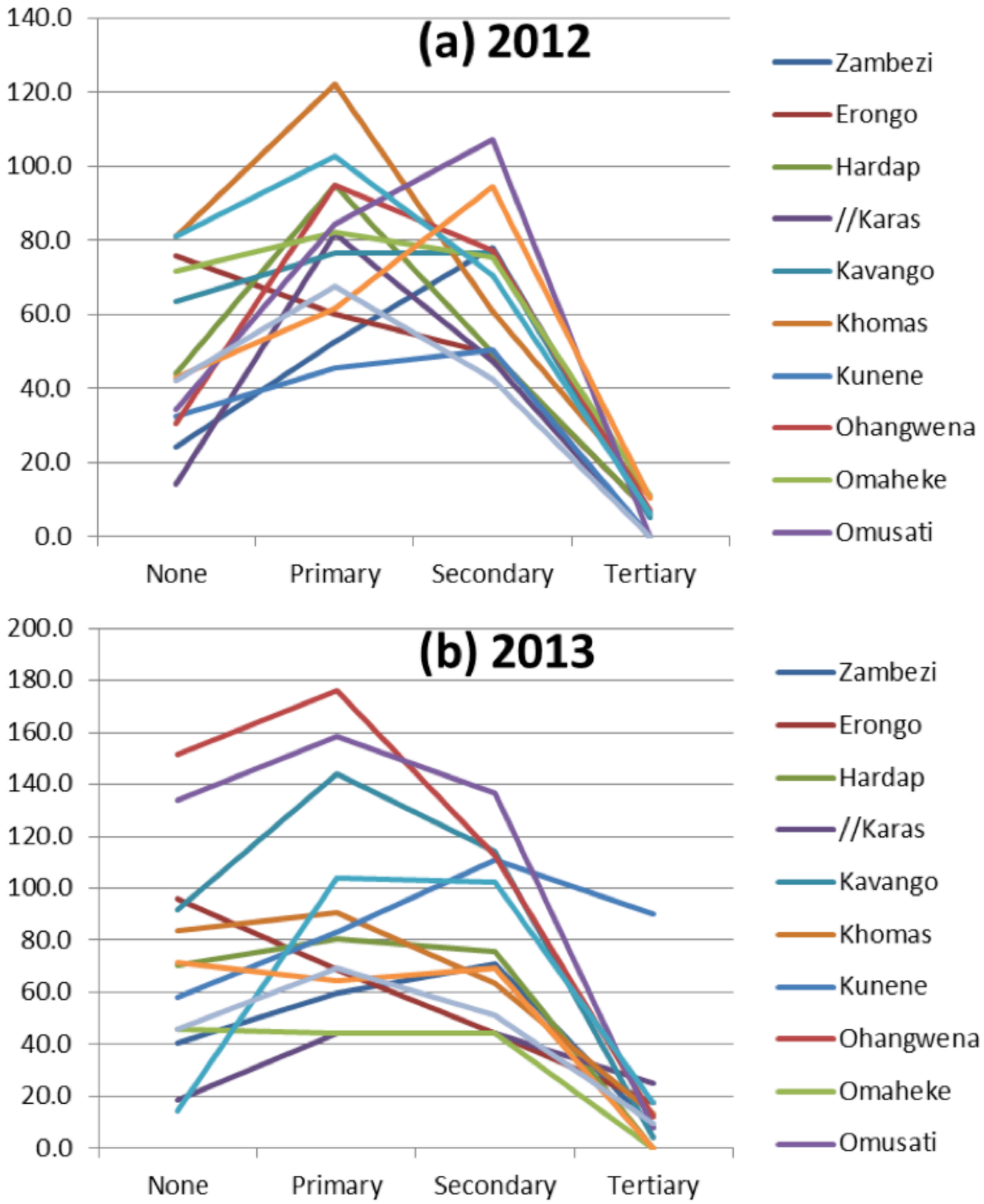


Figure 12 presents the PUE index across regions for the years 2012 and 2013, using broad education categories (none, primary, secondary and tertiary). Comparatively, all regions show relatively higher excess supply of skills in the categories of none, primary and secondary education level, compared to those in the tertiary level. In all cases an index of greater than 100 indicate excess supply of skills. Only few regions in 2012 (Figure 12a) showed excess supply, and include Khomas and Oshikoto regions in the primary group (PUE=122.2% and 102.7% respectively), and in Omusati region in the secondary education level (PUE=107.2%). This indicates that there were more employed people than the unemployed in all regions across all education levels. Notably, in the tertiary education group, the index was between 0 and 12%, suggesting than nearly all those with tertiary education were employed than not. For example in //Karas, Kunene, Omusati and Otjozondjupa, PUE was 0%, while Khomas and Oshana recorded at 10.9 and 11.2% respectively, in the tertiary category.

In 2013 (Figure 12b), excess supply increased in almost regions. In Ohangwena, Omusati, Oshikoto, Kavango and Kunene, PUE was in excess of 100%, meaning the unemployed excessed the employed. This was mostly among those with primary or secondary education level. In Kunene region, the proportion for those in the tertiary was about 90%. Only three regions (Omaheke, Oshana and Hardap) absorbed all with tertiary education into employment (with PUE=0%). Details on the PUE index all given in the appendix.

Figure 12: Proportion of unemployed to the employed across region in (a) 2012 and (b) 2013.



5.4. Variance of relative unemployment rate

The variance of relative unemployment rates (VARUR) is a measure similar to the coefficient of variation, however, VARUR uses the total unemployment or employment rate as the scaling factor. VARUR is expressed as

$$m_u = var\left(\frac{u_i}{u}\right)$$

where u_i is the unemployment rate for group i, while u is the total unemployment rate. Using a similar expression, one can compute an index of employment rate and compare the two indexes over time. As a coefficient of variation, higher values describe more scattered unemployment rates in that particular group than in the entire population, and therefore a bigger mismatch.

Figure 13 presents the VARUR index by sex and by year 2012 and 2013. In general the variance of relative employment rates is higher in 2013 than in 2012, this means that the unemployment rates by education level were likely to differ from the total unemployment rate in 2013 than in 2012. This pattern can be seen to be more pronounced among females in 2013, with a variance of 0.32 compared to a variance of 0.11 among men in the same year, while in 2012 the variance of women was estimated at 0.21. The huge disparity in women unemployment rate can be seen in Table 39, where the unemployment rate for females with no formal education is 42.0%, while for males is 25.7%, and at the other end of education level, the unemployment rate is 10.6% for those with university education for females, and their male counterparts register a rate of 4.5%, and similarly for females who attained postgraduate level have unemployment rate of 16.8 yet their male counterparts have a rate of 0.0%. These disparities lead to a higher value of VARUR for females in 2013.

Figure 13: Variance of relative unemployment rates, by sex and year

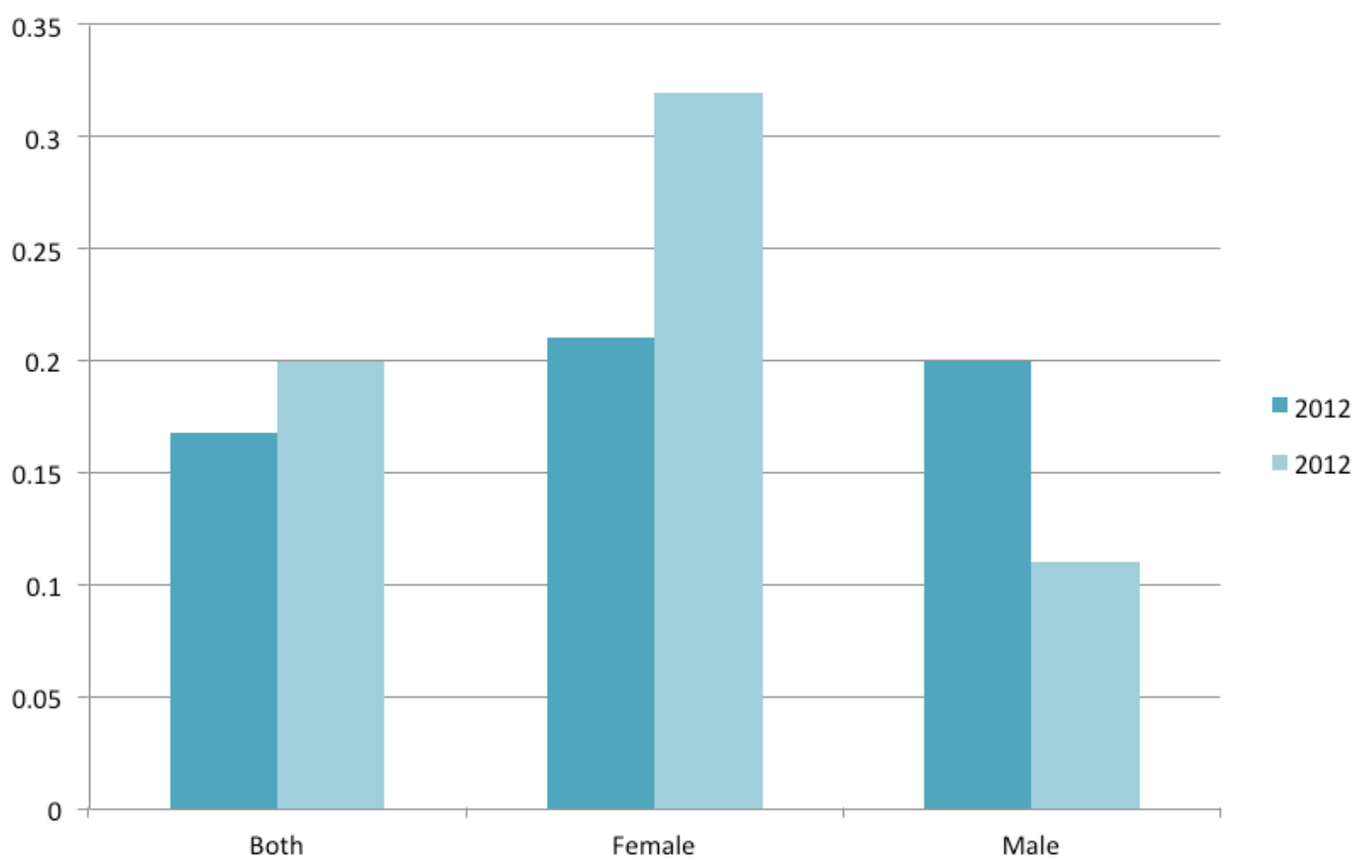


Figure 14: Variance of relative unemployment rates, by region and year

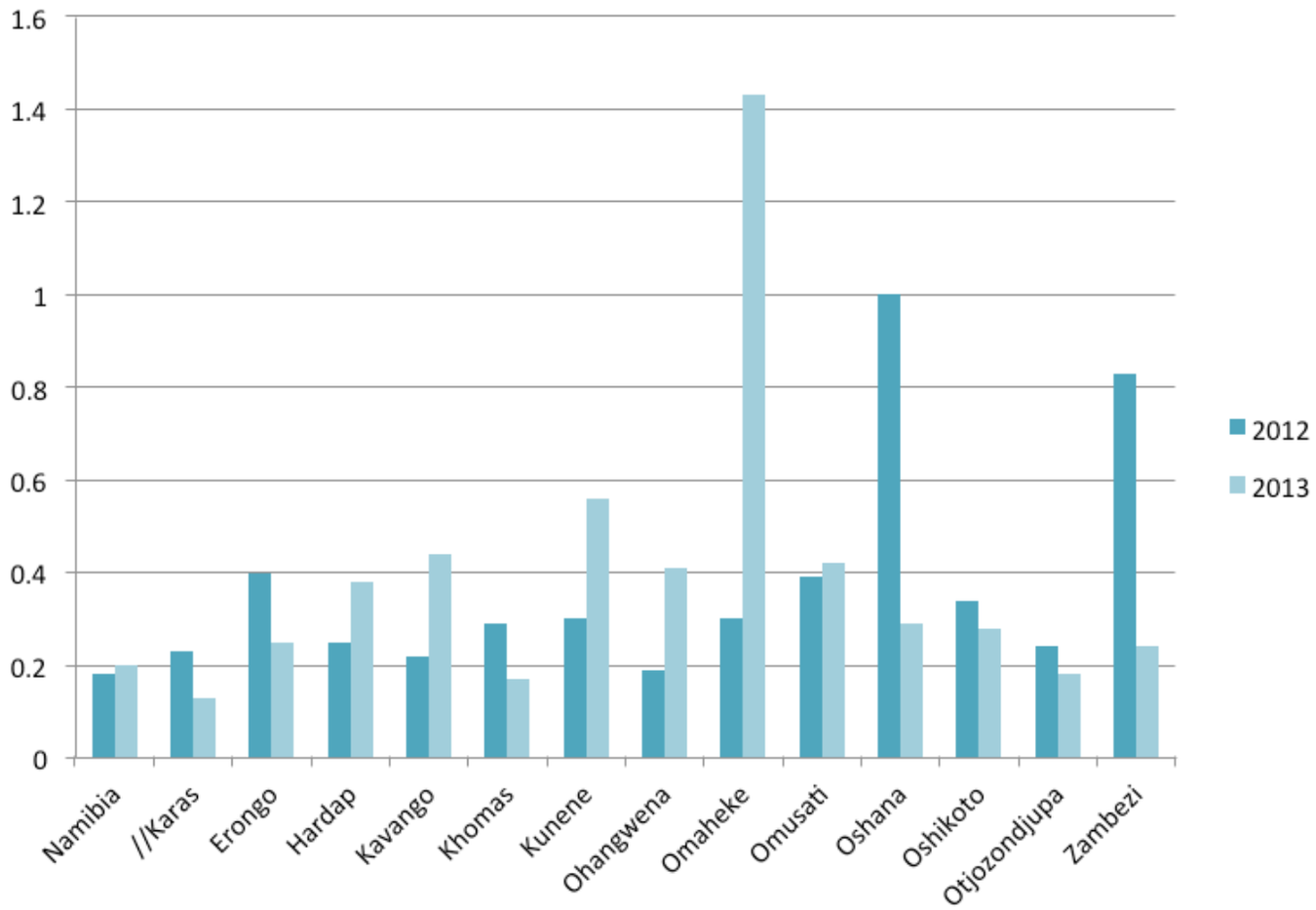


Figure 14 presents the variation in the variance by region and year. Overall the mismatch was relatively higher in 2013 compared to 2012. For most regions, the mismatch was below 0.30, in 2012, with only Oshana and Zambezi recording a mismatch of higher than 0.50. In 2013, six regions were estimated to have a mismatch of over or closer to 0.4. The highest disparity in unemployment rate was observed in Omaheke with a variance of 1.42, which compared to 2012 in the same region this is quite high.

5.5. Mismatch by Occupation

The mismatch by occupation compares people with a given education level working at an inappropriate skills level, measured by the broad occupation groups (high skilled non-manual, low-skilled non-manual, skilled manual and unskilled). Two measures, referred to as over-education and under-education are used. Over-education and under-education are defined, respectively, as having either more education or less education that is required. Table 38 provides a schematic presentation explaining how the two variables of under-education and over-education were derived. Workers in a particular group who have appropriate education level are said to be correctly or well matched. Accordingly, a university graduate working as low-skilled non-manual is over-educated, while a secondary school graduate working as an engineer is under-educated (ILO, 2015). When the incidence of over-education is high, it implies an over-supply of skilled workers, in other words, such individuals would simply pick-up a low-skills job on offer. On the other hand, under-education implies under-supply of skills, and workers are hired on jobs that require higher skills.

Table 38: Schematic presentation of skills mismatch by occupation (Green colour= Undereducation; Blue colour= Over-education; Gray colour= Correct matching)

Occupation level		Skills level (measured by education level)			
Major Groups	Broad groups	None	Primary	Secondary	Tertiary
Legislators, senior officials, managers	High-skilled non-manual	UNDER-EDUCATION[1]			Correct Matching
Professionals					
Technicians and associate professionals					
Clerks	Low-skilled non-manual	UNDER-EDUCATION		Correct Matching	Over-education
Service workers, shop, market sales workers					
Skilled agricultural and fishery workers	Skilled manual				
Craft and related trades workers					
Plant and machine operators and assemblers					
Elementary occupations	Unskilled	Correct Matching		Over-education	

Adapted: KILM 15, page 97- ILO (2015).[1] Mismatch by occupation is derived as follows: UNDER-EDUCATION-if education level is secondary or lower and current occupation is categories 1 to 3, OR, if education level is primary and none, while current occupation is in groups 4 to 8; OVER-EDUCATION- if current job is in category 4 to 8, and education level is tertiary, OR, if current occupation is 9 and the person has secondary or tertiary education.

Table 39 present the incidence of over and under-education by sex and region for the youth in 2012. Overall the incidence of over-education was 20.5%, with a relatively higher incidence in males (22.9%) than in female (18.2%). This difference varied across region. The highest incidence of over-education was observed in Erongo (35.0%), followed by //Karas (27.8%) and Otjozondjupa region (26.6%). The least incidence of over-education was in seen in Ohangwena (12.4%) and Kavango (13.0%). Compared between female and male, we observed that the most over-educated females were in Erongo (24.9%), followed by Oshana (24.6%) and Otjozondjupa (21.1%), whereas among males, over 40% of young men in Erongo were over-educated, followed by Karas (37.3%) and Hardap (32.5%).

Table 39: Incidence of over and under-education (%) by region, and sex in 2012

	Female				Male				Total			
Region	Over-educated	Correctly matched	Under-educated	Total	Over-educated	Correctly matched	Under-educated	Total	Over-educated	Correctly matched	Under-educated	Total
//Karas	19.3	65.3	15.4	12,013	37.3	55.1	7.6	10,662	27.8	60.5	11.7	22,675
Erongo	24.9	62.9	12.2	26,272	43.7	50.0	6.2	30,158	35.0	56.0	9.0	56,430
Hardap	18.2	70.7	11.1	12,770	32.5	57.5	10.0	15,202	26.0	63.5	10.5	27,972
Kavango	12.9	83.7	3.4	42,700	13.1	81.7	5.2	33,132	13.0	82.8	4.2	75,832
Khomas	16.7	73.7	9.7	89,200	26.7	65.2	8.2	92,693	21.8	69.3	8.9	181,893
Kunene	20.7	74.1	5.3	10,233	23.7	74.2	2.1	11,099	22.2	74.2	3.6	21,332
Ohangwena	14.4	83.2	2.4	39,122	10.0	89.2	0.7	32,572	12.4	86.0	1.6	71,694
Omaheke	11.8	79.5	8.7	9,300	20.4	76.6	3.0	10,653	16.4	78.0	5.7	19,953
Omusati	17.6	80.3	2.1	35,744	10.4	88.4	1.2	30,128	14.3	84.0	1.7	65,872
Oshana	24.6	70.7	4.6	38,170	20.2	77.0	2.8	30,246	22.7	73.5	3.8	68,416
Oshikoto	17.8	79.3	2.9	29,787	11.9	86.5	1.6	28,036	14.9	82.8	2.3	57,823
Otjozondjupa	21.1	67.3	11.6	23,476	31.4	62.6	6.0	26,497	26.6	64.8	8.6	49,973
Zambezi	18.2	75.1	6.6	18,397	25.1	72.4	2.5	15,545	24.2	72.7	3.1	33,942
Total	**18.2**	**75.1**	**6.6**	**387,184**	**22.9**	**72.2**	**4.9**	**366,623**	**20.5**	**73.7**	**5.8**	**753,807**

The incidence of under-education, as shown in Table 40, was 5.8%, with highest in //Karas (11.7%) and Hardap (10.5%) regions, and least in Ohangwena (1.6%) and Omusati (1.7%). With respect to sex, females had a relatively high incidence of under-education (6.6%) compared to males (4.9%), while within the regions, the highest incidence for females was recorded in //Karas, Erongo and Otjozondjupa, with 15.4%, 12.2% and 11.6% respectively. Among males, the highest incidence of under-education was in Hardap, Khomas and //Karas region, with 10.0%, 8.2% and 7.6% respectively.

Table 40 presents incidence of over- and under-education by region and sex in 2013. Looking at the incidence of over-education, we find a slightly different pattern to that obtained in 2012. The incidence is slightly lower (14.3%) compared to 2012 (20.5%), while under-education incidence was higher in 2013 (12.5%) as opposed to 2012 (5.8%). The difference in the incidence in over-education between females and males was 11.3% and 17.7% respectively, while for under-education was 15.1% for females and 9.6% for males. With regards to regional distribution, the total incidence of over-education was highest in Erongo (25.5%0 and //Karas (24.7%), while the least was obtained in Ohangwena and Kavango, with 7.9% and 8.3% respectively.

This pattern does not differ much when compared between females and males. For females, we observe that the highest incidence of over-education is recorded in Erongo (17.6%), while the least over-education is in Kavango (6.5%). Concerning under-education, the highest proportion is in Khomas (21.9%) and Erongo (21.2%), while the lowest incidence of under-education is in Omusati (6.7%) and Ohangwena (9.8%) respectively. Turning to males, //Karas and Erongo regions also reported higher incidence of over-education than the country incidence, with 35.4% and 33.3% respectively. The lowest incidence of over-education among males was in Omusati (5.8%) followed by Ohangwena (6.3%). The incidence of under-education was high in Khomas (15.5%), while the lowest incidence was reported in Omusati (2.5%), followed by Ohangwena (3.7%).

Table 40: Incidence of over and under-education (%) by region, and sex in 2013

	Female				Male				Total			
Region	Over-educated	Correctly matched	Under-educated	Total	Over-educated	Correctly matched	Under-educated	Total	Over-educated	Correctly matched	Under-educated	Total
//Karas	15.7	67.3	17.0	17,012	35.4	57.3	7.3	14,442	24.7	62.7	12.5	31,454
Erongo	17.6	61.1	21.2	31,461	33.3	52.3	14.4	31,882	25.5	56.7	17.8	63,343
Hardap	11.9	74.9	13.3	12,815	25.1	67.0	7.9	12,827	18.5	70.9	10.6	25,642
Kavango	6.5	82.3	11.3	43,955	10.6	82.7	6.7	34,650	8.3	82.5	9.2	78,605
Khomas	10.5	67.6	21.9	82,272	19.8	64.7	15.5	79,366	15.1	66.2	18.8	161,638
Kunene	8.7	76.7	14.5	15,546	11.4	78.0	10.6	12,878	10.0	77.3	12.7	28,424
Ohangwena	9.3	80.9	9.8	41,699	6.3	90.0	3.7	35,682	7.9	85.1	7.0	77,381
Omaheke	13.7	66.9	19.4	11,066	20.5	67.1	12.4	11,184	17.1	67.0	15.9	22,250
Omusati	12.0	81.3	6.7	39,112	5.8	91.6	2.5	30,706	9.3	85.9	4.9	69,818
Oshana	12.2	72.3	15.5	36,903	14.5	74.4	11.1	28,671	13.2	73.2	13.6	65,574
Oshikoto	12.4	75.6	11.9	28,872	15.0	78.3	6.7	30,001	13.7	77.0	9.3	58,873
Otjozondjupa	10.1	72.9	16.9	24,801	24.8	65.3	9.9	25,817	17.6	69.1	13.3	50,618
Zambezi	12.2	76.2	11.6	17,159	19.6	73.6	6.9	16,431	15.8	74.9	9.3	33,590
Total	**11.3**	**73.7**	**15.1**	**402,673**	**17.7**	**72.7**	**9.6**	**364,537**	**14.3**	**73.2**	**12.5**	**767,210**

To see how different variables jointly affect the probability of being overeducated as well as the probability of being undereducated compared to being correctly matched, we estimated a multinomial regression for each year. Regression models were estimated separately for females and males, and relative risk ratios (RRR) are presented.

Results for 2012 LFS data are shown in Table 41. Most variables affect over-education among female and male in a similar way. In urban areas, compared to rural areas, were more likely to have over-educated young females and males. The results also indicate that in urban areas, young females and males were likely to be under-educated. The magnitude of association, however, indicates that males were an increased risk of mismatch than females. The risk of being mismatched, i.e. both over- and under-educated, increased in //Karas for both female and male. In regions such as Zambezi, Erongo, Hardap, and Khomas, females were more likely to be overeducated. However, in some regions, females were less likely to be over-educated compared those in Otjozondjupa region.

Table 41: Probability of being over- and under-educated estimated with multinomial logit model, relative risk ratios (RRR), with base outcome of correctly matched, for 2012 LFS data.

	Female						Male					
	Overeducated			Undereducated			Overeducated			Undereducated		
Variable	RRR	95% CI		RRR	95% CI		RRR	95% CI		RRR	95% CI	
Place of residence												
Urban	1.41	1.34	1.47	2.97	2.80	3.15	3.11	3.00	3.23	4.45	4.19	4.72
Rural	1.00	.	.	1.00	.	.	1.00	.	.	1.00	.	.
Region												
Zambezi	1.82	1.61	2.06	0.79	0.69	0.91	1.31	1.21	1.42	0.70	0.61	0.81
Erongo	2.96	2.70	3.25	1.61	1.46	1.78	1.86	1.76	1.97	0.95	0.87	1.04
Hardap	1.23	1.11	1.36	0.73	0.65	0.82	1.83	1.71	1.96	3.45	3.13	3.80
Karas	2.20	1.96	2.46	1.82	1.62	2.05	3.16	2.91	3.44	2.68	2.38	3.01
Kavango	0.73	0.67	0.80	0.57	0.52	0.63	1.22	1.14	1.31	3.80	3.45	4.18
Khomas	1.07	1.00	1.15	0.66	0.61	0.72	1.18	1.12	1.24	1.46	1.36	1.57
Kunene	1.09	0.97	1.23	0.55	0.47	0.63	0.78	0.73	0.84	0.57	0.49	0.66
Ohangwena	1.01	0.92	1.11	0.68	0.61	0.77	1.36	1.25	1.47	0.84	0.72	0.98
Omaheke	0.46	0.41	0.52	0.69	0.60	0.79	0.67	0.62	0.72	0.47	0.41	0.54
Omusati	1.01	0.92	1.11	0.58	0.52	0.66	0.97	0.90	1.05	1.33	1.16	1.52
Oshana	1.08	0.99	1.17	0.45	0.41	0.50	1.49	1.40	1.60	1.38	1.24	1.53
Oshikoto	0.66	0.60	0.72	0.59	0.53	0.67	0.78	0.72	0.83	1.01	0.89	1.14
Otjozondjupa	1.00	.	.	1.00	.	.	1.00	.	.	1.00	.	.
Employment sector												
Formal sector	0.78	0.75	0.81	7.11	6.65	7.60	1.52	1.46	1.57	4.37	4.01	4.77
Informal	.	.	.	1.00	.	.	1.00	.	.	1.00	.	.
Type of contract												
Limited	0.70	0.66	0.74	0.81	0.75	0.87	1.20	1.15	1.26	3.42	3.19	3.67
Permanent	0.47	0.45	0.49	0.91	0.86	0.96	0.94	0.91	0.97	3.12	2.96	3.29
Unspecified	1.00	.	.	1.00	.	.	1.00	.	.	1.00	.	.
Age group (years)												
15-19	0.61	0.56	0.67	1.10	0.98	1.23	0.45	0.42	0.48	0.32	0.29	0.36
20-24	1.02	0.97	1.07	1.51	1.43	1.60	1.35	1.30	1.40	1.46	1.38	1.54
25-29	0.93	0.89	0.97	1.24	1.18	1.30	1.03	0.99	1.06	0.83	0.79	0.87
30-34	1.00	.	.	1.00	.	.	1.00	.	.	1.00	.	.
Marital status												
Never married	1.84	1.75	1.93	2.02	1.91	2.14	1.41	1.36	1.47	1.52	1.43	1.61
Married	0.70	0.65	0.74	1.16	1.08	1.24	1.19	1.13	1.26	2.91	2.70	3.13
Others	1.00	.	.	1.00	.	.	1.00	.	.	1.00	.	.

These regions include Kavango, Omaheke, and Oshikoto. Among males, there was an increased risk of over-education in most regions, except for Kunene, Omaheke and Oshikoto. With regards to the under-education, the risk was lower in all regions, except in Erongo. However, the pattern of association of under-education and region was reversed among males. For males, seven of the thirteen regions (Hardap, Karas, Kavango, Khomas, Omusati, Oshana, and Oshikoto) showed an increased risk of under-education.

In Table 42, results also show that females were less likely to be over-educated when employed in the formal sector, but are 7.11 times more likely to be under-educated. For males, the risk of under-education is much higher than that of over-education (RRR=4.37 and 1.52 respectively). Having a limited or permanent contract, as opposed to unspecified contract was associated with a decreased risk of mismatch for females. On the other hand, for males, the risk of over-education increased for those in limited contract, but decreased for those in permanent contract, yet, for under-education the risk increased regardless of whether one has a limited or permanent contact compared to unspecified contract.

The risk of mismatch for both female and male showed a U-shaped nonlinear pattern with age. For over-education for females, for example, was low in 15-19 age-group then rises to 1.02 in the age group 20-24, and dropped again to 0.93 in the age 25 to 29. With regards to under-education in the same female cohort, although the risk was high, it was also highest in the age group of 20-24. In males, the risk of mismatch was lower for the age group of 15-19 years, but rises sharply in the immediate age band of 20-24, with RRR=1.35 for over-education, and RRR=1.46 for under-education, then drops in the age range of 25-29 years. A more stable family situation, as indicated by being married, is associated with a lower probability of over-education, but a higher probability of under-education among females, but a higher risk of mismatch (this is both over-education and under-education) for males regardless of marital status.

Table 42 gives regression coefficients of risk of mismatch for 2013 study group. The probability of mismatching was higher for both female and male in urban areas compared to rural areas. Being in Zambezi, Kavango, Khomas, Kunene, Ohangwena, Omaheke, Omusati, Oshana, and Oshikoto compared to Otjozondjupa decreased the risk of being over-educated for females, but increased the risk of under-education for the same group. For males, on the other hand, the risk of mismatch increased for those males in Zambezi, Erongo, Hardap, Karas, and Oshikoto, with opposite probabilities of over-education and under-education for Kavango, Khomas, Kunene, Omaheke, Omusati and Oshana regions.

With regards to being in formal sector of employment relative to informal sector, the risk of over-education was lower for females but higher for males, while the risk of under-education was high for both groups. Having a permanent contract relative to having an unspecified contract reduced the risk of over-education and under-education for females, but for males, this applied for over-education only. However, the risk of under-education increased with males holding a permanent contract. A limited duration contract was associated with higher probability of over-education for females and males, but a lower risk of under-education for both groups.

Generally, the risk of mismatch was much lower for those at the lowest age (15-19 years), compared to those at 30-34 years. Mismatch of over-education was persistently lower for females, nevertheless, the pattern shows an increasing trend with increased age. On under-education for females, the risk was higher for those aged 20-24 and 25-29 years compared to those at age 30-34 years. For males, the risk was equally higher but showed a U-shaped pattern for both indicators of mismatch. Being married also showed a decreased risk of mismatch for females, but only so for over-education among males. The never married females were more likely to be over-educated (RRR=1.33) and under-educated (RRR=1.33). This association is seen in under-educated males only (RRR=1.11), but reversed for over-education for the same cohort (RRR=0.88).

Table 42: Probability of being over- and under-educated estimated with multinomial logit model, relative risk ratios (RRR), with base outcome of correctly matched, for 2013 LFS data.

	Female						Male					
	Overeducated			Undereducated			Overeducated			Undereducated		
Variable	RRR	95% CI		RRR	95% CI		RRR	95% CI		RRR	95% CI	
Place of residence												
Urban	2.15	2.04	2.27	4.67	4.45	4.89	2.52	2.43	2.62	3.70	3.53	3.88
Rural	1.00	.	.	1.00	.	.	1.00	.	1.00	.	.	.
Region												
Zambezi	0.48	0.43	0.55	1.08	0.97	1.21	1.01	0.93	1.11	2.12	1.91	2.36
Erongo	1.74	1.59	1.91	1.04	0.96	1.14	1.79	1.69	1.90	1.38	1.28	1.48
Hardap	0.99	0.88	1.12	1.25	1.11	1.40	1.44	1.34	1.54	1.15	1.04	1.28
Karas	1.46	1.33	1.60	1.24	1.14	1.36	2.17	2.03	2.33	1.05	0.95	1.15
Kavango	0.39	0.34	0.44	2.32	2.09	2.56	0.92	0.85	1.00	2.69	2.45	2.94
Khomas	0.64	0.59	0.69	0.85	0.79	0.92	0.58	0.55	0.61	0.92	0.86	0.98
Kunene	0.68	0.60	0.77	1.77	1.59	1.97	0.55	0.50	0.60	1.84	1.67	2.02
Ohangwena	0.52	0.46	0.59	2.88	2.59	3.20	0.99	0.91	1.08	1.76	1.59	1.95
Omaheke	0.39	0.35	0.44	0.81	0.74	0.90	0.54	0.50	0.58	1.48	1.35	1.62
Omusati	0.56	0.51	0.62	1.55	1.40	1.71	0.73	0.66	0.80	1.24	1.09	1.40
Oshana	0.67	0.61	0.74	1.25	1.14	1.36	0.93	0.86	0.99	2.07	1.91	2.25
Oshikoto	0.87	0.78	0.97	2.16	1.95	2.38	1.30	1.22	1.38	1.80	1.65	1.95
Otjozondjupa	1.00	.	.	1.00	.	.	1.00	.	.	1.00	.	.
Employment sector												
Formal sector	0.35	0.34	0.37	2.60	2.48	2.73	1.71	1.65	1.77	5.88	5.55	6.22
Informal	1.00	.	.	1.00	.	.	1.00	.	.	1.00	.	.
Type of contract												
Limited	1.19	1.12	1.27	0.58	0.55	0.62	1.49	1.43	1.56	0.99	0.94	1.05
Permanent	0.56	0.54	0.59	0.61	0.58	0.63	0.91	0.88	0.94	1.69	1.62	1.75
Unspecified	1.00	.	.	1.00	.	.	1.00	.	.	1.00	.	.
Age group (years)												
15-19	0.27	0.24	0.30	0.60	0.54	0.66	0.51	0.48	0.55	0.32	0.29	0.36
20-24	0.69	0.66	0.73	1.26	1.20	1.32	1.49	1.44	1.55	1.51	1.44	1.58
25-29	0.86	0.82	0.90	1.27	1.22	1.33	1.14	1.10	1.18	1.11	1.07	1.16
30-34	1.00	.	.	1.00	.	.	1.00	.	.	1.00	.	.
Marital status												
Never married	1.31	1.23	1.38	1.33	1.26	1.40	0.88	0.85	0.92	1.11	1.06	1.17
Married	0.71	0.67	0.77	0.74	0.70	0.79	0.71	0.67	0.76	1.10	1.03	1.17
Others	1.00	.	.	1.00	.	.	1.00	.	.	1.00	.	.

5.6. Relative wages by education level

This method simply compares the wages for each education level over time, with a base year established as the first year of the series. An education level that seems to attract a higher income than that in other education categories is considered to have a higher demand in the labour market. An average wage is used to measure the demand level. An additional approach is to use a regression model to quantify the coefficient of association between average wage and education level attain, controlling for other factors including sex, location, occupation, type of contract and type of organization.

Figure 15 presents the average wage with education level for 2012 and 2013. Accordingly, higher wages are in the tertiary category (University, postgraduate and teacher training) than in the lower levels. The highest was registered in the teacher training category in 2012, while in 2013 this was in the group with postgraduate training. As shown, the wage in the postgraduate group was about 25,000 more than that earned by those in other education groups. It can be argued, therefore, that this group is in higher demand on the labour market, and since this is the group within a higher education level, there is no apparent mismatch.

Figure 15: Average wages (N$) and education levels for 2012 and 2013

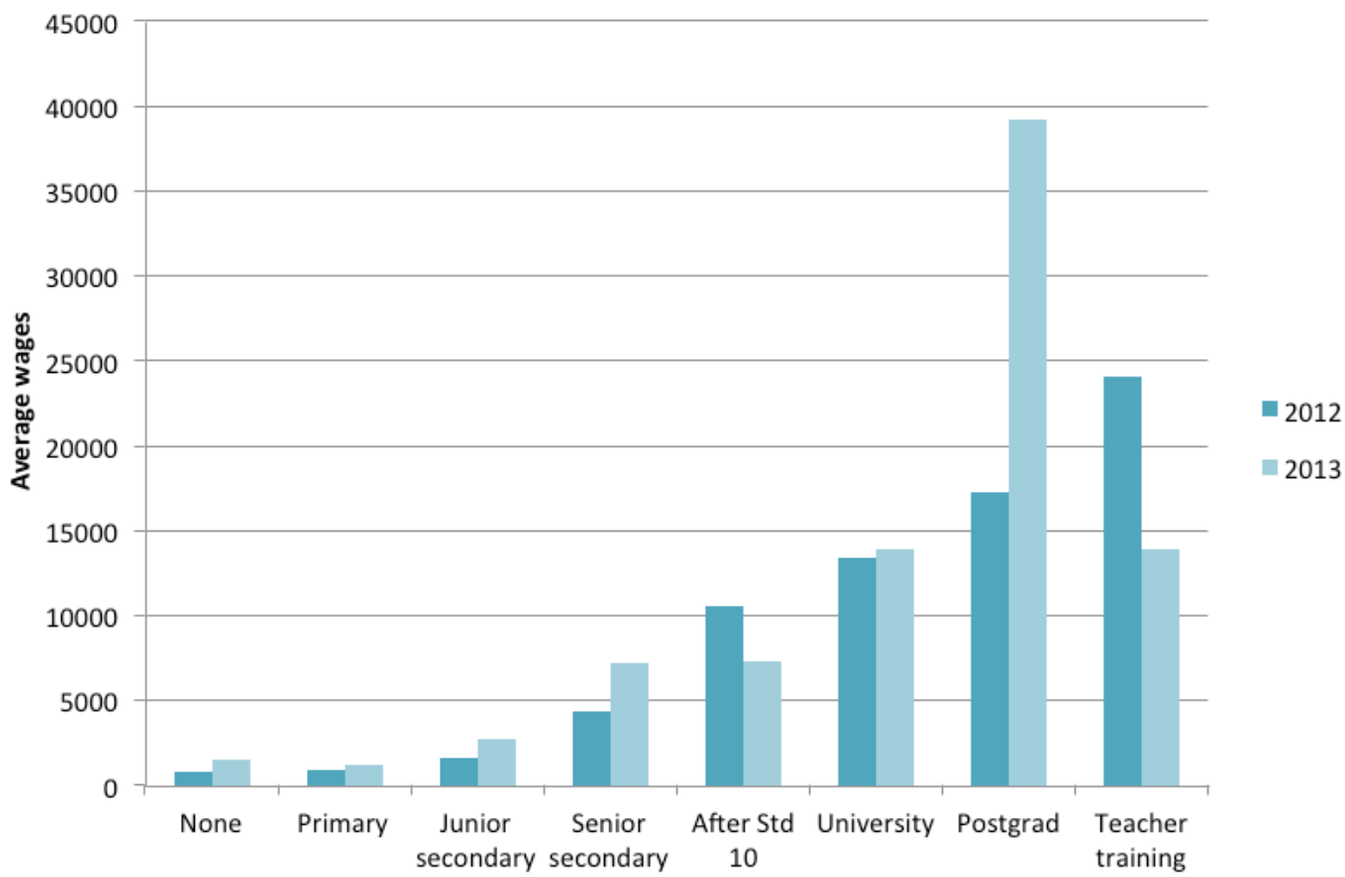


Table 43 shows results of an ordinary least squares (OLS) models fitted on wages as a response and using education level as an explanatory variable (in Model 1), and adjusted by different control variables in Model 2. In 2012, Model 1, shows that earnings increased with increasing level of education, and this effects remained after adjusting for other factors. A similar pattern of association is observed in 2013. For example, being of tertiary education, earns 2.7 times more wages than those without any formal education in 2012, while in 2013, those with tertiary education earned 2.44 times more wages compared to those with no education. Similarly those with secondary education earned better wages than those without with 0.47 times in 2012 and 0.84 in 2013.

Having adjusted for educational mismatch, occupational level and place of residence, the education level coefficients showed a stable pattern of association. Table 43, further shows that over-education penalizes wages earned (i.e., those with higher education are paid less than what they are worth for the fact that they are occupying a lower job), while under-educated fare better in their jobs with regards to wages (i.e, these are paid more for the fact that they are occupying a higher job), when both groups are compared to those who are correctly matched on their job and education levels. This is clearly measured by a negative coefficient for over-education and positive coefficient for under-education.

The penalty of over-education was more pronounced in 2012 (coefficient=-1.314) compared to 2013 (coefficient= -0.118). With regards to occupation levels, we observe that the unskilled, skilled manual earned a better wage than those who were of high skilled non-manual in 2012, but this association was reversed in 2013. In additional, Table 43, reveal that being in urban areas, offered better average wages than those in rural areas.

In conclusion, it can be emphasized that education mismatch has a negative consequence on wages. Higher levels of education than that required in their jobs (overeducated workers) face a wage penalty; to the contrary, the undereducated workers are earning higher wages than adequately educated workers.

Table 43: Parameter estimates of wages in an OLS equation with education level as explanatory variable adjusting for different control variables for 2012 and 2013 LFS data.

	Year 2012				Year 2013			
	OLS Model 1		OLS Model 2		OLS Model 1		OLS Model 2	
Variable	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error	Coefficient	Std. Error
Education level								
None			REF				REF	
Primary	-0.837	0.035	-0.49	0.029	-0.003	0.009	-0.022	0.008
Secondary	0.472	0.03	1.03	0.051	0.84	0.008	0.561	0.012
Tertiary	2.716	0.038	7.03	0.053	2.448	0.01	2.079	0.02
Educational mismatch								
Undereducated			5.546	0.035			0.587	0.018
Overeducated			-1.314	0.049			-0.118	0.012
Correctly matched			REF				REF	
Occupation level								
Unskilled			6.831	0.044			-0.678	0.02
Skilled manual			6.197	0.044			-0.049	0.02
Low skilled non-manual			0.355	0.025			-0.895	0.006
High skilled non-manual			REF				REF	
Place of residence								
Urban			0.606	0.014			0.433	0.004
Rural			REF				REF	
Model Selection								
Adjusted R^2	0.23		0.58		0.56		0.67	
F-test	10716.76		4324.27		32893.28		20307.12	

6.1. Summaries

The findings of this study can be summarized in three domains:

6.1.1. Patterns of Youth Employment:

- Having high school education or higher; being married; or being of aged 30-34 years; and living in urban areas promoted youth employment.
- The incidence of employment in the vulnerable sectors of the economy is growing (32% in 2012 and 54.7% in 2013).
- About half of the youth were employed in the informal sectors for both years (2012 and 2013).
- Transitions from spells of unemployment are uneven, with more youth absorbed into employment within a year, after leaving school or in between jobs.

6.1.2. Causes of youth unemployment:

Youth unemployment is systemic, and is highly correlated with education level, and gender. It shows location (rural versus urban and regional) disparities and manifests elements of skills mismatch.

- Unemployment and inactivity are more likely to occur among youths in rural areas; younger youths 15 – 19 years of age, and among the youth with no education or of primary education.
- Persistent high levels of unemployment among female youth, with high occurrence on almost all indicators: unemployment duration; long-term unemployment, first and repeat unemployment, NEET and unemployment index.

6.1.3. Skills Mismatch

- Incidence of over-education and under-education is evident in Namibia, with 14% in 2013 and 20.5% in 2012, while under-education was slightly higher in both years.
- The likelihood of mismatch by occupation was higher in males, but under-education was relatively high in females.
- Educational mismatch has a negative consequences / impacts on wages. There was a wage penalty for those over-educated as opposed to those under-educated.
- With regards to permanent jobs, it is evident that companies are correctly matching jobs with education level.
- Considering the coefficient of variation and proportion of the unemployed to that employed, there was an over-supply of youths possessing certain skills – between 2012 and 2013, with unemployed male youth having an education profile different from that of employed population, while the mismatch among female may be attributed to job searching behaviour.

In summary, it has been observed that, in all indicators of skills mismatch, there is strong evidence of labour market mismatch in Namibia. Therefore:

- The empirical analysis suggests that over-education is a sign of market failure or structural macroeconomic bottlenecks in the economy.
- If over-education is an investment in future earning power, mismatch can be considered as temporary and may not require policy interventions, or else,
- Policy makers should focus on reducing the incidence of over-education which reduces workers' welfare and in the long run harms the employers' interests. At the same time focus on under-education and regional disparities in skills, wages and education.

6.2. Policy Recommendations for Tackling Youth Employment and Unemployment

Throughout the study there has been one common trait, and that is, youth unemployment rates in Namibia are alarmingly high. Although there has been a decrease in 2014 the number still remains high. Given this, there is a need to identify and propose policies that can help do away with the lack of effective policy interventions. Policy factors play an important role in determining unemployment rates (Scarpetta 1996) and further address labour market policies with the aim of facilitating entry into the labour market. This study has revealed that policy recommendations will help address structural changes in the current labour market. This could be a way to lessen the imbalance between demand and supply of young workers if they possess skills that speak to the labour market demands.

6.2.1. Recommended Policies

General Labour market reforms have seen employment opportunities for the young people affected by structural changes in the labour market. Entries to the labour market for young people have disappeared without being replaced with other entries. There is a need to look into existing policies that address the structural changes in the current labour market and re work them in a way that they are in line with the current changes in the labour system. Young people are no longer transitioning easily from school to the world of work hence proper guidelines for transition need to be in place.

Firstly, policies that deal with education need to be revisited. This study identified that many young people lack a sound educational background to make them appealing to the labour market. The no re-admission policy by the Ministry of Education needs to be re-looked. Many young people are affected by this policy because they do not complete their high school studies which in most cases is the first level needed to enter the labour market, therefore, making them less desirable to the employers.

Secondly, schools can be encouraged to develop curriculums that are relevant for tasks where the employment prospects are good for example Elementary which has seen as increase in employment rates from 23.8% in 2012 and 25.1% in 2013 and other areas such as skilled agriculture, services and sales, craft and trade which have recorded to have higher employment rates than other areas.. This could be a way to lessen the imbalance between demand and supply of young workers if they possess skills that speak to labour market demands. This would require that a steering committee be developed and tasked with drafting a document that provides proper guidelines for schools on how to develop curriculums that are in-line with the changing labour market. That way the education system will be governed by policies that help facilitating easier entry into the labour market and hopefully lessen skills mismatch.

Development of policies around youth opportunity that caters for school goers and leavers is crucial, and funds should be appropriated for such a program. data will have to be generated in order to determine on who attends these programs, what are opportunities are out there for these youth, do they have skills that are in demand if not what can be done to address this.

Creating incentives for public-private partnerships to benefit young unemployed people for example a voluntary mentorship scheme. The changes in the labour market have made employers reluctant to take on school leavers as they lack experience and can be seen as an expense or liability. Therefore if policies are put in place that offer some sort of benefits for potential employers, they (employers) could be more willing to benefit the unemployed youth.

Development of targeted policies to increase the demand and supply of labour for young workers should be promoted. Firstly develop or revise current school drop-out prevention policies by offering the young people more programs that lead to employment. For example develop apprentice systems; they are the most effective targeted measure to keep down youth unemployment in the long run. If students can be engaged in vocational training at work places when they are not in school this could help with the transition from school to work. For this to work it means that with close cooperation between schools, workplaces, local employers' organization and unions is highly needed for this apprentice system.

There could be a development of a Namibian Charter for Quality Internships and Apprenticeship that solely deals with this matter of internships and apprenticeships as educational opportunities that give skills to young people.[2] This will clearly state the conditions of internships and apprenticeships, the quality and code of conduct.

[*if such plans are already in place maybe expand and revise the existing programs to see where the gap is.]

The existing policies on redistribution of resources need to be closely re-examined. High levels of youth unemployment also contribute to poverty and social exclusion.

Gender policies that address issues affecting male and female youth when it comes to employment and unemployment should be strongly revised. As the findings of this study show, females have a higher rate of unemployment than men. There should be a policy where every female child must go to school, because some households cannot afford to send all their children to school. Namibian organizations, churches, unions, employers and government need to promote free education for every single child. Promoting the inclusion of the girl child into the education system from grass root level.

Although education credentials are important in securing jobs, education alone is not sufficient meet to the skills required.

Entrepreneurship in Namibia – Incentives should be provided to private sectors or SMEs that promote student internship; encourage employers to introduce and expand quality internship programs that offer experience and translate into skills for job search methods.

Insertion of orientation programme /work placement schemes – poorly integrated new entrants in job markets often have qualifications but not necessary skills, thus the need for programmes to address making the transition from education to work place

Vocational training in school curricula – strengthen the role and effectiveness of vocational training education. Private sector should own/shape the Vocational training curricula. For example Vocational Education and Training (VET) and Namibia Training Authority (NTA) are effectively providing this service, and it has been successful and therefore this service of vocational training must continue to be enforced as it has generated good results in trying to address the skills mismatch in the country.

The Employment Creation Policy 2013/14-2016/17 was released in 2013 but it seems that the policy is slow to take off the ground. There is need to see this policy being effectively used for the timeframe it was designed for therefore all concerned stakeholders need to start implementing the policy and providing results of this.

[2]*See Policy on Unemployment. Adopted at the Council of Members Brussels, Belgium, 19-20 April*

APPENDIX

In section A, we report on the model used to analyze the employment and employment indicators, while section B and C provides summary tables for further employment and unemployment related indicators.

A. Regression Models Used

Four type of regression models were used to analyse various employment and unemployment indicators. The models are: (i) the ordinary least squares (OLS) regression; (ii) binary logistic regression; (iii) multinomial logistic regression; and (iv) ordinal (cumulative) logistic regression. In all models, the regression model is of the form:

$$Y = \beta_0 + \beta_1 X_1 + \ldots + \beta_k X_k$$

where Y is the response (outcome) indicator, and $\beta_i, i=0,1,\ldots,k$ are regression coefficients associated with explanatory variables $X_i, i=1,2\ldots,k$. Some of the explanatory variables are continuous (metrical), e.g., income; whereas others are categorical with two levels (e.g. sex and place of residence-rural or urban) or more levels (e.g. region, education, marital status). When modeling the effect of a categorical variable, one level is selected as a reference category. For instance, one may estimate the effect of being male and this category is compared to being female. Similarly, when modeling region, we have selected Otjozondjupa region as the reference, against which other region estimates are compared. The continuous variable is estimated along the same reasoning, however, the comparison is made against is a mean value of that variable.

Table A1 gives a summary of the regression models applied, the corresponding indicators analysed and the section, as well as the Table where the model results are reported.

Table A1: Summary of models used

Model type	Indicator	Measurement	Results Section	Results Table
Ordinary least squares regression	Relative wage	Continuous variable (N$)	Section 5.3	Table 43
Binary logistic regression	Youth employment status	1=employed, 0=otherwise	Section 3.2.2	Tables 16 & 17
	Long-term unemployment	1= without a job for 6 months or more, 0=otherwise	Section 4.5	Table 22
	First and repeat unemployment	Being unemployed for first time for 6 or more months/ or such an occurrence within 12 months	Section 4.6	Tables 23 &24
	NEET	1=Being a NEET, 0=otherwise	Section 4.7	Table 35
	Time-related under-employment	1=working hours less than 35 hrs/ week; 0=otherwise	Section 4.8	Table 36
	Unemployment index	=1 to define persistent and severe unemployment and 0=intermittent unemployment or none.	Section 4.9	Table 37
Ordinal logistic regression	Duration/spell of employment	Ordinal (< 1yr, 1-2 yrs, 3-5 yrs, 6-10 yrs)	Section 3.2.3	Table 18
	Duration of unemployment	Ordinal (<1 month, 1-3 months, 4-6 months, 7-12 months, 1- 2 years, >2 years)	Section 4.4	Table 21
Multinomial logistic regression	Unemployment occurrence	Multinomial (unemployed, not economically active, employed)	Section 4.3	Table 19 & 20
	Mismatch by occupation	Multinomial (0= correctly matched, 1=under-educated, 2=over-education	Section 5.5	Tables 41 and 42

B. Summary Tables for Various Indicators of Youth Employment

Table B1: Youth employment to population ratio (YEPR), by sex, area and level of completed education, 2012

		Urban			Rural			Total	
Education	Female	Male	Total	Female	Male	Total	Female	Male	Total
None	25.0	52.6	42.6	39.7	64.9	53.8	35.9	60.9	50.5
Primary	22.3	29.9	26.5	22.4	29.0	26.0	22.4	29.3	26.2
Junior secondary	33.8	43.5	38.3	28.2	30.2	29.1	31.3	38.0	34.3
Senior secondary	39.8	52.5	45.9	39.4	44.9	41.8	39.7	51.0	45.0
After Std 10	56.1	61.5	59.2	50.4	76.6	70.7	55.7	64.3	60.8
University	62.8	68.2	65.3	73.7	91.7	79.8	64.2	70.1	66.9
Postgrad	91.0	91.9	91.6	0.0	0.0	0.0	91.0	91.9	91.6
Teacher training	95.3	94.6	95.1	91.6	92.9	92.2	93.9	93.8	93.8
Don't know	61.9	68.8	66.9	15.5	45.7	34.1	28.8	54.8	45.7
Total	**36.7**	**46.7**	**41.6**	**29.5**	**35.6**	**32.4**	**33.5**	**41.9**	**37.6**

Table B2: Youth employed by industry, by sex and by year

	YEAR 2012				YEAR 2013		
	Sex		Total		Sex		Total
	Female	Male			Female	Male	
Agriculture, forestry and fishing	23851	36326	60177		24566	40054	64620
Mining and quarrying	894	5106	6000		1427	5257	6684
Manufacturing	4336	9714	14050		5187	10572	15759
Electricity, gas, steam and air conditioning supply	587	783	1370		219	641	860
Water supply; sewerage, waste management and remediation activities'	249	741	990		337	787	1124
Construction	1654	22199	23853		2322	24583	26905
Wholesale and retail trade; repair of motor vehicles and motorcycles	21625	19847	41472		27880	12646	40526
Transportation and storage	1043	8301	9344		1693	8895	10588
Accommodation and food service activities	16361	6536	22897		14802	4797	19599
Information and communication	1235	2179	3414		813	1770	2583
Financial and insurance activities	4098	2500	6598		6423	2941	9364
Real estate activities	294	56	350		90	33	123
Professional, scientific and technical activities	1578	1871	3449		2175	1325	3500
Administrative and support service activities	6540	8953	15493		8504	11589	20093
Public administration and defence; compulsory social security	4854	8630	13484		4916	6931	11847
Education	9234	4604	13838		9377	5179	14556
Human health and social work activities	4430	3043	7473		3728	1648	5376
Arts, entertainment and recreation	670	914	1584		1461	626	2087
Other service activities	3131	2396	5527		5067	3525	8592
Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	23137	9006	32143		19607	7067	26674
Activities of extraterritorial organizations and bodies	161	38	199		267	0	267
Total	**129962**	**153743**	**283705**		**140861**	**150866**	**291727**

Table B3: Youth employed by employment type, sex and year

	Year 2012			Year 2013		
Employment type	Female	Male	Total	Female	Male	Total
Subsistence With Employees	0	926	926	553	542	1095
Subsistence No Employees	13890	8236	22126	14197	6959	21156
Other Employer	3801	5241	9042	1791	2199	3990
Other Own Account	16995	12149	29144	18473	10485	28958
Domestic Worker	18435	5827	24262	14756	6843	21599
Other Employee	67808	112679	180487	85348	117556	202904
Unpaid Family Subsist	4777	6006	10783	4349	4820	9169
Unpaid Family Other	3897	2154	6051	2084	2118	4202
Other	297	403	700	119	221	340
Dont Know	116	124	240	287	295	582
Total	**130016**	**153745**	**283761**	**141957**	**152038**	**293995**

Table B4: Youth employed by employment sector, sex and year

	Year 2012				Year 2013		
Employment Sector	Female	Male	Total		Female	Male	Total
Not Filled	**31511**	**25018**	**56529**		**14999**	**13056**	**28055**
Government	14722	14658	29380		4189	8001	12190
Parastatal	4092	6175	10267		52012	62546	114558
Formal Private	37891	62995	100886		6706	9797	16503
Informal Private	10570	13119	23689		573	0	573
Non Profit	836	622	1458		294	523	817
Cooperative	1098	1254	2352		4802	12688	17490
Private HH Farm	8359	20304	28663		3573	11927	15500
Private HH Not Farm	19783	8693	28476		12802	5372	18174
Other	553	732	1285		154	202	356
Dont Know	601	174	775		0	286	286
Total	**130016**	**153744**	**283760**		**100104**	**124398**	**224502**

Table B5: Type of contract, by employment sector, 2012

	Type of Contract		
Employment sector	Limited Duration	Permanent	Unspecified Duration	Total
Government	2183	25283	1397	28972
Parastatal	909	7172	2087	10168
Formal Private	16264	52223	27380	97064
Informal Private	2275	3428	11360	17498
Non Profit	487	550	329	1391
Cooperative	350	1011	731	2092
Private HH Farm	1751	6695	14841	24221
Private HH Not Farm	1977	6827	14274	23906
Other	127	81	205	413
Dont Know	0	131	607	738
Total	**27761**	**105755**	**76698**	**216356**

Table B6: Type of contract, by employment sector, 2013

	Type of contract				
Employment Sector	Limited Duration	Permanent	Unspecified Duration	Unknown	Total
Government	3483	22670	1524	378	28055
Parastatal	1964	7616	2570	40	12190
FormalPrivate	18186	64635	30205	1531	114557
InformalPrivate	1999	4409	9699	395	16502
NonProfit	287	249	38	0	574
Cooperative	328	200	289	0	817
PrivateHHSubsist	636	2727	13084	1043	17490
PrivateHHCommFarm	2354	5081	7723	342	15500
PrivateHHNotFarm	1694	4898	11024	559	18175
Other	0	49	307	0	356
DontKnow	0	0	286	0	286
Total	**30931**	**112534**	**76749**	**4288**	**224502**

Table B7: Time Related Under-employment, 2012

		Female			Male			Both sexes	
	Under-employed	%Youth employed	% all employed	Under-employed	%Youth employed	% all employed	Under-employed	%Youth employed	% all employed
Subsistence With Employees	0	-	0	32	3.5	1.0	32	3.5	0.8
Subsistence No Employees	6884	49.6	11.8	3102	37.7	8.3	9986	45.1	10.4
Other Employer	415	10.9	4.4	312	6.0	1.9	727	8.0	2.8
Other Own Account	3922	23.1	9.3	1938	16.0	7.1	5860	20.1	8.5
Domestic Worker	4237	23.0	11.9	1982	34.0	18.0	6219	25.6	13.3
Other Employee	6123	9.0	4.6	7159	6.4	3.3	13282	7.4	3.8
Unpaid Family Subsist	1907	39.9	17.4	1983	33.0	17.9	3890	36.1	17.6
Unpaid Family Other	1734	44.5	16.5	1153	53.5	23.6	2887	47.7	18.8
Other	68	16.5	6.6	63	12.0	4.1	131	13.9	5.1
Total	25290	19.5	8.4	17724	11.5	5.4	43014	15.2	6.8

Table B8: Time Related Under-employment, 2013

		Female			Male		Both Sexes		
	Under-employed	% Total Youth employed	% all employed	Under-employed	% Total Youth employed	% All employed	Under-employed	%Youth employed	% All employed
Subsistence With Employees	234	42.3	10.0	212	39.1	6.6	446	40.7	8.0
Subsistence No Employees	8825	62.2	10.8	3330	47.9	7.8	12155	57.5	9.8
Other Employer	158	8.8	2.9	264	12.0	2.4	422	10.6	2.6
Other Own Account	3961	21.4	8.6	2096	20.0	8.4	6057	20.9	8.5
Domestic Worker	3800	25.8	14.0	2226	32.5	20.1	6026	27.9	15.8
Other Employee	5523	6.5	3.4	5771	4.9	2.4	11294	5.6	2.8
Unpaid Family Subsist	2685	61.7	18.1	1810	37.5	17.2	4495	49.0	17.7
Unpaid Family Other	698	33.5	15.6	1000	47.2	30.0	1698	40.4	21.7
Other	79	19.5	6.1	52	10.1	4.3	131	14.2	5.2
Total	**25963**	**18.3**	**7.5**	**16761**	**11.0**	**4.8**	**42724**	**14.5**	**6.2**

Table B9: Average wages of employees by age group, type of employee and year

		Year 2012			Year 2013	
Age group	Domestic Worker	Others	Total	Domestic Worker	Others	Total
15-19	396	667	631	457	8,181	6,058
20-24	650	2,250	2,111	719	3,990	3,649
25-29	941	4,286	3,909	1,283	6,145	5,784
30-34	873	6,030	5,507	858	5,932	5,435
Total	**806**	**4,044**	**3,708**	**895**	**5,571**	**5,115**

Table B10: Average Wages by Industry, Sex and Year

		Year 2012			Year 2013	
Industry in current main job	Female	Male	Total	Female	Male	Total
Agriculture, forestry and fishing	1,107	940	975	1,839	1,271	1,374
Mining and quarrying	8,778	9,547	9,432	8,716	8,214	8,316
Manufacturing	4,743	3,715	3,991	3,417	4,490	4,135
Electricity, gas, steam and air conditioning supply	2,802	4,934	4,059	2,816	5,585	4,842
Water supply; sewerage, waste management and remediation activities'	1,049	1,932	1,742	1,347	1,834	1,674
Construction	1,617	2,403	2,348	2,524	4,554	4,362
Wholesale and retail trade; repair of motor vehicles and motorcycles	1,776	3,303	2,482	5,846	10,437	7,517
Transportation and storage	6,518	3,996	4,260	6,152	3,398	3,905
Accommodation and food service activities	1,548	2,301	1,795	5,775	2,165	4,750
Information and communication	11,971	9,146	10,085	13,759	13,898	13,853
Financial and insurance activities	7,114	9,239	7,925	10,947	9,899	10,627
Real estate activities	3,231	700	2,826	5,000	-	5,000
Professional, scientific and technical activities	9,796	9,034	9,375	11,790	27,382	17,506
Administrative and support service activities	3,084	2,124	2,513	3,594	2,702	3,094
Public administration and defence; compulsory social security	8,158	7,107	7,480	5,964	6,830	6,475
Education	14,076	10,580	12,896	6,704	20,932	11,640
Human health and social work activities	7,089	7,693	7,338	8,994	7,121	8,383
Arts, entertainment and recreation	2,659	2,257	2,412	2,273	21,978	7,640
Other service activities	1,766	2,482	2,095	2,669	3,328	2,983
Private households	756	992	819	958	852	931
Extrateritorial organizations and bodies	6,310	600	5,229	4,795	-	4,795
Total	**3,850**	**3,605**	**3,711**	**4,972**	**5,253**	**5,127**

C. Summary Tables for Various Indicators of Youth Unemployment

Table C1: Youth unemployment by Area, Sex and Year

		Year 2012			Year 2013	
Area	Number youth unemployed	Labour force	Unemployment rate	Number youth unemployed	Labour force	Unemployment rate
Namibia	**172,222**	**753,806**	**22.8**	**210074**	**767,214**	**27.4**
Urban	103,081	424,653	24.3	107622	396,664	27.1
Rural	69,141	329,153	21.0	102452	370,550	27.6
Sex						
Female	100,906	387,180	26.1	124518	402,675	30.9
Male	71,317	366,626	19.5	85556	364,539	23.5

Table C2: Youth unemployed population and unemployment rate by sex and area, 2012

		Female			Male			Both sexes	
Area	Number youth unemployed	Youth labour force	Rate	Number youth unemployed	Youth labour force	Rate	Number youth unemployed	Youth labour force	Rate
Namibia	**100906**	**387180**	**26.1**	**71317**	**366626**	**19.5**	**172223**	**753806**	**22.8**
Urban	59910	217203	27.6	43172	207451	20.8	103082	424654	24.3
Rural	40996	169977	24.1	28145	159175	17.7	69141	329152	21.0
//Karas	3147	12012	26.2	1660	10663	15.6	4807	22675	21.2
Erongo	8324	26271	31.7	5697	30159	18.9	14021	56430	24.8
Hardap	4066	12771	31.8	3030	15203	19.9	7096	27974	25.4
Kavango	10068	42700	23.6	6440	33132	19.4	16508	75832	21.8
Khomas	21992	89200	24.7	19197	92693	20.7	41189	181893	22.6
Kunene	2813	10231	27.5	2208	11100	19.9	5021	21331	23.5
Ohangwena	6891	39122	17.6	4915	32571	15.1	11806	71693	16.5
Omaheke	3793	9300	40.8	2169	10653	20.4	5962	19953	29.9
Omusati	8803	35743	24.6	6187	30128	20.5	14990	65871	22.8
Oshana	9083	38169	23.8	6914	30246	22.9	15997	68415	23.4
Oshikoto	8250	29787	27.7	5332	28037	19.0	13582	57824	23.5
Otjozondjupa	7986	23476	34.0	4457	26497	16.8	12443	49973	24.9
Zambezi	5690	18397	30.9	3112	15545	20.0	8802	33942	25.9

Table C3: Youth unemployed population and unemployment rate by sex and area, 2013

		Female			Male			Both sexes	
Area	Number youth unemployed	Youth labour force	Rate	Number youth unemployed	Youth labour force	Rate	Number youth unemployed	Youth labour force	Rate
Namibia	**124518**	**402675**	**30.9**	**85556**	**364540**	**23.5**	**210074**	**767215**	**27.4**
Urban	64780	211353	30.7	42842	185312	23.1	107622	396665	27.1
Rural	59738	191322	31.2	42714	179228	23.8	102452	370550	27.6
//Karas	4153	17012	24.4	2513	14443	17.4	6666	31455	21.2
Erongo	9535	31460	30.3	5950	31883	18.7	15485	63343	24.4
Hardap	4690	12815	36.6	3604	12826	28.1	8294	25641	32.3
Kavango	14698	43955	33.4	10964	34650	31.6	25662	78605	32.6
Khomas	24398	82272	29.7	18008	79366	22.7	42406	161638	26.2
Kunene	7304	15546	47.0	3635	12878	28.2	10939	28424	38.5
Ohangwena	11229	41699	26.9	9404	35683	26.4	20633	77382	26.7
Omaheke	3599	11066	32.5	1635	11184	14.6	5234	22250	23.5
Omusati	11337	39113	29.0	9057	30706	29.5	20394	69819	29.2
Oshana	12443	36904	33.7	8303	28671	29.0	20746	65575	31.6
Oshikoto	7770	28872	26.9	5529	30001	18.4	13299	58873	22.6
Otjozondjupa	8269	24802	33.3	4095	25817	15.9	12364	50619	24.4
Zambezi	5093	17159	29.7	2858	16431	17.4	7951	33590	23.7

Table C4: Unemployed youth by sex and educational level by year, 2012

		Female			Male			Both sexes	
Education level	Number youth unemployed	Youth labour force	Rate %	Number youth unemployed	Youth labour force	Rate %	Number youth unemployed	Youth labour force	Rate %
None	5024	16161	31.1	4156	22642	18.4	9180	38803	23.7
Primary	17898	78748	22.7	18038	95099	19.0	35936	173847	20.7
Junior secondary	51333	176343	29.1	30044	142066	21.1	81377	318409	25.6
Senior secondary	25186	95448	26.4	17183	84516	20.3	42369	179964	23.5
After Std 10	178	1449	12.3	179	2154	8.3	357	3603	9.9
University	821	12537	6.5	850	10602	8.0	1671	23139	7.2
Postgrad	0	835	0.0	49	1526	3.2	49	2361	2.1
Teacher training	0	2848	0.0	62	1852	3.3	62	4700	1.3
Don't know	233	1006	23.2	236	1870	12.6	469	2876	16.3
Total	**100673**	**385375**	**26.1**	**70797**	**362327**	**19.5**	**171470**	**747702**	**22.9**

Table C5: Unemployed youth population and youth unemployment rate by sex and education level, 2013

		Female			Male			Both sexes	
Education level	Number youth unemployed	Youth labour force	Rate %	Number youth unemployed	Youth labour force	Rate %	Number youth unemployed	Youth labour force	Rate %
None	9740	23125	42.1	6912	26934	25.7	16652	50059	33.3
Primary	26147	86378	30.3	21924	97578	22.5	48071	183956	26.1
Junior secondary	60825	184183	33.0	37468	144074	26.0	98293	328257	29.9
Senior secondary	24385	83761	29.1	17317	71992	24.1	41702	155753	26.8
After Std 10	816	3593	22.7	1027	3615	28.4	1843	7208	25.6
University	1951	18397	10.6	771	17088	4.5	2722	35485	7.7
Postgrad	194	1154	16.8	0	978	0.0	194	2132	9.1
Teacher training	43	1248	3.4	0	1127	0.0	43	2375	1.8
Don't know	417	838	49.8	136	1151	11.8	553	1989	27.8
Total	**124518**	**402677**	**30.9**	**85555**	**364537**	**23.5**	**210073**	**767214**	**27.4**

Table C6: Youth unemployment by age groups and sex

C6.1: Youth unemployed population and unemployment rate by sex and age group 2012

		Female			Male			Both sexes	
Age group	Number youth unemployed	Youth labour force	Rate %	Number youth unemployed	Youth labour force	Rate %	Number youth unemployed	Youth labour force	Rate %
15-19	13974	118468	11.8	8884	115449	7.7	22858	233917	9.8
20-24	38783	105848	36.6	29134	100383	29.0	67917	206231	32.9
25-29	29180	88552	33.0	20507	81737	25.1	49687	170289	29.2
30-34	18969	74312	25.5	12791	69057	18.5	31760	143369	22.2
Total	**100906**	**387180**	**26.1**	**71316**	**366626**	**19.5**	**172222**	**753806**	**22.8**

C6.2: Youth unemployed population and unemployment rate by sex and age group 2013

		Female			Male			Both sexes	
Age-group	Number youth unemployed	Youth labour force	Rate %	Number youth unemployed	Youth labour force	Rate %	Number youth unemployed	Youth labour force	Rate %
15-19	16393	108480	15.1	13511	105548	12.8	29904	214028	14.0
20-24	48545	114533	42.4	32659	103401	31.6	81204	217934	37.3
25-29	34650	96187	36.0	22378	81670	27.4	57028	177857	32.1
30-34	24930	83475	29.9	17008	73920	23.0	41938	157395	26.6
Total	**124518**	**402675**	**30.9**	**85556**	**364539**	**23.5**	**210074**	**767214**	**27.4**

Table C7: Unemployed youth, by sex and length of time without work

C7.1: Unemployed youth, by sex and length of time without work, 2012

	Female		Male		Total	
Duration	Number	%	Number	%	Number	%
< 6 Months	10542	51.5	9922	48.5	20464	100
6 Months < 1 Year	10648	64.2	5931	35.8	16579	100
1 Year < 2 Years	21089	58.4	15011	41.6	36100	100
2 Years and more	60125	57.5	44498	42.5	104623	100
Total	**91862**	**58.4**	**65440**	**41.6**	**157302**	**100**

C7.2: Unemployed youth, by sex and length of time without work, 2013

	Female		Male		Total	
Duration	Number	%	Number	%	Number	%
< 6 Months	12492	51.8	11604	48.2	24096	100
6 Months < 1 Year	10971	61.0	7000	39.0	17971	100
1 Year < 2 Years	23374	57.6	17217	42.4	40591	100
2 Years and more	74908	61.0	47828	39.0	122736	100
Total	**109253**	**60.3**	**72045**	**39.7**	**181298**	**100**

Table C8: Unemployed youth, by area and length of time without work, 2012

	Length of Time Without Work									
	< 6 Months	6 Months to < 1 Year	1 Year to < 2 Years	2 Years and more	Total	< 6 Months	6 Months to < 1 Year	1 Year to < 2 Years	2 Years and more	Total
Area		Number					Percentage			
Namibia	**20464**	**16579**	**36101**	**104624**	**177768**	**11.5**	**9.3**	**20.3**	**58.9**	**100.0**
Urban	14683	10369	23482	59640	108174	13.6	9.6	21.7	55.1	100.0
Rural	5781	6210	12619	44984	69594	8.3				
//Karas	883	807	1409	2198	5297	16.7	15.2	26.6	41.5	100.0
Erongo	1586	2022	3787	6834	14229	11.1	14.2	26.6	48.0	100.0
Hardap	1406	1312	1769	2793	7280	19.3	18.0	24.3	38.4	100.0
Kavango	1662	1266	2924	10012	15864	10.5	8.0	18.4	63.1	100.0
Khomas	6854	3797	9062	26597	46310	14.8	8.2	19.6	57.4	100.0
Kunene	447	362	1046	3097	4952	9.0	7.3	21.1	62.5	100.0
Ohangwena	1518	707	1364	8128	11717	13.0	6.0	11.6	69.4	100.0
Omaheke	690	571	1863	2628	5752	12.0	9.9	32.4	45.7	100.0
Omusati	926	1265	3067	11513	16771	5.5	7.5	18.3	68.6	100.0
Oshana	1152	902	3363	10253	15670	7.4	5.8	21.5	65.4	100.0
Oshikoto	679	1544	2348	8326	12897	5.3	12.0	18.2	64.6	100.0
Otjozondjupa	1734	751	2312	6989	11786	14.7	6.4	19.6	59.3	100.0
Zambezi	928	1272	1787	5257	9244	10.0	13.8	19.3	56.9	100.0

Table C9: Unemployed youth, by area and length of time without work, 2013

	Length of Time Without Work									
	< 6 Months	6 Months < 1 Year	1 Year < 2 Years	2 Years and more	Total	< 6 Months	6 Months < 1 Year	1 Year < 2 Years	2 Years and more	
Area		Number					Percentage			Total
Namibia	**24097**	**17971**	**40590**	**122736**	**205394**	**13.6**	**8.7**	**19.8**	**59.8**	**100**
Urban	15294	10918	21395	57944	105551	14.1	10.3	20.3	54.9	100
Rural	8803	7053	19195	64792	99843	12.6	7.1	19.2	64.9	100
//Karas	1582	565	1831	2651	6629	29.9	8.5	27.6	40.0	100
Erongo	2389	2078	3211	7535	15213	16.8	13.7	21.1	49.5	100
Hardap	2390	946	2325	2598	8259	32.8	11.5	28.2	31.5	100
Kavango	3169	1659	4498	15895	25221	20.0	6.6	17.8	63.0	100
Khomas	4899	5007	8333	23026	41265	10.6	12.1	20.2	55.8	100
Kunene	1085	330	1254	8140	10809	21.9	3.1	11.6	75.3	100
Ohangwena	1625	2121	3224	13298	20268	13.9	10.5	15.9	65.6	100
Omaheke	731	674	1196	2579	5180	12.7	13.0	23.1	49.8	100
Omusati	2002	1272	3852	12604	19730	11.9	6.4	19.5	63.9	100
Oshana	1038	1266	4238	13501	20043	6.6	6.3	21.1	67.4	100
Oshikoto	847	973	2401	8628	12849	6.6	7.6	18.7	67.1	100
Otjozondjupa	1456	519	2851	7360	12186	12.4	4.3	23.4	60.4	100
Zambezi	880	561	1377	4921	7739	9.5	7.2	17.8	63.6	100

Table C10: Unemployed youth, by education level and length of time without work, 2012

	Length of Time Without Work									
	< 6 Months	6 Months < 1 Year	1 Year < 2 Years	2 Years and more	Total	< 6 Months	6 Months < 1 Year	1 Year < 2 Years	2 Years and more	
Education level		Number					Percentage			Total
None	954	417	2047	5281	8699	11.0	4.8	23.5	60.7	100.0
Primary	4109	2525	6413	23328	36375	11.3	6.9	17.6	64.1	100.0
Junior secondary	10259	8051	17282	48342	83934	12.2	9.6	20.6	57.6	100.0
Senior secondary	4762	5034	9926	24487	44209	10.8	11.4	22.5	55.4	100.0
After Std 10	131	0	0	191	322	40.7	0.0	0.0	59.3	100.0
University	248	554	220	1563	2585	9.6	21.4	8.5	60.5	100.0
Postgrad	0	0	0	124	124	0.0	0.0	0.0	100.0	100.0
Teacher training	0	0	62	0	62	0.0	0.0	100.0	0.0	100.0
Don't know	0	0	64	626	690	0.0	0.0	9.3	90.7	100.0
Total	**20463**	**16581**	**36014**	**103942**	**177000**	**11.6**	**9.4**	**20.3**	**58.7**	**100.0**

Table C11: Unemployed youth, by education level and length of time without work, 2013

	Length of Time Without Work									
	< 6 Months	6 Months < 1 Year	1 Year < 2 Years	2 Years and more	Total	< 6 Months	6 Months < 1 Year	1 Year < 2 Years	2 Years and more	
Education level		Number					Percentage			Total
None	1248	1005	1724	12360	16337	7.6	6.2	10.6	75.7	100
Primary	5343	3683	7793	30459	47278	11.3	7.8	16.5	64.4	100
Junior secondary	12196	7798	19664	55855	95513	12.8	8.2	20.6	58.5	100
Senior secondary	4374	4897	10534	21107	40912	10.7	12.0	25.7	51.6	100
After Std 10	364	0	231	1247	1842	19.8	0.0	12.5	67.7	100
University	489	588	520	1127	2724	18.0	21.6	19.1	41.4	100
Postgrad	58	0	0	136	194	29.9	0.0	0.0	70.1	100
Teacher training	0	0	0	43	43	0.0	0.0	0.0	100.0	100
Don't know	26	0	124	403	553	4.7	0.0	22.4	72.9	100
Total	**20463**	**16581**	**36014**	**103942**	**177000**	**11.6**	**9.4**	**20.3**	**58.7**	**100**

Table C12: Proportion of unemployed to employed, across region, for 2012 and 2013.

Year 2012													
Education level	Zambezi	Erongo	Hardap	//Karas	Kavango	Khomas	Kunene	Ohangwena	Omaheke	Omusati	Oshikoto	Oshana	Otjozondjupa
None	24.2	75.6	43.9	14.3	63.6	80.9	32.3	30.6	71.6	34.3	81.0	42.9	42.0
Primary	52.5	59.9	95.0	81.7	76.5	122.2	45.4	94.7	82.2	84.6	102.7	61.7	67.6
Secondary	78.2	49.1	49.8	47.5	76.5	61.0	50.3	77.2	75.2	107.2	70.6	94.6	42.5
Tertiary	6.4	6.3	6.1	0.0	5.1	10.9	0.0	6.9	11.2	0.0	6.4	10.6	0.0

Year 2013													
	Zambezi	Erongo	Hardap	//Karas	Kavango	Khomas	Kunene	Ohangwena	Omaheke	Omusati	Oshikoto	Oshana	Otjozondjupa
None	40.3	95.9	70.1	18.7	91.6	83.7	58.0	151.6	45.6	134.1	14.3	71.6	45.7
Primary	59.6	68.9	80.6	44.4	143.8	90.7	83.3	176.1	44.5	158.6	104.1	64.7	69.3
Secondary	70.9	44.4	75.5	43.9	113.9	63.3	111.1	112.7	44.1	136.7	102.6	69.3	51.0
Tertiary	7.9	17.3	0.0	25.1	4.3	13.0	90.0	12.0	0.0	7.9	17.7	0.0	9.3

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