

**AN INVESTIGATION INTO THE EFFECTS OF FISCAL POLICY ON THE  
QUALITY OF PRIMARY AND SECONDARY EDUCATION IN KHOMAS REGION  
GOVERNMENT SCHOOLS**

**A THESIS SUBMITTED IN PARTIAL FULFILMENT**

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## ABSTRACT

The adoption of Sustainable Developmental Goals, culminated in the adoption of radical measures to increase enrolment, survival rates and minimising dropout rates for both primary and secondary primary education. The rise in educational demands is associated with increase in government expenditure. However, government either adopts contractionary or expansionary fiscal measures to stimulate growth in the economy. The extent to which fiscal policy changes impacts the quality of education (enrolment rates, dropout rates, pass rates and survival rates) was investigated in this study. The study investigated the nature and magnitude of the relationship between government spending, (as measured by yearly expenditure on operational, capital projects and teachers' deployment expenses) and the quality of education in Khomas Region public schools. The study adopted a correlational research design to test the strength of the relationship between quality of education and government spending. Data was collected through questionnaires and also obtained from empirical secondary data sources. An OLS regression model was used to test the relationship between government spending and education quality using the SPSS. The research found out there is a strong positive correlation between government expenditure and the quality of education. It was found that any one unit increase in the government expenditure has a corresponding increase in the quality of education. The study concluded that government should increase per capita educational expenditure to maintain a high quality of education because fiscal policy significantly affects the quality of education.

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OLS

Ordinary Least Square

PRO

Public Relations Officer

PSC

Public Service Commission

UNESCO

United Nations Educational, Scientific and Cultural  
Organisation

UNISA

University of Namibia

SDG

Sustainable Development Goals

SPSS

Statistical Package for Social Sciences

## ABBREVIATIONS

|        |   |
|--------|---|
| AIDS   | Acquired Immunodeficiency Syndrome                                  |
| BoN    | Bank of Namibia   |
| DAC    | Development Assistance Committee                                    |
| DNEA   | Directorate of National Examinations and Assessments                |
| ECM    | Error Correction Model  |
| EDI    | Education for All Development Index                                 |
| ETSIP  | Education and Training Sector Improvement Programme                 |
| GDP    | Gross Domestic Product  |
| HIV    | Human Immunodeficiency Virus  |
| MoEAC  | Ministry of Education Arts and Culture                              |
| NSA    | Namibia Statistics Agency   |
| OECD   | Organisation for Economic Cooperation and Development               |
| OLS    | Ordinary Least Squares  |
| PRO    | Public Relations Officer  |
| PSC    | Public Service Commission   |
| UNESCO | United Nations Educational, Scientific and Cultural<br>Organisation |
| UNAM   | University of Namibia   |
| SDGs   | Sustainable Development Goals                                       |
| SPSS   | Statistical Package for Social Sciences                             |

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May God bestow His blessings upon them.

## DEDICATION

This dissertation is dedicated to my beloved parents Mr and Mrs. Nangolo, my husband Mr Ephraim, my kids Rachel, Martha Homateni and Phillemon, my brothers and my sisters who have always been pillars of strength in my tireless endeavors especially in personal development.

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## DECLARATION

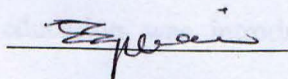
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## CHAPTER 1

### INTRODUCTION

#### 1.1 Introduction

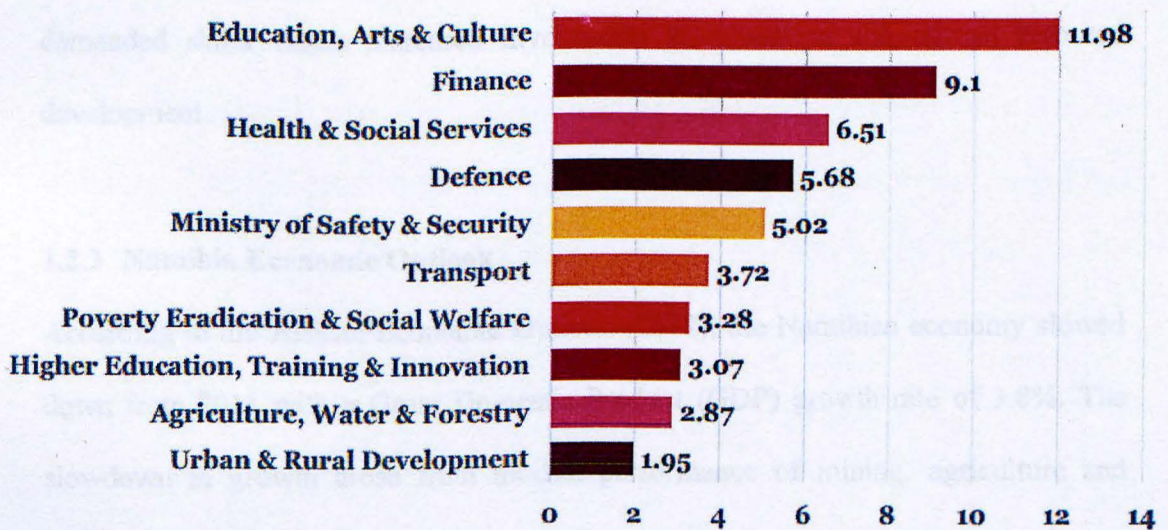
This chapter explores the background of the study, outlining the problem statement, research objectives as well as the significance of the study. The chapter explains the limitations and delimitations the researcher dealt with in conducting the research.

#### 1.2 Background of the study

##### 1.2.1 Namibia Education Sector

In his doctoral thesis on quality and equity in Namibia, Hailombe (2011), stated that prior to independence in 1990, schooling in the country was a privilege of the few whites and was never considered a right for every child mainly indigenous pupils. However, those that accessed it received inferior education. Under South African rule the education system was divided along ethnic and racial lines. Racial discrimination extended to the divisive and institutionalised distribution of education resources (MEC, 1993). At independence in 1990, the apartheid education system was substituted by a new all-encompassing education system where equity and quality education became the foundation. According to Hailombe (2011), compulsory education was introduced and visible signs of improvement were noticed. The government, through the Ministry of Education, worked diligently to ensure education for all through construction of more schools, recruitment of new and more teaching.

Notably the number of qualified primary teachers increased from 30% to 75% and enrolment increased from 545,000 in 2002 to 577,000 in 2008; an average of 13% growth per year. According to the Education for All Development Index (EDI), Namibia has gradually improved by 5% each year since 1999. The development noticeable points out that Namibia is one of the biggest spenders in education in Sub-Saharan Africa (Pillay, 2008). According to Ministry of Education, Arts and Culture (2017), the education sector receives the largest share of the national budget of about 22% dating back from 2011/12 financial year. It is supposed that 10% of the total budget is allocated to primary education and 2.3% to secondary education. The figure below depicts government sectorial expenditure in 2017/2018 financial year



**Figure 1.1: Sectorial Budgets**

*Source: National Budget Review, 2017/2018*

The spending has been necessitated by the progress past investments which culminated in an increase in the net enrolment rates in primary and secondary education increasing respectively from 92.3% to 98.3% and from 52.6% to 54.8% between 2007 and 2009. More so, the survival rates in primary and secondary

education have been modest off late (Hailombe, 2011). Despite the public investment in education by the government, Namibia and many Sub-Saharan African countries are miles from achieving education for all (Pillay, 2008).

Hailombe (2011) mentioned that the quality of education is still low as demonstrated by students' poor performance in many subjects especially mathematics and English. The also noted that the massive importation of labour in the region and massive exodus of learners to upcoming private schools is an indication of failures by the public schools to match up with industrial expected learners' quality. This is despite the introduction of the Education and Training Sector Improvement Programme (ETSIP) by the government in order to improve the development of relevant and demanded skills which increased investments in education and human resource development.

### **1.2.2 Namibia Economic Outlook**

According to the African Economic Outlook (2012), the Namibian economy slowed down from 2011 with a Gross Domestic Product (GDP) growth rate of 3.8%. The slowdown in growth arose from modest performance of mining, agriculture and tourism. Following the fiscal surpluses of 2007, the country adopted expansionary policies until 2012/2013. However, due to global recession crisis, the expansionary fiscal policies widen the fiscal deficit averaging nearly 6.5% of the GDP, which the government has been financing through both domestic and foreign borrowing to sustain the expansionary monetary policies. At the same time, severe slowdown in the global economy due to debt crisis in the Eurozone and structural reductions in the Southern Africa Customs Union (SACU) have reduced allocations to the country.

Confronted with the above, in 2013/14 financial budget the country introduced austerity measures to cushion high unemployed rate at 51.2%, widening fiscal deficit, poverty and infrastructure bottlenecks (Economic Watch Namibia, 2017). The austerity measures resulted in the contraction of government spending and increase on taxes stretching from the 2014 to date.

### **1.2.3 Sustainable Development Goals**

The setting and ratification of the Sustainable Development Goals (SDGs) ensured an improvement in primary and secondary education enrolment in the developing regions (United Nations Open Working Group, 2017). The commitment to universal education was established by the launching of the U.N. Millennium Development Goals (MDGs) in 2000 (Africa-America Institute, 2015), which saw an increase in the level of student enrolment. For instance, primary school enrolment increased from 62 million to 149 million (UNESCO, 2014) whereas out of the 522 million youths that enrolled in secondary schools, 49 million were from Africa (UNESCO, United Nations, World Bank, 2015). According to the Education for All Global Monitoring Report (2009), accessibility to education has been a challenge in Sub-Saharan Africa, despite that enrolments were increasing at a decreasing rate.

In the low-income Sub-Saharan African region, primary the gross enrolment rate grew by an average of 3.1 percentage points per year between 1999 and 2009, compared with only 0.8 percentage points per year in the 1990s in the sample of 33 low-income Sub-Saharan African countries. Enrolments in secondary and higher education were also growing rapidly, although from a smaller base. The region's average net enrolments in secondary education increased from 18% in 1999 to 25% in 2006.

Namibia, has also noticed significant growth in enrolment rates in the recent past. Gross school enrolment for secondary and primary education was reported at 64.61% in 2007, a positive development from 53.3% in 2000 according to the World Bank collection of development indicators, compiled from officially recognised sources. Gross enrolment projections pointed to an 85% growth by the year 2020 (World Bank, 2012). In April 2017, the New Era reported a marked increase of secondary enrolment from 195 726 learners in 2015 to 208 423 learners in 2016 and estimated an increase to 215 000 in 2017. In primary education, enrolment also increased from 442,729 learners in 2015 to 499,455 in 2016.

#### **1.2.4 Challenges in the Education Sector**

The growth in enrolment over the years has been a welcome development, however there are challenges and hurdles governments have to meet to ensure the learners survive through both primary and secondary education and acquire the necessary skills, knowledge and abilities. The educational system in Namibia is already facing challenges ranging from shortage of teachers and teacher attrition, poor curriculum, lack of educational infrastructure, minimal support from the government (Ministry of Education, Arts and Culture, 2016). Guilfoyle (2006) argued that inclusivity, has seen the teachers facing a challenge of closing achievement gaps and increasing proficiency for children with disability. Given, the minimal support from the parents and the government, the challenge has remained a thorn in the flesh in the bid to create and deliver quality education. Often at times, the teacher pupil ratio is too big for ensuring proficiency from all the learners (Glass *et al.*, 2011). Class size and organisation have been recognised to affect educational achievements, large classes result in lower educational achievements and multi-grading remains a challenge to

manage as it results in adoption of less effective methods of teaching. The amount of attention and guidance dedicated to individual learners is limited.

The need for matching financial support and the remarkably growing gross enrolment in primary and secondary education is critical for learners' achievements and proficiency. Public and private investment in education ensures learners' access to quality education. Public investment through provision of free and subsidised education, educational infrastructure and resources through public private partnerships is critical for maintenance and sustenance of quality education (Africa-America Institute, 2015). Quality is achieved through the recruitment and maintenance of the welfare of teaching staff through better salaries and allowances (Hall & Mambo, 2015). As at 2015, the financing of education in Africa was predominantly funded from government education expenditure. This accounted for 18.4% total education expenditure as reported by the Organisation for Economic Co-operation and Development (OECD)'s Development Assistance Committee (DAC).

In line with regional developments and growth in enrolment, Namibia has ensured integration of the SDGs with the educational policy (Ministry of Education, Arts and Culture, 2016). Despite the rising financial requirements due to the gross enrolments percentage, the government abolished non-voluntary contribution from parents and caregivers. The government through budget allocations, public private partnerships with international donors and the civil society supports education in administration, formal education, adult and lifelong learning, arts and culture and HIV/AIDS management units. Given the financial obligation the government has, not only in education, the Economy Watch Namibia (2017) reported that the economy has

constantly contracted from the second quarter of 2016. The government adopted tight fiscal policy as opposed to expansionary fiscal measures that had been pre-dominant. This research therefore intended to establish the effect of the tight fiscal policy on the quality of education in the country over the years.

### **1.3 Statement of the problem**

According to the Research on Socio-Economic Policy (2017), there is a strong positive relationship between Gross Domestic Product (GDP) per capita and public education spending per capita. According to the Ministry of Education, Arts and Culture (2016), the country's major challenges included: increasing the amount of public resources to primary and secondary education, low levels of student achievements, increasing repetition rate and deployment of teaching staff to schools (Ministry of Education, Arts and Culture, 2016). The challenges facing the sector coupled with tightening government expenditure due to minimum revenue collection, a drop in SACU allotments from 2010 (Economy Watch Namibia, 2017), motivated the investigation to assess the potency of fiscal initiatives on influencing the quality of primary and secondary education in Namibia.

### **1.4 Research Objectives**

The main objective of the study was to investigate the effects of fiscal policy on the quality of education in primary and secondary government schools in the Khomas Region. The sub objectives of the study were:

- To determine the effects of fiscal initiatives on the amount of public resources allocated to government primary and secondary schools

- To assess the effects of fiscal initiatives on the deployment of teaching staff in government primary and secondary schools.
- To assess the effects of fiscal policy on repetition rates in government primary and secondary schools.

### **1.5 Hypothesis**

H<sub>0</sub>: There is no relationship between fiscal policy and quality of education

H<sub>1</sub>: There is a relationship between fiscal policy and quality of education

### **1.6 Significance of the Study**

The study gave the researcher in-depth knowledge regarding fiscal policy and how to improve the quality of education in Namibia. The results of this study forms the basis of recommendations for policies that could assist the central government and public primary and secondary schools to produce quality graduates. The research findings can contribute to the unsettled academic debate on the role of government in improving the quality of education. The study has the potential to inspire scholars to do further research and create reference material for other researchers on the role of fiscal policy on the countries' quality of education.

### **1.7 Limitations of the Study**

The information regarding fiscal expenditure per capita, is treated as sensitive and confidential by government schools and disclosure of such information might be prohibited. Though, the researcher adhered to ethical standards to get the information through simplified questionnaires for anonymity (Omeri, 2015). More so the study considered participants without taking into consideration the level of understanding

on matters of fiscal policy and could have better awareness of the interaction between fiscal policy and quality of education.

### **1.8 Delimitations of the Study**

The study was delimited to the heads of Khomas Region government schools and it was assumed they gave a true representation of the whole Khomas Region. It dwelt on assessing the effects of fiscal policy on the quality of education in primary and secondary government schools in the Khomas Region.

### **1.9 Summary**

This chapter discussed the background of the problem, the problem statement and the objective of the study. The main purpose of the study was to investigate the effects of fiscal changes and fiscal policy's effects on the quality of education in the Namibian context. The next chapter reviews literature on fiscal policy and determinants of quality of education. There are a number of theories that explains the relationship between fiscal policy and industry performance, however these were tested against empirical evidence.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter takes an in-depth review of the available literature to understand the perspective of various scholars on the effects of various fiscal initiatives on the quality of education provided by public primary and secondary schools. Although this review discusses relevant publications published from books, electronic journals, and credible internet sources and periodicals on fiscal expenditure on education and quality of education, it also discusses how relevant they are in terms of the significance to this study.

#### 2.2 The Concept of Fiscal Policy

##### 2.2.1 The Evolution of Fiscal Policy

The concept of fiscal policy was popularised following the publishing of the General Theory of Employment, Interest and Money (1936), by the Keynesian. The theory postulated that individuals and firms could cause to inefficient aggregate macroeconomic outcomes, where the economy operates below its potential output and growth rate if there is no government intervention. It was therefore critical for government, through policing to ensure equitable distribution of wealth, economic growth and development, price stability and ensure full employment. The policy prescription of the Keynesian Revolution was more government intervention in the running of the economy, hence a choice of varying government spending and/or

taxation in order to vary output. The Keynesian Revolution argued that fiscal policy was a relatively more potent and reliable policy instrument for economic stabilization.

### **2.2.2 Fiscal Policy (Government Spending Policy)**

Dwivedi (2005) defined fiscal policy as the discretionary changes made in the government spending and tax rates with the objective of achieving certain economic objectives. Mark Horton and Asmaa El-Ganainy (2009) suggested that fiscal policy is used by the government to influence the economy and reduce poverty. It is used in conjunction with the monetary policy through the central bank. Gray (2007), pointed out that country's economies transition under different administrations from totalitarianism toward democracy and or socialism toward free market systems. These transitions require reorientation of public spending and tax policy to facilitate development through effective mobilisation of resources, efficient allocation of financial resources, reduction in inequalities of income and wealth, price stability, balanced regional development, reducing the deficit in the balance of payment, capital formation, increasing national income and development of infrastructure (World Bank, 2013). Calitz and Siebrits (2008) identified various instruments for fiscal policy such as budgetary control, compensatory fiscal policy, discretionary fiscal policy, depending on the objectives a government intends to achieve.

### **2.2.3 Expansionary vs. Contractionary Government Spending Policy**

Governments use fiscal policy to stimulate growth by changing the level and types of taxes. According to Sorensen & Whitta-Jacobsen (2005), government could either increase aggregate demand directly through an increase in government spending and this is called expansionary policy or can reduce demand by lowering spending which

is known as contractionary or tight policy. In so doing, by means of varying government spending and/or taxes, fiscal policy can be used to stabilize autonomous expenditures, other macroeconomic variables and consequently the level of equilibrium output in the economy.

#### **2.3.4 Measurement of Government Spending on Education.**

There are number of ways the level of government spending in education is measured. According to OECD (2017) government expenditure is measured as in terms of thousand dollars per capita and as a percentage of the GDP. Public spending on education includes direct expenditure on educational institutions. The indicators are expressed as a percentage of the GDP, however it excludes the expenditure on public and private institutions delivering supporting educational services. Obi *et al.*, (2016) noted that government expenditure on education can be divided into two: capital and recurrent expenditures. Capital expenditure is the payment for non-financial assets used the educational system for more than one year whereas recurrent expenditures are payments for non-refundable transactions within a year.

Government expenditure in education is measured by aggregating both capital expenditure and recurrent expenditure on educational institutions (Conroy, 2016). According to IMF World Economic Outlook (2013) information on capital expenditure and recurrent expenditure is readily available from the government departments dealing with financial budgeting and disbursement. The information can note that the standard measure of for public financial expenditures could be raw data available from relevant ministries. Due to availability of data, the study adopted raw financial information relating to capital expenditure, teaching and administrative staff

financial budgets based on deployments and recurrent expenditure obtained from MoEAC and Ministry of Finance as provided in the National Income and Expenditure accounts.

## 2.4 Quality in Education

The universalization of basic education is neither achievable nor sustainable without the continuous delivery of quality in education by school systems (Yu, 2002). Demand for educational quality is also increasing, as governments view the satisfactory performance of their basic education systems not only instrumentally but also strategically in relation to economic development and international competitiveness (Gomba, 2011). Quality of education is concerned with student learning achievements, in terms of traditional curriculum and standards (Fredriksson, 2004). Quality takes into account the complete nature of educational inputs and its objectives, curriculum and educational technologies and their relevance in socio-economic, cultural and political environment (Coombs, 1985).

More fundamentally, education is a set of processes and outcomes that are defined qualitatively (EFA Global Monitoring Report, 2005). Goddard and Leask (1992) highlighted the definition of quality in education as simply meeting the requirements of education stakeholders such as parents, government, students, teachers, employers and institutions. Dakar Framework for Action (1990) previously highlighted that quality in education is a desired set of characteristics of learners, processes, content and systems. Hoy *et al.*, (2000), added that quality in education is the assessment of the ability of education systems to achieve and develop the talents of learners, at the

same meeting the accountability standards set by the stakeholders who pay for the process.

#### **2.4.4 Approaches to Quality in Education Assessment**

EFA Global Monitoring Report (2005) distinguished between educational outcomes and processes that need to be satisfied to achieve them. This was a culmination of different ideologies, epistemology and disciplinary composition of quality in education. Quality is therefore defined from humanistic, behaviourist, critical, indigenous and adult education approach.

- **Quality in Humanist Approach**

This humanistic approach emphasizes learning as a process of social practice rather than the result of individual intervention. Educational curriculum should not be standardized and controlled rather it should be responsive to individual learners and circumstance. More so, assessments should focus on individuals though peer assessment is also appreciated.

- **Quality in Behaviourist Approach**

This is the most common type of evaluating learning outcomes across the divide. Contrary to the humanistic approach, behaviouristic approach prescribes a standardized and controlled curriculum, based on a set objective. The testing and examination of learners is the central feature of learning and measurement of learned behaviour. Unlike in the humanistic approach where teachers are facilitators of learning, in the behaviouristic approach teachers have to be knowledgeable and have the ability to instruct the learners.

- **Quality in Critical Approach**

This is an approach persuaded by sociologists and critical pedagogues who proposes that good quality education prompts social change. Teaching curriculum and teaching methods are supposed to encourage critical analysis of social power relations and ways in which formal knowledge is produced and transmitted. The approach places emphasis on active participation by learners in the design of their own learning experience.

- **Quality in Indigenous Approach**

The approach measures quality of education through its ability to help learners draw out knowledge from their socio-cultural circumstances. It proposes that learners' rich sources of prior knowledge, accumulated through a variety of experiences, which education should build from in classroom curriculum and non-formal lifelong learning activities.

- **Quality in Adult Education Approach**

In the adult education tradition, the quality of education is assessed based on how to help the learners experience and critically reflect on it. The learners have specific requirements and or experience that are supposed to be enhanced by the learning process. Quality education therefore nourishes the experiences of the individuals.

#### **2.4.5 Measuring Quality of Education**

Sonje, Deskar-Skrbic and Sonje (2018) suggested that a stream of literature is focused on direct measurement of educational efficiency. The 'adeptness literature' examines

the transformation of various educational inputs such as student-related, family-related, community-related inputs and public financial inputs into outputs such as number of graduates, students' test scores, attendance rate, enrollment and employability (Mgbemena & Dimnwobi, 2016). Sonje, Deskar-Skrbic and Sonje (2018) suggested that education efficiency and or quality is determined by its ability to make best possible use of available inputs. The educational inputs the study focused on are capital expenditure, teachers' deployment expenditure and recurrent (operational) expenditures. A body of literature points out that the toolbox to assess the quality of an education system involves non-parametric methods and parametric measurements.

#### **2.4.5.1 Parametric Measurements**

Parametric measurement assumes that sample data comes from a population follows a probability distribution based on fixed parameters. According to Yu (2012) the most common used parametric measurement test is the Stochastic Frontier Analysis (SFA). The method measures efficiency by use of two components: a stochastic production frontier serving as a benchmark against which a firm efficiency is measured and a one-sided error term which has an independent and identical distribution across observations and captures technical inefficiencies across inputs to outputs conversion process.

#### **2.4.5.2 Non-Parametric Measurements**

Non-parametric methods for measuring and assessing the quality of education are based on mathematic optimization and uses methods such as Free Disposal Hull (FDH) and Data Envelopment Analysis (DEA).

- **Free Disposal Hull (FDH)**

Lim, Lee and Lee (2012) highlighted that the FDH model is a non-parametric analysis for efficiency. The model was conceptualised, formulated and developed by Deprins, Simar and Tulkens in 1984. According to Tauchmann (2012), the model can be substituted for measuring efficiency for by pairing inputs and outputs to produce a possibility set. The production possibility set of FDH, a pair of inputs and outputs that are producible, is obtained by allowing free disposability of variables. The methods have been previously adopted in studies estimating efficiency in the public spending in Malta (Ebjner and Ulrike, 2009)

- **Data Envelopment Analysis (DEA)**

DEA is an efficiency assessment tool that was developed by Charnes, Cooper and Rhodes (1978). The tool is used to measure the output per unit of input. If greatest possible output per unit is achieved the absolute or optimum quality in output have been achieved. DEA uses linear programming technique to find the set of highest possible efficiency ratios of outputs to inputs for the service unit being evaluated. The DEA mathematical model for measuring or estimating the effectiveness of government spending as an input is as follows:

$$Q_{ed} = f(ER, AR, PR, NG, RR, EM) \text{ where,}$$

Where, QEd = Quality of Education, ER = enrolment rates, AR = attendance rates  
PR = pass rates, NG = number of graduates, RR = repetition rates and  
EM = employability

***(Equation 2.4.5.21: Data Envelopment Analysis Formula)***

Assuming there is a linear relationship between quality of education and the above variables the DEA model can be re-specified in the estimable form below:

$$Qed_t = \alpha_0 + \alpha_1 ER + \alpha_2 AR + \alpha_3 PR + \alpha_4 NG + \alpha_5 RR + \alpha_6 EM)$$

*(Equation 2.4.5.22: Data Envelopment Analysis Formula for Quality of Education)*

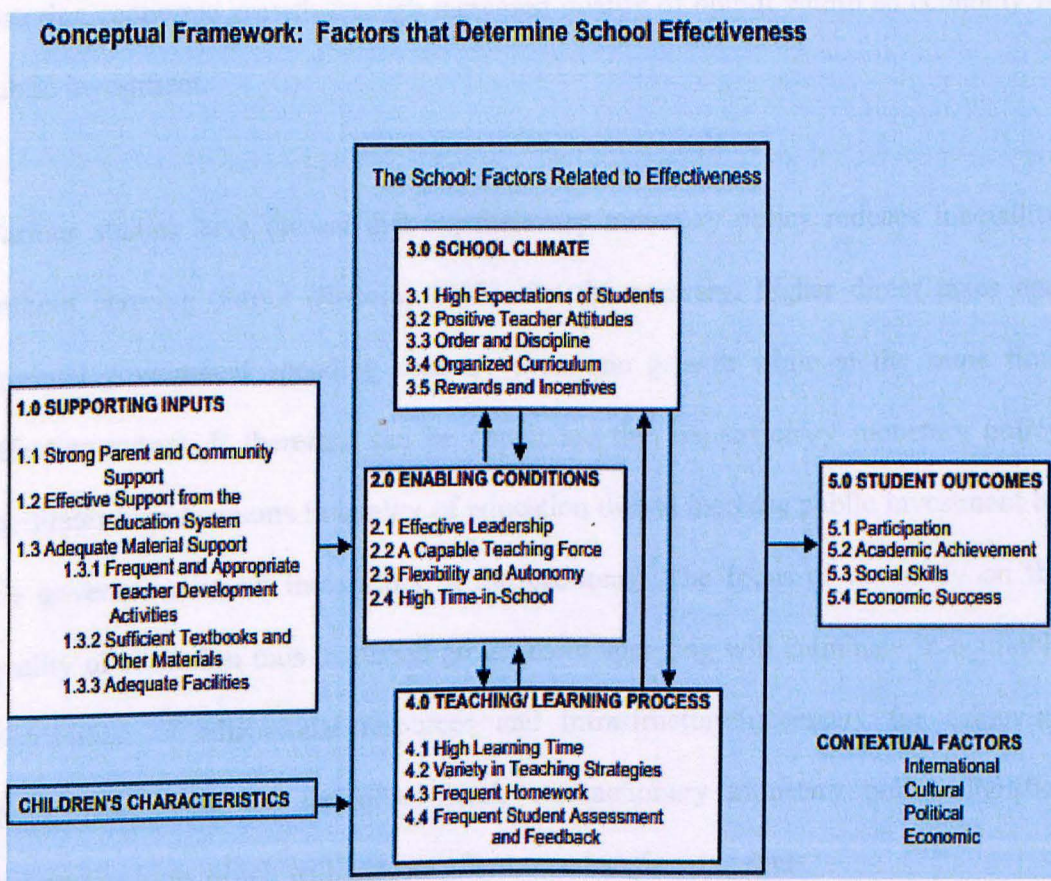
Given that most studies conducted to test the efficiency of public spending on education adapted the DEA model in determining the efficiency index of the dependent variable, the study adapted the same in measuring the quality of education index. However, the data on some variables such as attendance rates, number of graduates and employability was not readily available culminating in the use of enrolment rates, pass rates and repetition rates data only.

#### **2.4.6 Determinants of Quality in Education**

Heneveld and Craig (1996) developed a conceptual framework for factors affecting the quality in educational systems. The conceptual framework captures that quality educational output is determined by the characteristics of the learners, supporting inputs in the educational system, school climate, and availability of enabling conditions and the teaching or learning process. In the context of Heneveld and Craig, quality in education is determined by student outcome such as participation, academic achievements, social skills and economic success.

It is critical to ensure quality in education, however according to the diagram below all stakeholders in education are supposed to participate in the education process to ensure quality is achieved. Supporting inputs such as strong parent and community

support, effective support from the education system and adequate educational material is crucial in ensuring quality. Similarly, school related characteristics such as the schooling climate and teaching processes are supposed to be designed to allow for quality in the education processes. The figure below simplifies the determinants of quality in education:



**Figure 2.1: Conceptual Framework: Factors that determine school effectiveness**

*Source: Heneveld and Craig, (1996)*

## 2.5 Fiscal Policy vs. Quality of Education

On the empirical side, the relationship between fiscal policy and quality of education has received considerable attention recently. A number of studies have used time series models, especially vector autoregressive models, to estimate the effects of

different fiscal policy shocks on economic activity however the magnitude of the effects across different countries still remains an open question (Robelo, 2003). According to Muinelo-Gallo and Roca-Sagalés (2011), reduction in direct taxes and increased government spending expands the economic growth and development. Muinelo-Gallo and Roca-Sagalés added that the only fiscal policy that is critical for fostering economic growth through increased quality of output within an economy is public investment.

Various studies have proved that expansionary monetary policy reduces inequality without harming output (Robelo, 2003). On the contrary, higher direct taxes and minimal government spending contract economic growth while at the same time affecting output. It therefore can be concluded that expansionary monetary policy facilitates improvements in quality of education due to increase public investment by the government in all the sectors in the economy. The focus of the study on the quality of education thus increased government spending will culminate in equitable distribution of educational resources and infrastructure necessary for achieving quality education. On the other hand, contractionary monetary policy signifies reduced budgets which will have an effect on educational outputs.

Meanwhile, the neoclassical approach growth models emphasises that economic growth depends on exogenous factors such as population and technological progress. The neoclassical approach draws from conventional wisdom that differences in tax and expenditure policies are important determinants of level and quality of output but however only in the short run. Contrary to exogenous models, endogenous growth models assume that investment in human and physical capital affect growth rate

consequently giving more scope for tax and government expenditure to play a role in the growth process. These works tend to transform the temporary growth effects of fiscal policy that the neoclassical model involves, into permanent effects.

Thus, endogenous growth models that incorporate public policies predict that distorting taxes, as well as productive public expenditures, affect economic growth in the long run (Dwivedi, 2005). A gap therefore still exists in literature on the effect of contractionary and expansionary fiscal policy on output quality in the long or short run.

## **2.6 Approaches to Education Financing**

Organisation for Economic Co-operation and Development (OECD) in 2017, reiterated that while levels of funding have been a major concern, it is crucial to consider the fund mechanisms around education. According to Pillay (2008), African governments have adopted various funding methods for education which includes private-public partnerships, the differentiated government funding models and cost sharing methods.

- **Government Expenditure on Education**

Traditionally, government have been central in the financing of education through budget allocations. Education for All Global Monitoring Report (2009) argued that despite most governments moving away from the tradition, government is still the main contributor to education through financing of capital projects, recruiting and maintaining the welfare of the teaching and administrative staff, provision of

technological and economic infrastructure and provision of basic and social amenities at the various schools. This tradition is true in all Sub-Saharan African countries.

- **Private-public partnerships**

Education have not solely been financed by the government, the private sector plays a role in ensuring universal primary and secondary education. Government normally do not have enough resources and thus approaches the private sector to assist should need be. For instance, in Botswana and Zambia, the governments have been the major financier of schools' capital expenditure whereas the private sector have been crucial in operational expenditure.

- **The differentiated government funding model**

This model determines how public institution are prioritized and funded by the government. Institutions that yield great social returns for instance health, teaching and public services are given the highest priority in allocation of financial resources. In Mauritius, public institutions are not all funded in the same way, institutions that yield high private returns receive with the lowest levels of funding whereas those that yield greater social returns. However, various studies have pointed out that, governments in Namibia, Zimbabwe, Zambia, Botswana and Tanzania, more financial resources are allocated to areas of private gains (Pillay, 2008).

- **Cost sharing**

Governments have in the recent past introduced a cost sharing financing model in which the cost of education is shared among the parents and the government through tuition fees and contributions for capital projects. Zambia, Zimbabwe, South Africa

and Tanzania, have a system of fee paying in primary and secondary education (Gomba, 2011). However, not all countries apply cost sharing equitably because of the dual track tuition programmes for instance Zambia, Tanzania and Namibia.

## **2.7 Theoretical Literature on Government Spending**

### **2.7.4 The Median Voter Hypothesis**

The theory suggests that level of government expenditure on public services and industrial sectors is indirectly driven by the voters. The assumption is that fiscal policy of a country is a reflection of the preferences of the voters and the personal feeling of closeness in ideologies between citizens and elected government officials (Garrett and Rhine, 2006). Whether or not the government officials intend to develop an economy through contractionary or expansionary fiscal policy, the median voter's income and demand for public services determines the policy the government adopts. The theory therefore suggests that the quality of output in the public institutions is determined by perceived opinion of the citizens as opposed to the administration because it is the voters themselves who determines the level of government spending.

### **2.7.5 Musgrave and Rostow's Theory of Public Expenditure**

According to Musgrave and Rostow (1990), government spending is a major determinant and driver of economic growth. The theory proposes that the state grows like an organism and makes decisions for the social wellbeing of the citizen. The public sector is supposed to provide the basic social amenities such as water, road, energy, security and sanitation. As economic growth begins, public spending increases towards human capital development such as health and education which are

required to sustain economic growth (Agboro and Edema, 2014). Musgrave and Rostow's theory therefore suggest that the quality of public services depends on the government investments in basic social amenities and infrastructures required for growth while involving private investment to ensure the high demand on social amenities are conveniently met but at a different cost.

### **2.7.6 Pure Theory of Public Expenditure**

The pure theory was postulated by Samuelson (1954), and it focuses on government spending. Government expenditure can be categorized into private consumption goods and collective consumption goods. Private consumption goods are driven by individual's preferences and choices. Collective consumption goods are goods consumed by all individuals, but one person's consumption does not reduce the availability of the good to another. Samuelson used the above categorization to replicate categories of government spending. He proposed that public expenditure will grow to achieve full employment. In order to achieve full employment, there should be an increase in education expenses and capital growth. Government will finance the educational expenses through savings or borrowings and technological innovation. Government therefore prioritizes on collective consumption goods. Education is categorised as a collective consumption good that and therefore it is supposed to be prioritized by the government. The quality of education is therefore depended upon how the government prioritize it.

## 2.8 Empirical Studies Review

Mutegi (2015), tested the influence of unit cost of education on students' performance in public secondary schools in Tharaka South Sub-County, Kenya. The study was guided by two objectives which focused on household average expenditure on education and government average expenditure on education. Through regression analysis study concluded that there is a positive relationship between expenditure on education and performance. The more resources are devoted to education the more the quality of education would be. On the contrary, reduction in spending was found be associated with low quality education. Mutegi recommended for increased educational funding by the government, parents and donor community for quality sustenance in the education sector.

Romer (1990), Barro (1991), and Lucas (1998) through their studies showed that there is a positive relationship between the growth rate of per capita output and school enrolment rate. Expansionary monetary policy increases the per capita income of individuals culminating in huge spending on education. The study showed that education can perform significantly well if both the government and the people are spending on education. The study also suggested that increasing spending on human capital development will address the economic and social welfare gap between currently existing the developing countries.

Ramirez *et al.*, (1997) and Blis and Klenow (2000) in a separate cross-country analysis of the channels show that there is a positive relationship between economic growth and spending in human capital. Afzal *et al.*, (2010) concluded that there is a

positive long-run and short-run relationship between education and economic growth after conducting a research in Pakistan.

### **2.8.1 Effects of government expenditure on quality of learning resources**

According to OECD Reviews of School Resources (2013), school systems have limited resources with which to pursue their objectives. The review indicated that government through educational policy can facilitate efficiency and equitability through the use of financial resources. The Committee on Economic and Social Rights (2010) suggested that in the wake of free education especially in primary education, government has the sole responsibility of marrying learning resources to enrolment rates. The study by Committee on Economic and Social Rights (CESR) proposed the use of expenditure and resources allocation ratios in the analysis of the educational resources allocations after realizing that governments devotes insufficient resources to the education sector which in turn hampered the realisation of minimum essential levels of the right to quality education.

### **2.8.2 Effects of government expenditure on teachers' deployment and turnover**

Ogawa (2016) conducted a study in Zambia on the effects of public expenditure on education and resources management. The study concluded that efficient and equitable employment of resources is crucial for the realisation of educational outputs. Secondly the paper noted that teachers' salaries and allowances constituted a large share of public spending on education and they remain the most important input to in the delivery of educational services. The government's ability to pay salaries and allowances significantly affects the deployment of teachers. Hutchings *et al.*, (2006), research report indicated that teachers' deployment in the public sector was largely a

responsibility of the government and therefore government budget on allowances and salaries determined the level of teacher deployment. However, Maylor (2009) conducted a study in England on the relationship between government expenditure and teacher deployment, the study concluded that there is no relationship between level of government expenditure and teachers' deployment. The study records that teachers' deployment is government social responsibility that have no relationship with the fiscal initiatives.

### **2.8.3 Effects of government expenditure on enrolment rates**

Adesiyani (2016) studied the impact of public spending on education in Nigeria. The purpose of the study was to analyze the relationship between government spending and enrolment rates at both the primary and secondary level. The research analyzed how government spending affected macroeconomic variables like per capita income, population growth rate, and workers' remittance. The study then retraces the effects of the macroeconomic variable on education, focusing mainly on enrolment. The study revealed a positive relationship between Nigeria's per capita income which is a reflection of social welfare due to economic growth and development. Education leads to higher productivity which in turn leads to an increase in per capita income through an increase in GDP. Adesiyani (2016) recommended that government should increase allocation to education, institutionalize monitoring and utilization of fund allocated because of the tangible results in enrolments and quality of the education systems.

#### **2.8.4 Effects of government expenditure on survival rates and dropout rates**

Belfield (2014) in a study, “The economic burden of school dropouts and suspensions in Florida” concluded that government fiscal gains are impacted by additional high student graduate. This creates a cycle, where government spends more and more additional graduate are added, it sets off the expenditure cycle. The burden of looking after school dropouts, is exorbitantly higher than financing the education systems and therefore, investment in education was suggested in the study as the remedy for reducing dropout rates and sustain survival rates. However, the study divided the responsibility amongst the parents, business community and the government. Okumu (2008) described that in Uganda, despite the benefits of the Universal Primary Education, dropouts remained a challenge influenced by lack of parental education, non-payment of tuition fees, household sizes and the proportion of economically active members in the family swaying chances of dropouts. The study reiterated the importance of public funding and assistance of the school kids in minimizing dropouts’ rates in public schools.

### **2.8.5 Effects of government expenditure on learning infrastructure**

Edame and Eturoma (2014) conducted a study to establish the impact of public expenditure on infrastructural facilities and economic growth in Nigeria. The investigation concluded that poor financial resources allocation to the educational systems resulted in poor educational outputs such as poor attendance, poor quality of students, inadequate preparations by the teaching staff and poor morale. The study notes the significant impact of government expenditure on government infrastructural facilities.

### **2.8.6 Centre of the Study**

Despite the existence of a number of studies linking the government investment in education and educational outputs, the field is devoid of studies testing the extent to which the government expenditure in education improves efficiency and quality of the educational systems and outputs respectively (Okumu, 2008; Adesiyani, 2016; Adame and Eturoma 2014). The study therefore intended to test whether or not the government fiscal policy in the past 30 years have an effect on the quality as determined by the pass rates, repetition rates, dropout rates, enrolments rates, employability and number of graduates.

## **2.9 Summary**

The chapter, discussed approaches to fiscal management approaches and the effects of each on economic growth and ultimately quality of education in various countries. Various theories postulated by researchers on models of government spending preferences to achieve optimal quality in education. The approaches to assessment of quality on education were also discussed together with the factors closely related to

the fiscal adjustments that impact on education. However, the research fraternity is bereft of studies that test the magnitude of the effects of fiscal movement to the quality of education. This study therefore will fill the void by establishing whether there is a close relationship between fiscal policy and quality of education, focusing on the Khomas region in Namibia.

### 3.2 Research Design

This research adopted a correlational research design, which Oforu (2005) suggested to be a method for analyzing the relationship between variables with the aim of establishing the relationship between the dependent and independent variables. A correlational research design is a form of an observational research in which several variables are observed over a period of time to determine if there is a relationship between them, though it cannot establish causality. The researcher adopted correlational research design to determine if and to what degree fiscal transfers are related to the quality of education in primary and secondary schools.

The method was best suited for the study since it was measuring two or more variables and assessing the relationship between them, with no manipulation of an independent variable. Quantitative research methodologies were adopted in data collection, analysis and presentation. According to Creswell & Clark (2011), quantitative approach provides overall interpretation of results in numerical values and is also synonymous with testing of any statistical relationship between variables.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter, presents the methodology the study adopted. It details the research design, the population characteristics, sample description, sampling techniques, research instruments, data collection procedures, data analysis and ethical considerations the researcher took cognizance of during data collection and analysis.

#### 3.2 Research Design

This research adopted a correlational research design, which Orodho (2003) suggested to be a method for analysing the relationship between variables with the aim of establishing the relationship between the dependent and independent variables. A correlational research design is a form of an observational research in which two or more variables are observed over a period of time to determine if there is a relationship between them, though it cannot establish causality. The researcher adopted correlational research design to determine if and to what degree fiscal initiatives are related to the quality of education in primary and secondary schools.

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### **3.3 Population**

The population for the study comprised of heads of 54 primary and 29 secondary government schools in the Khomas Region, Public Relations Officers (PROs) from the Ministry of Education, Arts and Culture (Directorate of National Examination and Assessment) and the Ministry of Finance giving a target population of 75 participants for the study.

### **3.4 Sample Size and Sampling Procedure**

The study adopted the purposive sampling technique, which examines the entire population. Given that the population is finite, comparatively small and well defined with the participants accessible, the researcher engaged all the 73 heads of the targeted schools and 2 PROs from Ministry of Education, Arts and Culture and Ministry of Finance, giving a sample size of 75 respondents. Damico (2016) posits that using the whole population allows for the use of descriptive statistics rather than predictive inferences and generalisation.

### **3.5 Procedure**

The study used both primary and secondary data sources, though year on year secondary unadjusted data was predominant in the study.

#### **3.5.1 Secondary Data**

The secondary unadjusted data spanning for the period 1998 to 2018 was used in the study. A shorter period was considered to reduce the extent of measurement error and the problem of autocorrelation that is often associated with high-frequency data (Nwokoro, 2011). The major sources of data were financial releases and public

statements by the Bank of Namibia, Ministry of Education, Arts and Culture, public releases by Directorate of National Examination and Assessment, Namibia Statistics Authority releases, World Bank Databank and UNESCO. The research adopted a regression approach utilizing time series data that was collected on a yearly basis over the period under review, beginning 2009 and ending 2018. The researcher was given permission to collect archival and survey data from the heads of the schools and line ministries using structured questionnaires.

### 3.5 Description of Variables

#### 3.5.2 Primary Data

Questionnaires were administered to the standard participants and picked after completion. The researcher personally administered the questionnaires in the various schools under study.

### 3.6 Model Specification and Estimation

Empirical literature review has revealed that correlation research designs employ a number of models. The models range from the two-equation simple correlation models used by Friedman and Meiselman (1963), to the single equation model with reduced form relationship used by Anderson and Jordan (1968). This study adopted the Ordinary Least Squares model to analyse the relationship between fiscal policy and quality of education. This method reduces the error sum of squares, it is unbiased, consistent and efficient and has minimum variance. It is also the easiest method for testing the multiple regression equations on the variables, determining quality of education, based on non-correlation in the independent variables identified (Hutcheson, 1999). The model was preferred because it captures the relative impact of

fiscal actions on educational outputs within the context of a single equation. The model was as follows:

$$Y = \alpha + \beta_1 X_1 + E_\epsilon, \text{ where}$$

$Y$  = Quality of education index,  $\alpha$  = intercept,  $\beta_1$  = Beta (the Slope of the line in the regression equation),  $X_1$  = government expenditure,  $\epsilon$  = error term.

*(Equation 3.61: OLS Model)*

### 3.7 Description of Variables

#### 3.7.1 Dependant Variable

Mgbemena & Dimnwobi (2016) noted that quality of education is measured by the ability of to transform of various educational inputs in terms of student-related, family-related, community-related inputs and government inputs into outputs. The study used aggregate averages of students' pass rates, attendance rates, enrolment rates and dropouts' rates.

#### 3.7.2 Independent Variable

Obi *et al.*, (2016) distinguished that government expenditure is measured by aggregating capital and recurrent expenditures in Namibian dollars. Capital expenditure is the payment for non-financial assets used in the educational system for more than one year while recurrent expenditures are payments for non-refundable transactions within a year.

### **3.8 Data Analysis**

The collected data was analysed using the Statistical Package for Social Sciences (SPSS). The research focused on quantitative information. Secondary and primary data collected was tabulated in SPSS, and various correlational tests were run to establish relationships. The researcher adopted the Ordinary Least Squares (OLS) methods for assessing the nature of the relationship between government expenditure and quality of education. The methods have been adopted in recent studies assessing the relationship between public spending and educational outcome (Odesiyan, 2016).

#### **3.8.1 Decision Criteria**

The slope of the relationship between government spending on secondary and primary expenditure must be statistically different from zero. At 5% significance, for alpha to be statistically insignificant, the t-statistic should be below 1.96. For a null hypothesis, a p-value greater than the significance level shows that the intercept is not statistically significant. On the other hand, a p-value which is less than the significance level shows that the intercept is significantly different from zero. An ordinary least squares (OLS) regression was run to examine the relationship between government spending and quality of education. The slopes, intercepts and t statistics obtained were used in conjunction with the R square to explain the nature of the relationship.

### **3.9 Research Ethics**

The researcher obtained a letter from the Post Graduate Studies Committee of the University of Namibia for permission to carry out the research and an Ethical Clearance from the Ethics Committee of UNAM. The researcher was given approval and informed the government schools and ministries on the study and its objectives.

Informed and voluntary consent was sought from all participants and they were assured their identities and information would be kept private. The data gathered is being kept in a lockable safe for 5 years and will be destroyed by shredding and burning thereafter.

### **3.10 Summary**

The chapter discussed research methods compatible with the correlational research design that was used in the study. The chapter also described the population and the number of participants that were considered for the study. The OLS Model was also explained as the data analysis method. Ethical considerations were also highlighted. The next chapter provides a presentation of the interpretation of the data that was gathered for the study.

**DATA ANALYSIS AND INTERPRETATION**

**4.0 Introduction**

This chapter presents, interprets and discusses the results obtained from the questionnaire administered and collected from participants. Quantitative data was integrated and discussed in line with the objectives of the study. The chapter is divided into five sub-sections which are demographic presentation, government spending on education and its effects and empirical analysis of spending on the quality of education as determined by pass rates. The chapter concludes by looking at the proposed fiscal management and financial management skills for schools.

**4.1 Primary Data Analysis**

**4.1.1 Response Rate**

A total of 75 questionnaires were distributed to all 73 school heads in the Khomas Region and 2 permanent public relations officers with the Ministry of Education, Arts and Culture. Out of the expected 75 responses, only 66 questionnaires were returned. This gave a response rate of 88% which was generally acceptable for a research of this magnitude given that Babbie (2002) suggested that a response rate above 50%, can effectively represent the characteristics of the total population.

## 4.1.2 Demographic Information

### 4.1.2.1 Employment Status

The participants in the study were permanently employed heads of schools in the Khomas Region. The validity of the findings is therefore not questionable because all the participants were assumed to appreciate their working environment unlike part-timers and or fixed contract employees.

### 4.1.2.2 Gender of Respondents

The majority of the participants (58.6%) in the study were male school heads and public relation officers. Women constituted 41.4% giving a difference of 17.2%, which is insignificant should the study consider gender sensitive issues related to government expenditure and quality of education. Table 1 below summarises the findings by gender.

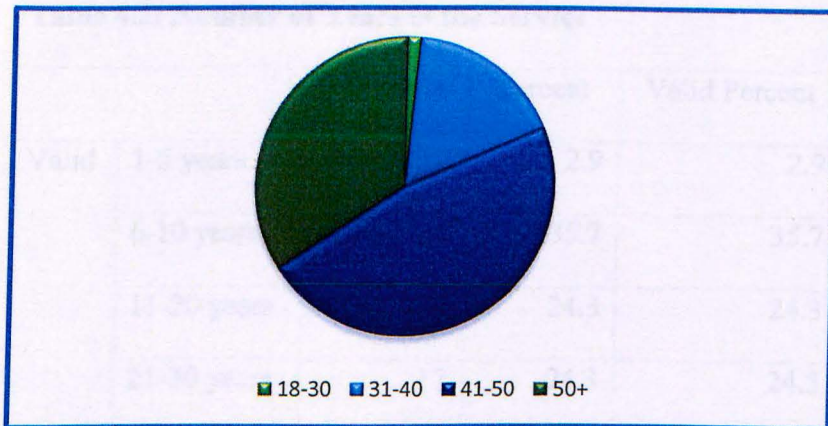
**Table 4.1: Gender Representation**

|       |        | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------|-----------|---------|---------------|--------------------|
| Valid | Female | 29        | 41.4    | 41.4          | 41.4               |
|       | Male   | 41        | 58.6    | 58.6          | 100.0              |
|       | Total  | 70        | 100.0   | 100.0         |                    |

*Source: Primary Data*

#### 4.1.2.3 Age of Respondents

The study sought to understand the composition of the respondents by age to ensure that mature and understanding of the fiscal initiatives and learners' performance. The Figure 4.1 below shows the ages of the respondents.



**Figure 4.1: Age of Correspondents**

*Source: Primary Data*

As shown in the diagram above, most of the participants (47.1%) were aged between 41 and 50 years. 34.3% of the respondents were aged 50 years and above, 17.1% were aged between 31 and 40 years. However, ages between 18-30 years were least represented in the study with 1.4% of the participants. According to Kusurkar (2016) a research study with majority of participants 24 years and above is considered vigorous due psycho-social maturation and maturation of the of judgment. Most of the participants who participated in the study are above 40 years of age.

#### 4.1.2.4 Number of Years in Service

A number of studies have indicated the difficulties young and new employees have with appreciating phenomenon of their work. For the that reason the study sought to established the number of years the participants have been in their working station

and or positions to understand their appreciation of government expenditure and its effects on the quality of education. The Table 4.2 below shows the number of years the respondents were in services.

**Table 4.2: Number of Years in the Service**

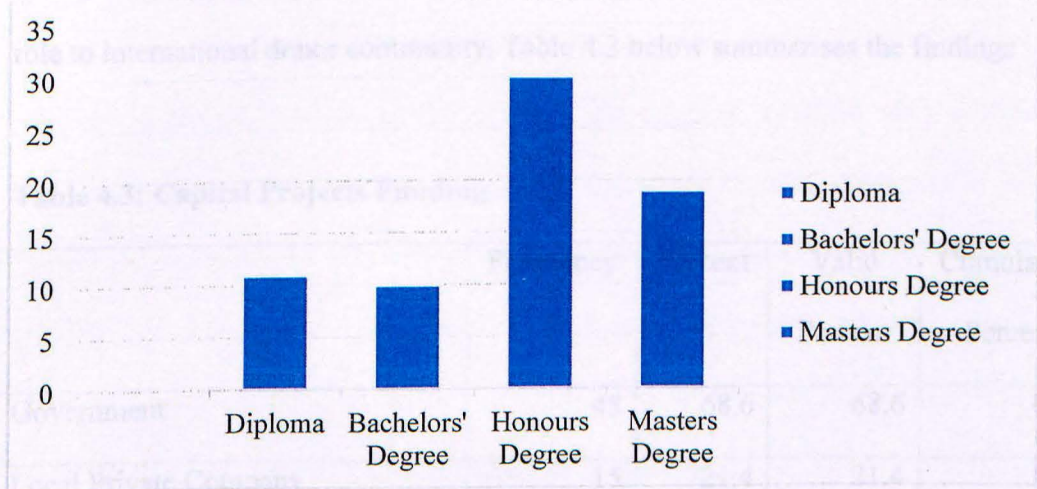
|       |             | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------|-----------|---------|---------------|--------------------|
| Valid | 1-5 years   | 2         | 2.9     | 2.9           | 2.9                |
|       | 6-10 years  | 25        | 35.7    | 35.7          | 38.6               |
|       | 11-20 years | 17        | 24.3    | 24.3          | 62.9               |
|       | 21-30 years | 17        | 24.3    | 24.3          | 87.1               |
|       | 31+         | 9         | 12.9    | 12.9          | 100.0              |
|       | Total       | 70        | 100.0   | 100.0         |                    |

*(Source: Primary Data)*

Table 2, shows that the prevalent participants in the study, 35.7% had between 6- and 10-years working experience, 24.3% had between 11 and 20 years and the 21 to 30 years category had 24.3% number of participants also. Categories 1-5 and 30+ had 2.9% and 12.9% number of participants respectively. Most of the participants had more than 6 years in the services which provided for validity of the findings given the level of experience.

#### **4.1.2.5 Qualification of the Participants**

The level of education determines the extent to which one appreciate and understand the issues surrounding fiscal policies and learners' performance. Figure 4.4, shows the summary of qualification the respondents had acquired.



**Figure 4.4: Summary of qualification of the respondents**

*Source: Primary data*

The study showed that the participants in the study had varying levels academic qualification, Fig 4.4 above shows that 15.7% of the participants in the study had acquired college diplomas, 14.3% had acquired bachelor's degrees, 42.9% had acquired honours' degrees and 32.7% had masters' degrees. Conclusively all the participants were academically qualified to participate in the study.

#### **4.1.3 Government Spending on Education**

Education for All Global Monitoring Report (2009) noted the government as the main contributor in education through financing of capital projects, recruiting and maintaining the welfare of the teaching and administrative staff, provision of technological and economic infrastructure and provision of basic and social amenities at the various schools. The participants (100%) indicated that government remains the main source of fund for public schools' operational activities and 68.6% indicated that capital projects are funded mainly by government, 21.4% of the participants indicated

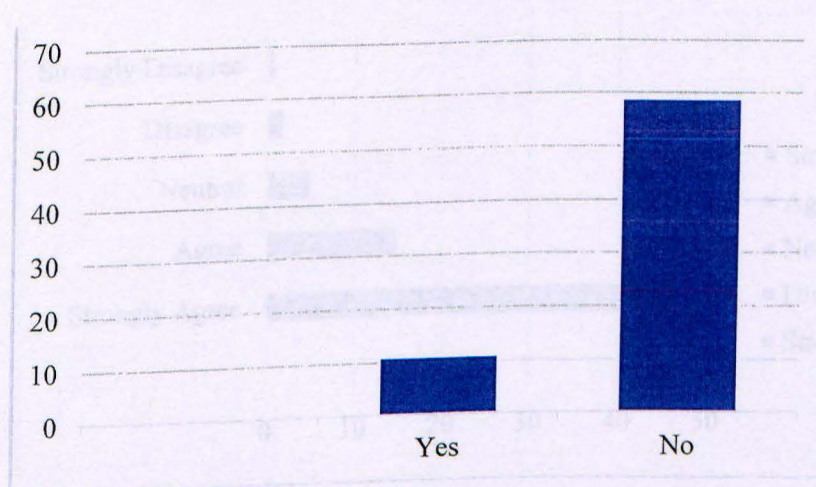
local private companies as the funders of capital projects whereas 10% attributed the role to international donor community. Table 4.3 below summarises the findings

**Table 4.3: Capital Projects Funding**

|                               | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------------------------------|-----------|---------|---------------|--------------------|
| Government                    | 48        | 68.6    | 68.6          | 68.6               |
| Local Private Company         | 15        | 21.4    | 21.4          | 90.0               |
| International Donor Community | 7         | 10.0    | 10.0          | 100.0              |
| Total                         | 70        | 100.0   | 100.0         |                    |

*Source: Primary Data*

Most of the participants (84.3%) also noted that the level of government spending was not adequate for optimal operation of the school. 15.7% of the school heads indicated that government funding was sufficient for their operation. The Figure



**Figure 4.3: Level of Government Funding Adequacy**

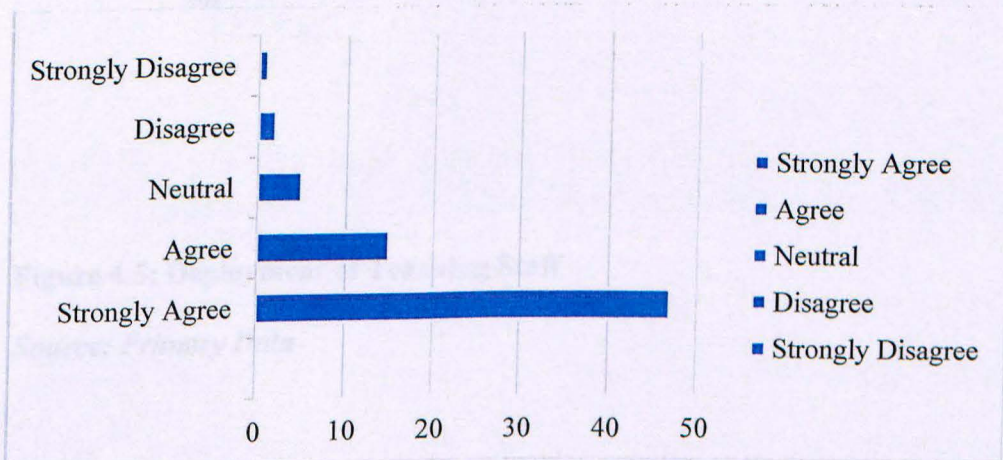
*Source: Primary Data*

All the participants indicated that they are allocated financial resources quarterly for operation purposes and capital projects. Contrary to Dwivendi's (2007) assertion that funding should determine enrolments, the participants indicated that enrolments determined the level of spending. Pillay (2008), pointed out that institutions that yield greater social returns should receive more funding. In the same vein, the government allocates resources to public schools that are likely to yield more social benefits.

#### 4.1.4 Effects of Government Spending on Education

##### 4.1.4.1 Government Expenditure on Quality of Teaching resources

Figure 9 below shows the percentage number of respondents when asked about the effects of government on the quality of teaching resources. 67.1% of the participants strongly agreed that government expenditure is directly related to quality of education resources. 21.4% of the participants agreed to the assertion, 7.1% were neutral. However, 2.9% of the participants disagreed and 1.4 strongly disagreed.

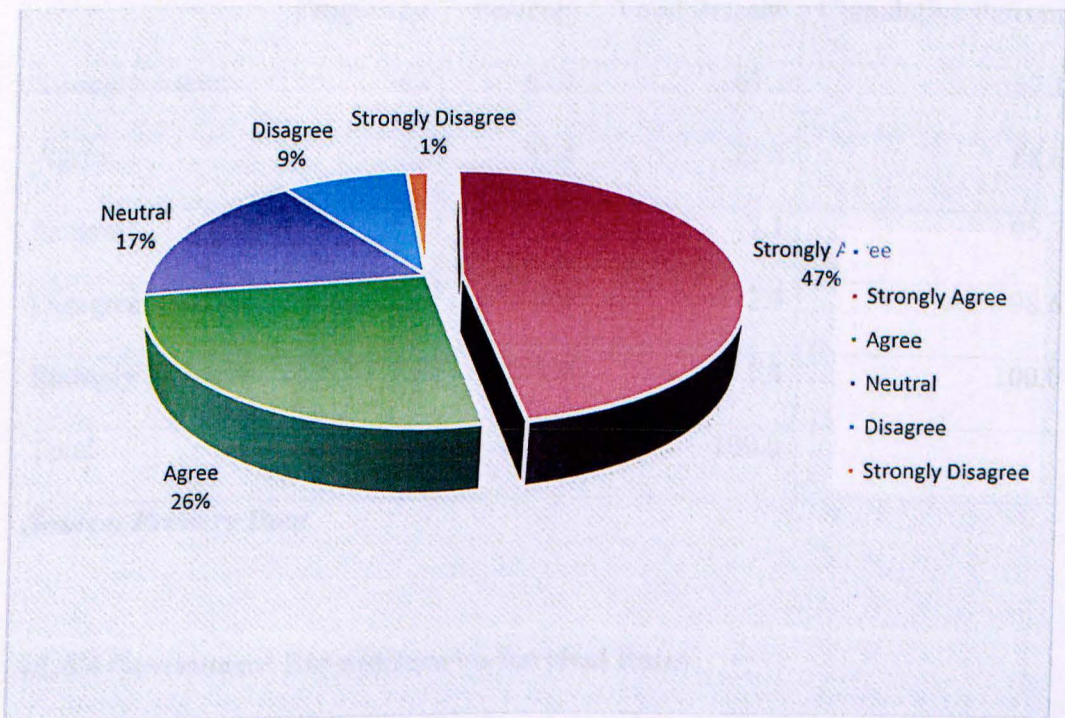


**Figure 4.4: Government Spending on Resources Allocation**

*Source: Primary Data*

#### 4.1.4.2 Government Expenditure on Deployment of Teaching Staff

The results showed that government expenditure on education affected the deployment of teachers. 47.1% of the participants strongly agreed to the existence of a negative linear relationship. Another 25% were in agreement that government fiscal initiatives affect the deployment of teaching staff. 17.1% of the participants were neutral of the relationship. Only 1 person was strongly against the relationship and 6% disagreed. Figure 10, the findings on the teacher deployment against fiscal initiatives.



**Figure 4.5: Deployment of Teaching Staff**

*Source: Primary Data*

#### 4.1.4.3 Government Expenditure on Enrolment Rates

The study showed that enrolment rate is inversely affected by the government allocation to agriculture and other economic sectors. Table 4.4, below shows that

67.1% strongly agreed that enrolments are heavily influenced by government expenditure, whereas 21.4% agreed to the existing negative relationship between government expenditure and enrolments rates in the public schools. 7.1% of the respondents in the study doubted there exist a relationship between government expenditure and enrolments rates. A paltry 4.3% combined either strongly disagreed and or disagreed government expenditure affect the enrolment rate.

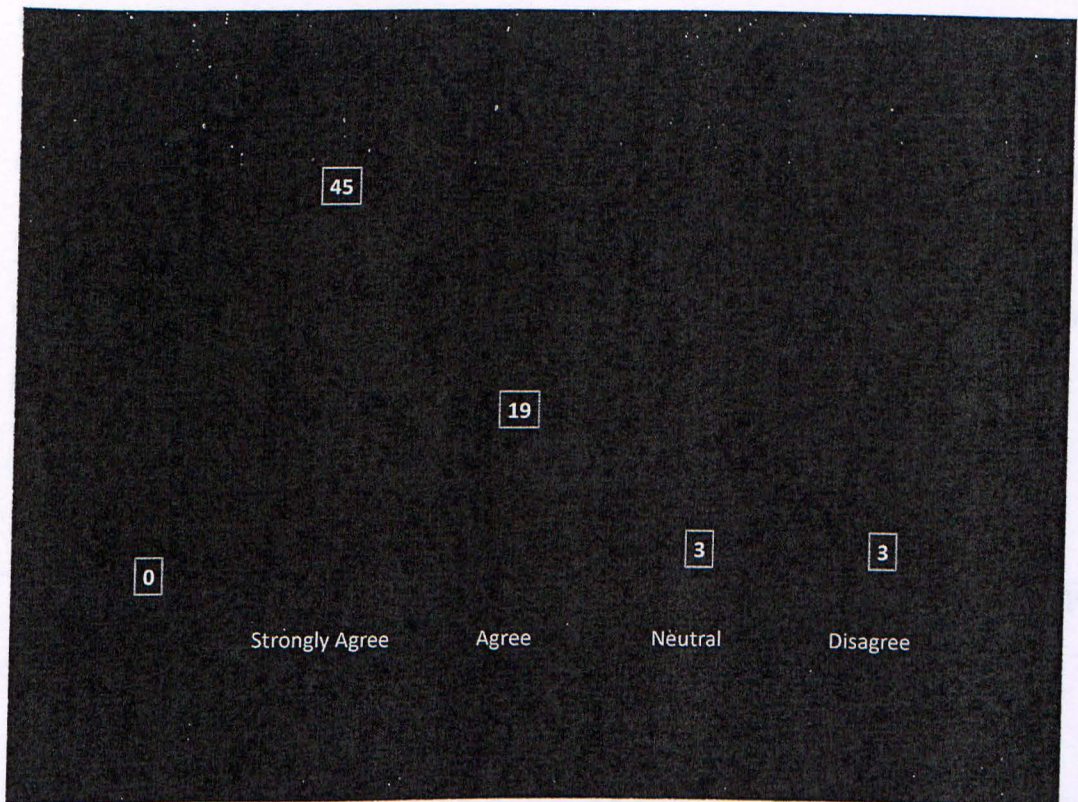
**Table 4.4: Government Expenditure on Enrolment**

|       |                   | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------------------|-----------|---------|---------------|--------------------|
| Valid | Strongly Agree    | 47        | 67.1    | 67.1          | 67.1               |
|       | Agree             | 15        | 21.4    | 21.4          | 88.6               |
|       | Neutral           | 5         | 7.1     | 7.1           | 95.7               |
|       | Disagree          | 2         | 2.9     | 2.9           | 98.6               |
|       | Strongly Disagree | 1         | 1.4     | 1.4           | 100.0              |
|       | Total             | 70        | 100.0   | 100.0         |                    |

*Source: Primary Data*

#### **4.1.4.4 Government Expenditure on Survival Rates**

There is direct cost associated with education such as books, transportation, uniforms and uniforms that are not provided by the government. Despite a number of studies indicating that survival rates are indirectly related to government expenditure rather on the disposable income (Schultz, 1993) and (Basu, 1999), the findings show that most of the participants are strongly agreed government expenditure on education directly affect the levels of survival in public schools.



**Figure 4.6: Government Expenditure Influence of Survival Rates**

*Source: Primary Data*

The figure above shows that most the participants (68.1%) strongly agreed that level of government spending contrariwise affect survival rates in public school. 28% of the participants agreed to the inverse relationship that exist between level of government spending and survival rates. A significant number of participants (7.1%) indicated their strong disagreement to the relationship between fiscal initiatives and survival rates.

#### **4.1.4.5 Government Learning Infrastructure**

Duflo (2001) investigated school infrastructure expansion project in Indonesia and established that the largest part of the funds was provided for by the government

despite donor funds from the private sector. The findings showed that the 645 of the participants strongly agreed their level of government spending on education also determine the investment in infrastructure. 27.1 % of the participants concurred and agreed to the assertion, however 4.3% were neutral and another 4.3% disagreed. None of the participants strongly disagreed that quality of learning infrastructure is a product of government spending. The table below summarizes the findings.

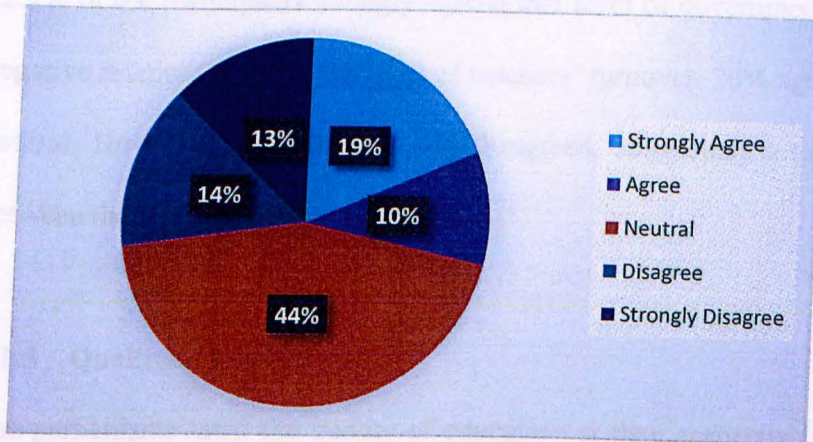
**Table 4.5: Effects of Government Spending on Infrastructure**

|       |                | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|----------------|-----------|---------|---------------|--------------------|
| Valid | Strongly Agree | 45        | 64.3    | 64.3          | 64.3               |
|       | Agree          | 19        | 27.1    | 27.1          | 91.4               |
|       | Neutral        | 3         | 4.3     | 4.3           | 95.7               |
|       | Disagree       | 3         | 4.3     | 4.3           | 100.0              |
|       | Total          | 70        | 100.0   | 100.0         |                    |

*Source: Primary Data*

#### 4.1.4.6 Government Spending and Dropout Rates

The study showed that the level of school dropout is slightly related to the level of government spending. 44.3% of the participants were neutral about the relationship. However, 18.6% attested to a close relation between dropouts and level of government spending and assumed it inverse whereas 10% agreed that level of government affects the level of school dropouts in public schools. On the contrary 14.3% disagreed there is an inverse relationship between level of spending and number of dropouts.

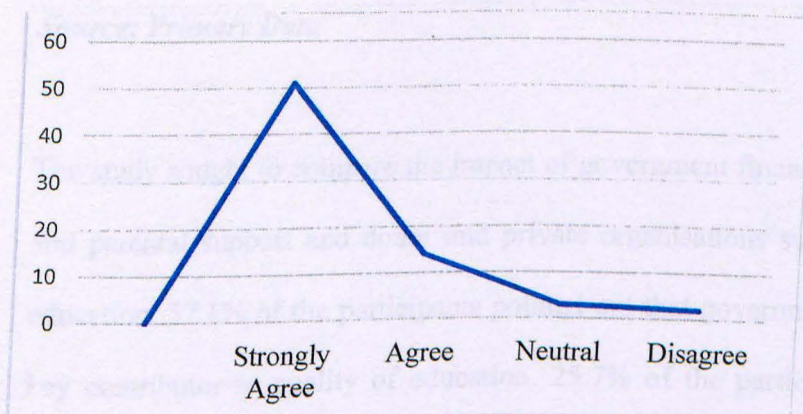


**Figure 4.7: Effects of Government Spending on Level of Dropouts**

*Source: Primary Data*

#### 4.1.4.7 Effects of Government Spending on Teachers' Turnover

Amutenya (2016) investigated the causes of teachers' attrition in the Khomas Region public schools in Namibia and concluded that the level of remuneration, conditions of service and allowances were chief causes of attrition. Government has been and continues to be the sole payer of the public service. A decline in the level of expenditure is therefore deemed to exacerbate teachers' turnover rates. The findings of the studies confirmed the findings by Amutenya (2016).



**Figure 4.8: Effects of Government Spending on Teachers Turnover**

*Source: Primary Data*

72.9% of the participants strongly agreed that level of government expenditure had a negative relationship with the level of teachers' turnover. 20% agreed and 4.3% were neutral. However, a worthless 2.9% disagreed, suggesting a positive relationship between the variable under consideration.

#### 4.1.5 Quality of Education

The participants rated the quality of education at their respective schools. 75.7% of the participants rated their schools average and 24.3% rated their schools excellent in terms of education quality. The study also sought to understand the factors affecting the quality of education the respective schools, Table below, summarizes the findings

**Table 4.6: Factors affecting Quality of Education**

|                              | Frequency | Percent | Valid<br>Percent | Cumulative<br>Percent |
|------------------------------|-----------|---------|------------------|-----------------------|
| Government Financial Support | 40        | 57.1    | 57.1             | 57.1                  |
| Parents Support              | 12        | 17.1    | 17.1             | 74.3                  |
| Donors and Private Support   | 18        | 25.7    | 25.7             | 100.0                 |
| Total                        | 70        | 100.0   | 100.0            |                       |

*Source: Primary Data*

The study sought to compare the impact of government financial support, community and parental support and donor and private organisations support on the quality of education. 57.1% of the participants pointed out that government financial support is key contributor to quality of education. 25.7% of the participants attribute quality education to donor and private companies funding of school curricular activities.

17.1% indicated that parents have a critical role in ensuring schools deliver quality education.

## 4.2 Secondary Data Analysis

This section analyses quantitative data collected from secondary source. To achieve this test the relationship between levels of government spending and quality of education descriptive statistics were used and interpreted. The section also presents the correlation analysis adopted in examining the degree of association among the study variables.

### 4.2.2 Descriptive Statistics

Table 8, show that in a period of 30 years minimum government spending on education was \$16,052,720.00 and on the other hand a maximum of \$104,775,170.26. Government expenditure included aggregate expenditure on capital expenditure and recurrent expenditures for primary and secondary schools. On average the quality index (QeD Index) of education is 53.23%. Quality of education index is an average of enrolments rates, attendance rates, pass rates, repetition rates and number of graduates in a particular year. The Table 11 below gives a descriptive summary of the secondary data research findings.

**Table 4.11: Descriptive Statistics**

|                       | N  | Minimum     | Maximum      | Mean          | Std. Deviation |
|-----------------------|----|-------------|--------------|---------------|----------------|
| Primary and Secondary | 31 | 16052720.00 | 104775170.26 | 39503140.7910 | 2558197.19001  |
| Qed Index             | 31 | 46          | 61           | 53.23         | 2.952          |
| Valid N (listwise)    | 31 |             |              |               |                |

*Source: SPSS Data Analysis*

### 4.2.3 Correlation Analysis

Correlation analysis test is a measure of statistical relationship between two or more variables. It measures the strength of an association between two variables and the direction of the relation (Creswell: 2012). The research tested the correlation between government expenditure against quality of education.

**Table 4.12: Correlation Findings**

|                     |                     | PrimarySecondaryExp | Qed Index |
|---------------------|---------------------|---------------------|-----------|
| PrimarySecondaryExp | Pearson Correlation | 1                   | .698**    |
|                     | Sig. (2-tailed)     |                     | .000      |
|                     | N                   | 31                  | 31        |
| Qed Index           | Pearson Correlation | .698**              | 1         |
|                     | Sig. (2-tailed)     | .000                |           |
|                     | N                   | 31                  | 31        |

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

*Source: SPSS Data Analysis*

The results show that there is a strong positive correlation between level of government expenditure and quality of education of +0.698. The correlation matrix shows that government expenditure positively influences quality of education to a large extent. A positive correlation indicates that a 1% increase in government expenditure increases the quality of education by a magnitude of 0.698.

#### 4.2.4 Regression Analysis

The study tested the hypothesis that government that there is a positive relationship between level of government spending and quality of education. The research used the Ordinary Least Squares (OLS) regression to test the hypothesis. The Least Squares in a regression model are used to determine the relationship and the strength of the relationship. R-Squared is used to determine model parsimony. The +/- sign of beta coefficients indicate the direction of the relationship.

##### 4.2.4.1 Model Summary

**Table 4.13: Model Summary**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .698 <sup>a</sup> | .487     | .469              | 2.151                      |

a. Predictors: (Constant), Primary and Secondary

*Source: SPSS Regression Tables*

##### 4.2.4.2 R<sup>2</sup> (Coefficient of Determination)

The results from the regression test analysis showed a coefficient of determination of 48.7%. The coefficient of determination explains the extent to which changes in the dependent variable (pass rates, dropout rates and repetition rates) as measured by Quality of Education can be explained by the change in the independent variables.

##### 4.2.4.3 Adjusted R<sup>2</sup>

The results showed an adjusted R-squared 0.469. The adjusted R<sup>2</sup> gives an idea of how well the model generalizes and ideally the value is expected to be the same the

$R^2$  value. The results show a difference between  $R^2$  and Adjusted  $R^2$  of 0.018 meaning that should the research have derived the model from the whole population it will account for approximately 5% less variance in the outcome.

#### 4.2.4.4 Anova Tests

**Table 4.14: Anova Test Table**

| Model  |            | Sum of Squares | df | Mean Square | F      | Sig.              |
|--|------------|----------------|----|-------------|--------|-------------------|
| 1  | Regression | 127.291        | 1  | 127.291     | 27.522 | .000 <sup>b</sup> |
|  | Residual   | 134.129        | 29 | 4.625       |        |                   |
|  | Total      | 261.419        | 30 |             |        |                   |
| a. Dependent Variable: Qed Index                 |            |                |    |             |        |                   |
| b. Predictors: (Constant), Primary and Secondary |            |                |    |             |        |                   |

*Source: SPSS Data Output*

ANOVA tests consist of the calculation that provide information about variability of within a regression model and provides the basis for testing the significance. The data showed that  $F(1, 29)$  and the probability of observing a value greater than or equal to 27.522 is less than 0.001 giving strong evidence that  $\beta_1$  is not equal to zero. Therefore, since  $R^2$  term is 0.478, this indicate that 47.8% of the variability in quality of education in primary and secondary schools' response is explained by the changes in government expenditure.

#### 4.2.4.5 Coefficients

**Table 4.15: Coefficient Tables**

| Model            | Unstandardized Coefficients |            | Standardized Coefficients | T      | Sig. |
|------------------|-----------------------------|------------|---------------------------|--------|------|
|                  | B                           | Std. Error | Beta                      |        |      |
| (Constant)       | 50.045                      | .719       |                           | 69.613 | .000 |
| PrimarySecondary | 8.052E-7                    | .000       | .698                      | 5.246  | .000 |

a. Dependent Variable: Qed Index

Source: SPSS Data Output

The results show that the value of the coefficient of government expenditure is  $3.934E-9$ , which means that a unit increase in government expenditure will cause an increase in quality of education by a magnitude of  $8.052E-7$ . Thus, the regression model can be defined as follows:

$$\text{Quality of education} = 50.045 + 8.052E-7 * \text{Government expenditure}$$

#### 4.2.4.6 Conclusions from the Results

The research sought to investigate the relationship between level of government expenditure and quality of education in the Khomas Region. The study analysed the data from the questionnaire and presented the findings in frequency tables, graphs and charts. In analyses of secondary data regression analysis was used to the study hypothesis. Level of government expenditure was measured by investment in educational resources, public school infrastructure and teachers' deployment. Quality

of education was measured as an average of pass rate, dropout rates and repetition rates for both public primary and secondary schools.

The result from the frequency tables analysed approximately 80% of the participants indicated that level of government expenditure affected the amount of resources allocated and bought by schools, deployment of teachers, investments in capital projects in public schools, teachers, turnover of rates, enrolments rates, and survival rates. However, it is notable there are other factors affecting the quality of education such as school characteristics, parents and community support and funding from private sector and international organisation.

The OLS was used to test the magnitude of the relationship between government expenditure and quality of education, which the primary data had confirmed its existence. The results show that there is a positive strong relationship between level of government expenditure and quality of education. Any increase in the spending is associated with an improvement in educational outputs.

#### **4.3 Summary**

This chapter presented and analysed the data that was gathered in carrying out the research. Quantitative techniques were used in the analysis of the data and conclusions were drawn and compared to previously existing literature on government expenditure. The major findings from the research included the existence of a strong positive correlation between level of expenditure and quality of education. The following chapter presents the conclusions and recommendations from the study and explores areas for future study.

**CONCLUSIONS AND RECOMMENDATIONS****5.1 Introduction**

The previous chapter gave an analysis and presentation of the research findings. The current chapter presents a summary of the research findings of this study. The chapter also provides conclusions and discussions drawn from the research findings and gives recommendations on fiscal policy and how it can effectively be used to influence the quality of education. The chapter also provides further study areas at the end of the chapter.

**5.2 Summary of Findings**

The research investigated the relationship between fiscal policy and quality of education. The main focus was to determine the nature of the relationship between fiscal decisions and the quality of education over a 30-year period. Fiscal policy was determined by the government expenditure on educational resources, deployment of teaching staff and public primary and secondary school capital projects investments during the period. Quality of education was defined by the pass rates, dropout rates and repetition rates. Both qualitative and quantitative techniques were used to determine the nature of the relationship. The conclusions were divided into 4 subheadings which were government spending, effects of government spending on quality of education and the magnitude of the relationship.

### 5.2.1 Scope of Government Spending on Education

The research investigated government spending in light of the UN millennium goal declarations which the country has also adopted. The results indicated that the government is the main, if not the sole funder of public education in public schools. Government is responsible for the provision of operational and capital projects funds. However, the study revealed (84.3%) that the government is not meeting the optimal financial requirements for the schools because the government uses enrolments to determine per capita expenditure for each school. Adesiyan (2016) found out that the increase in per capita expenditure on education was associated with an increase in enrolment, however the government of Namibia is finding education contrariwise. Enrolments are independent of government expenditure.

The policy the government is using for funding has created a challenge for government in terms of keeping up with the optimal quarterly allocations to the schools. Government expenditure on education is determined by enrolment rates which have a possibility of straining the government, should the budgeted funds fall short in matching enrolment. The participants revealed that the schools also engage in fundraising activities but government remains the main sponsor of education in Namibia. Gomba (2011) postulated that sole funding of education by the government, creates a fiscal dilemma during recession hence the need to adopt various funding methods. The study also established that schools are engaging in minimal income generating activities that supplements schools' expenditures at the same time minimize the burden of government supporting all activities in schools.

## **5.2.2 Effects of Government Spending on Education**

The study revealed that level of government expenditure influences the amount of educational resources, deployment of teaching staff, enrolment rates, survival rates, dropout rates, capital projects investment and teacher's turnover. The most significant implication of on fiscal policy initiatives is to recognize that operational efficiency in schools needs to be managed with the objective of creating quality education outputs which in turn boost the GDP of the country.

### **5.2.3.1 Educational Resources**

The research sought to understand the relationship and effect of government spending on educational resources such as books. The findings indicate a strong positive association between government spending and amount of educational resources allocated to schools. 67.1% of the participants in the study strongly agreed that government spending affects the quality and number of educational resources available for the learners in the public schools. This implies that as government expenditure decreases, the number of education resources available for every student decrease and inversely (Mutegi, 2016).

However, the Namibian scenario is unique because there is overdependence on the government for funding of operational and capital projects. A research conducted by Gwanyira (2017) in Zambia showed a negative association between educational resources and government expenditure. Notably the government, the government encourages for community to assist should the government be engaging in capital projects. Gwanyira noted that parents contributed bricks, monetary donations and lobbied for private and international partners to develop their own schools.

### **5.2.3.2 Teachers Deployment**

The study confirmed the findings by Hailombe (2011) that teacher deployment has been a constraint for the government strenuous budget which saw the implementation of mobile education for nomadic communities to cushion the challenge. However, the study made it visibly clear why mobile teaching have not yielded positive expected result. Government spending is directly related to teachers' deployment, welfare and motivation. Teachers' deployment is associated with increased expenditure by the government to cater for their housing allowance, salaries and rural allowance. A decline in government education expenditure visibly the deployment and motivation of the teachers thus in turn affecting the quality of education outputs.

### **5.2.3.3 Repetition Rates**

The findings of the study showed that there is a strong negative relationship between level of government spending and repetition rates. According to Luthuli (2017), repetition rates especially in grade 10 and 12 are a product of minimal investments in education infrastructures that capacitated development of the learners. A study was conducted in Nigeria to investigate the relationship between government expenditure and educational outputs (pass rates, dropout rates and repetition rates) in 2011. The findings of the study showed that there is a connection between these variables. If a number of your learners are repeating it points out to poor quality of the education systems. The rates of repetition in the developing countries especially in public schools remains alarming (Chandra, 2010) and World Bank (2010) asserts that a drive needs to be exerted to the governments in developing countries to stimulate growth in pass rates whilst combating repetition rate and dropout rates through government expenditure.

### 5.2.3 Impact of Government Spending and Quality of Education

The researcher found out that the level of government expenditure has an impact on the overall efficiency of the education system. The coefficient of government spending on education is  $8.052E-7$ , which shows that for every unit increase in government expenditure, quality of education improves by a magnitude of  $8.052E-7$ . The positive coefficient implied that the more the government increases its expenditure on educational drivers such in this case, the educational resources, capital projects and teachers' welfare, the quality of education will be improved (pass rates, dropout rates, attendance rates and repetition rates)

The probability of the government expenditure increasing the quality of educational output was 0.00 which shows that the level of government spending has high impact because the probability is less than 0.05. The output of the educational systems was also significant in the determination of the government expenditure ratio by considering the probability values. The combine factors representing quality of education had a P-value of 0.00 from the regression analysis which is less than 0.05 for it to be more significant in determining the government expenditure ratio.

The study findings are in tandem with findings by Jeston (2016) which showed a strong positive correlation the between education per capita spending and learners' performance. The study showed that the level of education spending per learner increased the chance of their performance. Luthuli (2017) also discovered that there is strong relationship between government spending and human capital development (through access to quality education). These findings showed a strong relationship

between government expenditure and gross enrolment ratio at 99 % confidence interval ( $p < 0.0001$ ).

### **5.3 Implication of the Findings**

The findings of the research outline various set of policy implications for government spending and quality of education. There is need for crafting policies for managing government expenditure in the country. It is important for government to increase operational efficiency in the education systems by ensuring accessibility of financial resources. The study noted that education expenditure should be driven more by enrolments rather the opposite. It is also noteworthy that increasing government expenditure will go a long way in improving the quality of education in Namibia. Ensuring there is equal access to academic learning material and competent happy teachers, will assist in improving the quality and quantity of educational outputs.

### **5.4 Recommendations**

#### **5.4.1 Funding for the Schools**

The results indicated a strong relationship between government expenditures and the quality of education. Quality education according to the Human Capital Theory creates a pool of knowledgeable, skilled and competent workforce which can transform the fortunes of the country through their contribution. The research therefore recommends the government despite of the fiscal policy adopted to maintain the budget for education higher otherwise the quality of education will be compromised. The government should adopt a funding model that can sustain funding during contractionary periods. Muktdair-Al-Mukit (2012) study, noted that Bangladesh and Singapore have successfully created an incremental budget for

education that is not affected by changes in government spending policy and Namibia needs to emulate such.

#### **5.4.2 Increase the Scope for Fundraising Activities**

The overreliance on funding from government by schools was exposed by the study and therefore it is recommended the government widens the scope for fundraising by the schools and their communities. The fundraising activities can include exhibitions, gala dinners and lobbying with the international and local business communities for project development at the schools to reduce the government burden. UNESCO (2014) attributed the education success in the financially troubled Zimbabwe to fundraising activities by the schools and the community.

### **5.5 Areas for Future Research**

The research primarily focused on the fiscal policy and its impact on the quality of education in Khomas Region. Thus, there is need for further research on the subject matter as the study only focused on one variable (fiscal policy) and the results may be limited because of the small size of the sample hence there is a need to expand in this area. Therefore, since the research did not include all the possible explanatory variables of quality of education future research can be done towards that area including different combinations of explanatory variables. More so, the study used inflation adjusted government spending figures which might have affected the data properties, the research therefore recommends diagnostic testing for the study variable in future research studies.

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## ANNEXURE 1: INTRODUCTION LETTER

Dear Respondent,

I am a Master's in Business Administration (Finance) student registered at the Department of Economics and Management Science at University of Namibia. I am currently carrying out a research on the following topic:

“AN INVESTIGATION INTO THE EFFECTS OF FISCAL POLICY ON THE QUALITY OF PRIMARY AND SECONDARY EDUCATION IN THE KHOMAS REGION GOVERNMENT SCHOOLS”

Since you are directly involved in the subject of the study, your completion of the attached questionnaire is important. All responses will be treated confidential and reported only in terms of the entire population. Thank you in advance for your anticipated cooperation.

Yours faithfully,

Ester Ndinelago Ephraim

**I have read the above information regarding this research study on gender diversity, and consent to participate in this study.**

Name of Participant.....

Signature .....

Date.....

## ANNEXURE 2: QUESTIONNAIRE

### AN INVESTIGATION INTO THE EFFECTS OF FISCAL POLICY ON THE QUALITY OF PRIMARY AND SECONDARY EDUCATION IN THE KHOMAS REGION GOVERNMENT SCHOOLS

Please feel free and respond to all questions. Responses will be treated confidentially and for the purposes of this study only. The questions below are designed to gather information about your organisation.

#### PART 1: DEMOGRAPHIC INFORMATION

The information in this section will be used for statistical purposes only.

Please mark a cross (X) in the applicable box.

|   |                   |   |                            |  |
|---|-------------------|---|----------------------------|--|
| 1 | Employment Status | 1 | Permanent                  |  |
|   |                   | 2 | Fixed Term Contract        |  |
|   |                   | 3 | Part-Time Contract         |  |
|   |                   | 4 | Any other (Please specify) |  |

|   |        |   |        |  |
|---|--------|---|--------|--|
| 2 | Gender | 1 | Female |  |
|   |        | 2 | Male   |  |

|   |                   |   |                  |   |               |
|---|-------------------|---|------------------|---|---------------|
| 3 | Age               | 1 | 18 – 30          | 3 | 41 – 50       |
|   |                   | 2 | 31 – 40          | 4 | 51 - and more |
|   | Length of service | 1 | Less than 1 year | 4 | 11-20 years   |
|   |                   | 2 | 1-5 years        | 5 | 21-30 years   |
|   |                   | 3 | 6-10 years       | 6 | 31 +          |

|   |                    |   |                 |
|---|--------------------|---|-----------------|
| 4 | Level of education | 1 | Diploma         |
|   |                    | 2 | Bachelor Degree |
|   |                    | 3 | Honours Degree  |
|   |                    | 4 | Master's Degree |
|   |                    | 5 | Doctorate       |

## PART 2: GOVERNMENT SPENDING ON EDUCATION

5. What is the main source of finance for operational purpose at your school?

- A. Government
- B. Local Private Company
- C. International Donor Community
- D. Tuition Fees

6. What is the main source of finance for capital projects at your school?

- A. Government
- B. Local Private Company
- C. International Donor Community
- D. Tuition Fees

7. State any other means the school uses to raise funds for both capital and operation activities

i. ....

ii. ....

8. Is the level of government funding adequate for optimal operation of the school?

Yes

No

9. How often does the school get funds from the government?

A. Monthly

B. Quarterly

C. Semi Annually

D. Yearly

E. Other

(Specify).....

10. What criteria does the government use to allocate financial resources to schools?

A. Enrolment rates

B. Pass rates

C. Needs Basis

D. Systematic Distribution

E. Random Allocation

11. What other assistance measures government has put in place apart from financial contribution?.....

.....

.....

**In the table below, indicate the whether or not government expenditure impact negatively the following factors.**

|    |                                    | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|----|------------------------------------|----------------|-------|---------|----------|-------------------|
| 12 | Quality of teaching resources      |                |       |         |          |                   |
| 13 | Deployment of teachers             |                |       |         |          |                   |
| 14 | Enrolment rates                    |                |       |         |          |                   |
| 15 | Survival rate at your school       |                |       |         |          |                   |
| 16 | Quality of learning infrastructure |                |       |         |          |                   |
| 17 | Level of school dropouts           |                |       |         |          |                   |
| 18 | Teacher turnover                   |                |       |         |          |                   |

### PART 3: PERFORMANCE AND QUALITY OF EDUCATION

20. Kindly indicate Government estimate expenditure on education for the following periods

| Year                | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Administrative      |      |      |      |      |      |      |      |      |      |      |      |      |
| Staff Deployment    |      |      |      |      |      |      |      |      |      |      |      |      |
| Resource Allocation |      |      |      |      |      |      |      |      |      |      |      |      |
| Teacher's Welfare   |      |      |      |      |      |      |      |      |      |      |      |      |
| Capital Projects    |      |      |      |      |      |      |      |      |      |      |      |      |

| Year                | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Administrative      |      |      |      |      |      |      |      |      |      |      |      |      |
| Staff Deployment    |      |      |      |      |      |      |      |      |      |      |      |      |
| Resource Allocation |      |      |      |      |      |      |      |      |      |      |      |      |

|                   |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Teacher's Welfare |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Capital Projects  |  |  |  |  |  |  |  |  |  |  |  |  |  |

|                     |      |      |      |      |      |      |      |  |  |  |  |  |  |
|---------------------|------|------|------|------|------|------|------|--|--|--|--|--|--|
| Year                | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |  |  |  |  |  |  |
| Administrative      |      |      |      |      |      |      |      |  |  |  |  |  |  |
| Staff Deployment    |      |      |      |      |      |      |      |  |  |  |  |  |  |
| Resource Allocation |      |      |      |      |      |      |      |  |  |  |  |  |  |
| Teacher's Welfare   |      |      |      |      |      |      |      |  |  |  |  |  |  |
| Capital Projects    |      |      |      |      |      |      |      |  |  |  |  |  |  |

21. Kindly indicate your school pass rates for the following periods

|           |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|
| Year      | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 |
| Pass Rate |      |      |      |      |      |      |      |      |      |      |      |      |

|           |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------|------|------|------|------|------|------|------|------|------|------|------|------|
| Year      | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| Pass Rate |      |      |      |      |      |      |      |      |      |      |      |      |

|           |      |      |      |      |      |      |      |  |  |  |  |  |
|-----------|------|------|------|------|------|------|------|--|--|--|--|--|
| Year      | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |  |  |  |  |  |
| Pass Rate |      |      |      |      |      |      |      |  |  |  |  |  |

22. Rate the quality of your school's education?

- Poor
  Average
  Excellent

23. Which of the following affects more the quality of schools' education?

- Government Financial Support
- Parents Support
- Donors and Private Support

Thank you for your participation



The Rev. Dr. Greenfield Mwakipesile

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## CONTACT

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Windhoek,  
Namibia

## LANGUAGE & COPY-EDITING CERTIFICATE

3<sup>rd</sup> March 2019

**RE: LANGUAGE, COPY-EDITING AND PROOFREADING OF ESTER NDINELAGO EFRHAIM'S THESIS FOR THE MASTER OF BUSINESS ADMINISTRATION DEGREE OF THE NAMIBIA BUSINESS SCHOOL OF THE UNIVERSITY OF NAMIBIA**

This certificate serves to confirm that I copyedited and proofread **ESTER NDINELAGO EFRHAIM'S** Thesis for the **MASTER OF BUSINESS ADMINISTRATION DEGREE** entitled: **AN INVESTIGATION INTO THE EFFECTS OF FISCAL POLICY ON THE QUALITY OF PRIMARY AND SECONDARY EDUCATION IN KHOMAS REGION GOVERNMENT SCHOOLS**

I declare that I professionally copyedited and proofread the thesis and removed mistakes and errors in spelling, grammar, and punctuation. In some cases, I improved sentence construction without changing the content provided by the student. I also removed some typographical errors from the thesis and formatted the thesis so that it complies with the University of Namibia's guidelines.

I am a trained language and copy editor and have edited many Postgraduate Diploma, Masters' Thesis, Dissertations and Doctoral Dissertations for students studying with universities in Namibia, Zimbabwe, eSwatini, South Africa and abroad. I have also copy-edited company documents for companies in the region and abroad.

Please feel free to contact me should the need arise.

Yours Sincerely,

The Rev. Dr. Greenfield Mwakipesile



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Dr. Greenfield Mwakipesile