EFFECT OF TAX PAYER EDUCATION ON TAX COMPLIANCE AMONG SMES IN KENYA, A CASE OF MOTOR VEHICLE SPARES TRADERS IN NAKURU TOWN SUBURB AREA

\mathbf{BY}

JOHN MWANGI NJOKI

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER DEGREE IN TAX AND CUSTOMS ADMINISTRATION

MOI UNIVERSITY

DECLARATION

Student's Declaration

I declare that this research project is my original work and has not been presented
either in full or part of it for a degree in this University or any other.
Signed Date
JOHN MWANGI NJOKI
REG NO: KESRA/105/0050/2017
Declaration by the Supervisors
This research project has been submitted for examination with our approval as the
Project Supervisors.
Signed Date
Dr. IRUNGU MACHARIA
Lecturer, Department of Accounting and Finance, School of Business and Economics
Signed Date
Dr. NAOMI KOSKE

Lecturer, Department of Accounting and Finance, School of Business and Economics.

DEDICATION

This project is dedicated to my mother who single handedly raised me and made a lot of sacrifice to educate me despite the fact that she lacked a similar opportunity in her life. I also dedicate this project to my two young daughters.

ACKNOWLEDGMENT

I would first acknowledge The Almighty God for the good health during the entire period of this work. I would also like to acknowledge the assistance of my research Supervisors Dr. Irungu Macharia and Dr. Naomi Koske for their guidance and constructive criticism in the writing of this research project. Without their input, this work would remain incomplete. I would also like to acknowledge the contribution of all my Lecturers in my course work for the knowledge impacted in me.

ABSTRACT

The level of tax compliance among the small and medium tax payers is described as low by Kenya Revenue Authority. Kenya's SMEs have the potential to generate a great deal of tax revenue for the government, but that's not the case. The main objective of this study was to determine the effect of tax-payer education on motor vehicles traders' tax compliance in the Nakuru Town suburb of Kenya. The specific objectives included: to determine the effect of main stream media education, print media education, social media education and KRA stakeholders' forums education on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya. The study was anchored on four theories: theory of planned behavior, economic deterrence theory, optimal taxation theory and presumptive taxation theory. Explanatory research design was adopted. The target population for the study was 300 traders dealing in motor vehicles spares in Suburb area of Nakuru town. A sample size of 150 traders was selected using simple random sampling technique. The study collected primary data by use of structured questionnaires. To explain the characteristics of the study variables, data collected was calculated and analyzed using descriptive statistics including frequencies, percentages, means and standard deviations. The relationship between the independent variable and the dependent variable was tested using inferential statistics such as Pearson correlation and regression. The findings indicated a combined R square of 0.615. This shows that main stream media education, social media education, KRA's stakeholder's education forums and print media tax payers education explain 61.5% of the tax compliance. The findings also indicated that print media tax payers education (β =0.315, p=0.000, R Square=0.414), social media education (β=0.292, p=0.000, R Square=0.381), main stream media education (β=0.205, p=0.003,R Square=0.285) and KRA's stakeholders education forums (β=0.184, p=0.003, R Square=0.310) had a positive and significant effect on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya. The study concluded that all the independent variables (main stream media education, social media education, KRA's stakeholder's education forums and print media tax payers education) jointly have a positive and significant relationship with tax compliance. The study recommends inclusion of tax education in Kenya primary and education curriculum to prepare young learners who are future tax payers on the importance of tax compliance. The study also recommends that the KRA needs to scale up its social media engagement of the enlightenment of taxpayers since the use of social media platforms is very convenient given the advent and advantages brought about by use of smartphone technology. The business traders in Nakuru town are likewise, encouraged to adhere to tax compliance since the compliance is more beneficial to the country's economy. In addition, they need to acknowledge the information updated on the social media platforms, newspapers as well as the ones advertised on national televisions.

TABLE OF CONTENTS

DECLARATION	11
DEDICATION	iii
ACKNOWLEDGMENT	iv
ABSTRACT	v
TABLE OF CONTENTS	vi
LIST OF TABLES	x
LIST OF FIGURES	xi
OPERATIONAL DEFINITION OF TERMS	xii
ABBREVIATIONS AND ACRONYMS	xiii
CHAPTER ONE	1
INTRODUCTION	1
1.0 Overview	1
1.1 Background of the Study	1
1.2 Statement of the Problem	5
1.3 Objectives of the study	6
1.3.1 General objective	6
1.3.2 Specific Objectives	6
1.4 Research Hypotheses	7
1.5 Significance of the Study	7
1.6 Scope of the Study	8
CHAPTER TWO	9
LITERATURE REVIEW	9
2.0 Overview	9
2.1 Concepts of the Study	9
2.1.1 Tax Compliance	9
2.1.2 Tax Payer Education	10
2.2 Theoretical Review	10
2.2.1 The Theory of Planned Behavior	11
2.2.2 Economic Deterrence Theory	12
2.2.3 Optimal Taxation Theory	14
2.2.4 Presumptive Taxation Theory	14
2.3 Empirical Review on Tax payer Education and Tax Compliance	15
2.3.1 Main Stream Media Education and Tax Compliance	19

2.3.2 Social Media Education and Tax Compliance	21
2.3.3 KRA's Stakeholders Education Forums and Tax Compliance	22
2.3.4 Print Media Education and Tax Compliance	24
2.4 Research Gaps	25
2.5 Conceptual Framework	26
CHAPTER THREE	28
RESEARCH METHODOLOGY	28
3.1 Overview	28
3.2 Research Design	28
3.3 Study Area	28
3.4 Target Population	28
3.5 Sample Size and Sampling Procedure	29
3.6 Data Types and Sources	30
3.7 Data Collection Procedures.	30
3.8 Validity of the Instrument	31
3.9 Reliability of the Instrument	32
3.10 Measurement of Variables	33
3.11 Data Analysis Techniques and Model Specification	34
3.12 Diagnostic Tests	35
3.12.1 Test of Normality	36
3.12.2 Test of Linearity	36
3.12.3 Test of Multicollinearity	36
3.12.4 Test of Heteroscedasticity	36
3.12.5 Test of Autocorrelation	37
3.13 Ethical Considerations	37
CHAPTER FOUR	38
DATA ANALYSIS, DISCUSSION AND PRESENTATION OF THE STUDY	
FINDINGS	38
4.1 Introduction	38
4.2 Response Rate	38
4.3 Pilot Results	39
4.3.1 Reliability results	39
4.3.2 Test for Validity	39
4.4 Demographic characteristics of the Respondents	40

4.5 Descriptive Statistics for the Variables	42
4.5.1 Tax Compliance	42
4.5.2 Main Stream Media Education	43
4.5.3 Social Media Education	44
4.5.4 KRA's Stakeholders Education Forums	46
4.5.5 Print media tax payers education	48
4.6 Diagnostic Tests	50
4.6.1 Normality Test	50
4.6.2 Test of Linearity	51
4.6.3 Multicollinearity Test	52
4.6.4 Heteroscedasticity Test	52
4.6.5 Auto-correlation Test	53
4.7 Correlation Analysis	53
4.8 Univariate Regression Analysis	55
4.8.1 Main stream media education and Tax compliance	55
4.8.2 Social media education and Tax compliance	56
4.8.3 KRA's stakeholder's education forums and Tax Compliance	56
4.8.4 Print media tax payers education and Tax Compliance	57
4.9 Multiple Regression Analysis	57
4.10 Hypothesis Testing.	61
4.11 Discussion of the Key Findings	63
CHAPTER FIVE	66
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	66
5.1 Introduction	66
5.2 Summary of the Findings	66
5.2.1 Main stream media education and Tax Compliance	66
5.2.2 Social media education and Tax Compliance	66
5.2.3 KRA's stakeholder's education forums and Tax Compliance	67
5.2.4 Print media tax payers education and tax compliance	67
5.3 Conclusions	68
5.3.1 Main stream media education and Tax Compliance	68
5.3.2 Social media education and Tax Compliance	68
5.3.3 KRA's stakeholder's education forums and Tax Compliance	69
5.3.4 Print media tax payers education and tax compliance	69

5.4 Theoretical Implications	70
5.5 Recommendations	70
5.6 Contribution of the Study	71
5.7 Limitations of the Study	72
5.8 Areas for Further Studies	72
REFERENCES	73
APPENDICES	79
Appendix I: Letter of Introduction	79
Appendix II: Questionnaire	80
Appendix III: Summary of Empirical Literature	86
Appendix IV: NACOSTI Permit	89
Appendix V: Authorization Letter from KESRA	90

LIST OF TABLES

Table 3.1: Measurement of variables
Table 4.1: Response Rate
Table 4.2: Reliability Results
Table 4.3: Factorial test results for Validity
Table 4.4: Demographic profile of the Respondents
Table 4.5: Descriptive Statistics on tax compliance
Table 4.6: Descriptive Statistics on main stream media education
Table 4.7: Descriptive Statistics social media education
Table 4.8: Descriptive Statistics on KRA's stakeholders' education forums47
Table 4.9: Descriptive Statistics on print media tax payers education49
Table 4.10: Test for Normality
Table 4.11: Multicollinearity Results
Table 4.12: Breusch-Pagan Test for heteroscedasity
Table 4.13: Durbin-Watson Test for Serial Correlation
Table 4.14: Correlation Matrix; Tax-Payers Education and Tax Compliance54
Table 4.15: Regression Results; Main stream media education and Tax compliance.55
Table 4.16: Regression Results; Social media education and Tax compliance56
Table 4.17: Regression Results; KRA's stakeholder's education forums and Tax
compliance56
Table 4.18: Regression Results; Print media tax payers education and Tax compliance
57
Table 4.19: Model Summary; Tax-Payers Education and Tax Compliance58
Table 4.20: ANOVA; Tax-Payers Education and Tax Compliance
Table 4.21: Coefficients; Tax-Payers Education and Tax Compliance
Table 4.22: Hypotheses Test Results

T	TCT	\mathbf{OF}	FIC:	URES
	451	()r	T I (T	

Figure 2.1: Conceptual Framework	27
\mathcal{E}	

OPERATIONAL DEFINITION OF TERMS

- **KRA stakeholder's education forums:** refers to dissemination of tax education to tax payers through workshops, seminars and cultural events (Katharina *et al.*, 2015)
- **Main Stream Media Education:** refers to dissemination of tax education to tax payers through televisions and radio stations (Sas, 2007)
- **Print Media Education:** refers to dissemination of tax education to tax payers through magazines, newspaper and booklets (Gitaru, 2017).
- **Small Tax Payer**: This is a category of tax payers whose business turnover is less than Kes 500 million in one year. They further have characteristics of small capital, sole employment structure.
- **Social Media Education:** refers to dissemination of tax education to tax payers through Facebook, Twitter, Instagram and other social media applications (Cyan, Koumpias & Martinez-Vazquez, 2016)
- **Tax Compliance:** refers to the tendency of the tax payers to do as required by the tax rules and obligations (Marziana *et al*, 2010)
- **Tax Education**: These are programs that are initiated by tax authorities to sensitize tax payers on the tax obligations as well as their rights under the tax laws (Gitaru, 2017)
- **Tax**: This is a compulsory levy imposed by government on income, expenditure or capital assets but does not guarantee direct benefit from the levy paid as tax (Lymer and Oats, 2009).

ABBREVIATIONS AND ACRONYMS

ANOVA Analysis of Variance

CAK Communication Authority of Kenya

CBD Central Business District

ETR Electronic Tax Register

GoK Government of Kenya

KRA Kenya Revenue Authority

OECD Organization for Economic Co-operation and Development

PAYE Pay As You Earn

PIN Personal Identification Number

SAS Self-Assessment System

SMEs Small and Medium Enterprises

TV Television

VAT Value Added Tax

VIF Variance Inflation Factor

CHAPTER ONE

INTRODUCTION

1.0 Overview

This chapter presents the study background, the statement of the problem, the main objective, specific objectives, the research hypotheses, the significance and the scope of study.

1.1 Background of the Study

Tax is a compulsory payment that is imposed by the government on its subjects with no assurance of a direct benefit from the tax paid (Lymer & Oats, 2009). Tax compliance can be described as the willingness by the taxpayer to pay taxes (Kirchler, 2007). In regard to taxation, the principal objective of the government is to maximize the amount of revenue collected from its citizens as taxes. On the other hand, citizens are working towards reducing the burden of taxation. In the process of reducing their tax burden, the citizens may work towards achieving this objective either through tax avoidance or tax evasion. Tax compliance is a global concern and governments worldwide are faced with the problem of tax non-compliance (Maseko, 2014).

Tax compliance is the extent to which the tax payers strive to do as per the requirement by the relevant tax laws that have been set up by countries. According to Maxwel (2003), compliant tax payers are those that make timely declaration of their tax positions. Maxwel also explains that compliance by taxpayers is dependent on economic incentives embedded in the tax structure. Compliance with tax payers also relies on the effectiveness of the tax structure and administration in detecting and punishing non-compliant taxpayers.

In an effort to increase tax compliance, the Japanese government introduced the Self-Assessment System through the Japanese National Tax Administration (NTA) in 1947, which played a key role in the tax learning process. Rani (2005) argues that activities such as public relations, tax education, tax guidance and tax consultancy have been introduced by the Government of Japan to improve tax compliance levels. The introduction of such non-punitive measures such as tax education to enhance tax compliance is a departure from the past practices of punishing and levying fines to enforce tax compliance.

A research carried out in Malaysia by Mohd Rusyidi *et al* (2013) on the impact of introducing tax education in the formal curriculum found that introduction of tax education in schools would help improve tax compliance as it would help in changing the attitude of the tax payers in the early stages of their lives. Formal tax education is one of the best strategies that can be used in Malaysia to equip future taxpayers with tax expertise that will help them comply with their taxes. This however has not been introduced in Malaysia even after the aforementioned scholars suggested the measure (Anies Barieyah *et al.*, 2009).

Further studies have been conducted by other scholars in Malaysia to prove the level of tax knowledge among salaried workers who have completed their tertiary education. Amriza and Nero (2005) found that, although they had tertiary education, salaried workers in Malaysia did not possess sufficient tax knowledge. If salaried workers who had undergone through the tertiary education possessed such low levels of tax knowledge, this meant that the situation was worse in the informal sector. In Tanzania, Clifford and Jairus (2013) conducted a study to test the effect of taxpayer education on tax compliance. The study found that the relationship between tax compliance and the education of tax payers was positive.

Countries in Africa are developing countries which still depend on tax revenue to finance government operations and this emphasizes the importance of tax compliance to enhance revenue collected from taxes. Nigeria which is a country in Africa is faced with the greatest problem of tax non-compliance. James and Alley (2004) view that tax compliance is a major issue facing many tax authorities in Africa and that it is never easy to persuade taxpayers to comply with the tax laws in place. Aksnes (2011) observed that there are several reasons that lead tax payers being non-compliant in Africa key among them being low tax education and complicated rules.

Ignorance of tax laws is seen as a major issue facing the tax authority in Nigeria in its effort to improve tax compliance among tax payers. The main factor that creates a problem to the proper planning and tax administration in Nigeria is the low level of tax-payers' education. Azubike (2009) observed that there is lack of information among the taxpayers in Nigeria regarding the relevant tax laws. This therefore emphasizes the uphill task the government of Nigeria faces in improving tax compliance. With this observation of lack of information among the tax payers, the government of Nigeria is instituting education programs to educate its taxpayers regarding the provisions of the tax laws in the country. Tax payers' education was adopted by the Nigerian government as a major reform to enhance tax compliance. Lagos State Internal Revenue adopted Public enlighten measures such as the use of radio, television, newspapers, bill boards and printing of T-shirts (Olowookere *et al* 2013).

In Uganda, tax noncompliance is also a major problem facing the government and the Uganda Revenue Authority. Uganda Revenue Authority was set up in 1991 with the expectation that its enhanced autonomy would improve revenue collection. The Authority was allowed to hire its own skilled staff and to run like a private entity with

a code of conduct to curb corruption. After its inception, URA introduced measures to increase tax revenue key among them was tax-payers education and tax advice facilities (Ayoki *et al* 2005).

Kenya relies mostly on tax revenues for their development goals and financing of the government activities. The government of Kenya needs money to finance its operations such as education, health services, infrastructure, defense and financing of debts. This therefore means that the government should direct more effort in ensuring all the citizens pay their fair share of the taxes. Lymer and Oats (2009) argue that taxation in civilized societies is one of the most important elements of national income management.

In Kenya, depending on their business turnover or income levels, taxpayers are categorized as small, medium or large. Regardless of one's classification, taxpayers in Kenya are required to comply with tax laws. Businesses in the informal sector, vital to most economies, are the engines of growth. In Kenya, these enterprises are an essential part of the economy and are the source of various economic contributions through the generation of income through exports, the provision of new job opportunities, the stimulation of competition, the driving force of employment, the contribution to economic growth, the aid to industrial development, the satisfaction of local demand for services and the introduction of innovation and support for large enterprises. Nevertheless, the sector remains the smallest contributor to tax revenue in Kenya. There is therefore a need to assess the role of education for taxpayers in determining the tax compliance of companies in the informal sector. The study will add new contribution on the effect of taxpayers education in the form of social media education. This study focused on spare motor vehicle dealers in Nakuru Town, Kenya's Suburb area.

1.2 Statement of the Problem

A major challenge facing both developed and developing countries in the world is non-compliance with current tax laws and obligations. There are several reasons why tax payers do not comply with tax laws, including poor education, complex tax laws, low risk of being caught and a culture of corruption (Aksnes, 2011). In Kenya, the authority mandated with tax revenue collection is faced with the challenge of tax compliance among the tax payers. What this one means therefore is that Kenya Revenue Authority does not meet its tax collection targets. Due to tax revenue collected not being enough to finance government development and recurrent expenditure, the government is forced to turn to both domestic and foreign debts (CBK, 2019).

To enhance tax compliance particularly in the informal sector aimed at making it possible to hit tax revenue targets, the government through Kenya Revenue Authority has embarked on extensive tax payers education through various modes (Kamau, 2014). In the past KRA has largely concentrated on the more formal sector leaving out the informal sector untaxed of their billions despite a report by KRA annual report of 2012, approximating that Kes 108 billion could be tapped from the informal sector (KRA, 2012). Fjeldstad and Ranker (2003) posits that tax payers education involves coming up with a group of tax officers and properly training them and mandating them with the responsibility of training tax payers. Even though taxpayers' education has been a key initiative, not much has been documented as to whether it has borne fruits. There's thus a need for research to assess whether these efforts are gaining fruits in enhancing tax compliance.

A research study on the impact of tax payer education on VAT tax compliance was conducted by Ndirangu (2014) and found that tax knowledge and education have a

positive impact on VAT compliance among motor vehicle part dealers in Nairobi CBD, thus presenting a geographical gap. A similar study was conducted by Gitaru (2017) on the impact of tax payer education on SMEs in Nairobi CBD and found out that tax payer education plays a very critical role in tax compliance thus presenting a geographical gap.

To the best of the researcher's knowledge, no local study focused on the role of tax payer education in improving tax compliance among spare motor vehicle traders in Nakuru town's Suburb area. This study therefore sought to fill the existing research gap by examining the effect of taxpayer education mode on tax compliance among spare motor vehicle traders in the Nakuru Town Suburb, Kenya.

1.3 Objectives of the study

1.3.1 General objective

The general objective of this study was to establish the effect of tax-payers education on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya

1.3.2 Specific Objectives

The specific objectives of this study were:

- i. To determine the effect of main stream media education on tax compliance among motor vehicles spares traders in Suburb area of Nakuru town, Kenya.
- To assess the effect of social media education on tax compliance among motor vehicles spares traders in Suburb area of Nakuru town, Kenya.
- iii. To examine the effect of KRA stakeholders' forums education on tax compliance among motor vehicles spares traders in Suburb area of Nakuru town, Kenya.

iv. To evaluate the effect of print media education on tax compliance among motor vehicles spares traders in Suburb area of Nakuru town, Kenya.

1.4 Research Hypotheses

H₀₁: Main stream media education has no significant effect on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya.

 H_{02} : Social media education has no significant effect on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya.

H₀₃: KRA's Stakeholders forums education has no significant effect on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya.

H₀₄: Print media education has no significant effect on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya.

1.5 Significance of the Study

This research may be of beneficial to KRA which is in the front seat in ensuring tax compliance through tax-payers education. The results of this study will inform the KRA in assessing whether its efforts in educating tax-payers are gaining fruits and also get informed on the most effective mode of education to use. The government on the other hand may find this study important as it can use it to make policy that specifically affect SMEs in Nakuru Suburb area and a country as a whole depending on the outcomes of the study. The study may also be of importance to other scholars who might be interested in a similar study in other areas of the country. The study may also be of great importance to the business owners if the findings of the study are used in policy making towards improving tax compliance in the informal sector.

1.6 Scope of the Study

The study sought to determine the impact of tax payer education on tax compliance among traders in the Nakuru Town Suburb, Kenya. It focused on four key dimensions: main stream media education, social media education, print media education and KRA stakeholders' forums education. This study covered small and medium motor vehicles spare traders in Nakuru town Suburb area. The target population were 300 traders dealing in motor vehicles spare parts in this Suburb area of Nakuru town since there are many other traders dealing with other merchandise. Out of this, 150 traders were sampled. The respondents who were issued the questionnaires were the actual owners of the businesses. The study was conducted between 2019 and 2020.

CHAPTER TWO

LITERATURE REVIEW

2.0 Overview

This chapter primarily concerns itself with highlighting what other scholars have said regarding tax-payers education and its effect on tax compliance. The chapter also highlights the theoretical review, empirical review and also the conceptual framework of the study.

2.1 Concepts of the Study

2.1.1 Tax Compliance

Tax compliance is defined as the degree to which the tax payers strive to do as per the requirements by the relevant tax laws that have been set up by countries. According to Maxwel (2003), compliant tax payers are those that make timely declaration of their tax positions. Maxwel also claims that enforcement by taxpayers is based on economic rewards embedded in the tax structure. Compliance with tax payers also relies on the effectiveness of the tax structure and administration in detecting and punishing non-compliant taxpayers.

Tax compliance refers, according to Williams and Round (2009), to fulfilling all tax obligations as required by the tax laws. Some of the variables that can lead to tax evasion and tax fraud are high compliance costs, inadequate understanding, high tax rates and tax penalties. The size, nature and functioning of the informal sector make the tax compliance issue critical. In terms of resources and expertise, the sector is not well established. The authors further observe that individuals either willingly or unwillingly fail to comply with tax laws. They include tax resisters and protesters against taxes. Tax protesters use alternative interpretations of the tax law to try to avoid paying taxes, while tax resisters refuse to pay taxes on conscientious grounds.

2.1.2 Tax Payer Education

Taxpayer education refers to a method of educating individuals about the entire taxation process and why they should pay taxes (Aksnes, 2011). It helps taxpayers fulfill their government tax obligations. This suggests that the primary aim of taxpayer education is to promote voluntary taxpayer enforcement. The main objective of tax payer education, according to Misra (2004), is threefold: to impart awareness of tax laws and enforcement; to change the attitude of taxpayers towards taxation; and to increase tax collection through voluntary compliance.

This study focuses on four dimensions that tax authorities use to pass information and knowledge to tax payer. The first one is stakeholder's education forums that entails to dissemination of tax education to tax payers through workshops, seminars and cultural events (Katharina *et al.*, 2015). The second one is main stream media education that involves dissemination of tax education to tax payers through televisions and radio stations (Sas, 2007). The third one is print media education that involves dissemination of tax education to tax payers through magazines, newspaper and booklets (Gitaru, 2017). The fourth one is social media education that includes dissemination of tax education to tax payers through Facebook, Twitter, Instagram and other social media applications (Cyan, Koumpias & Martinez-Vazquez, 2016).

2.2 Theoretical Review

A theory can be said to be a set of assumptions, propositions, or facts that have been accepted to provide an explanation to a particular phenomenon. Several theories have tried to provide a solution or answers to the problem of tax noncompliance. Why is it that despite the fact that tax payers have full knowledge of the fact that, for the government to provide essential services it requires money, but they still refuse to pay taxes or underpay taxes? Onuba (2011) argued that the reason as to why most people

fail to comply with the set tax regulations and laws is because the governments tend not to be accountable on the taxes collected. The taxes or revenue collected tend not to achieve the purpose for which they are intended for. The major concern here is corruption among the governments.

There is need especially for developing countries to extensively roll out tax-payers education programs if they expect to enhance tax compliance among tax payers. This is an observation that was made by Azubike (2009). The governments must also ensure that revenue generated from taxes is better utilized without any of the coins ending up in a few individuals' pockets. This will have the effect of gaining tax payers confidence when it comes to utilizing their hard-earned revenue generated from taxation. The government and the tax payers have a social contract. The government collects tax revenue on behalf of the tax payers guided by the existing social contract between the two parties.

It's therefore needless to say that the government has a duty to ensure that none of the social contract clauses is broken or bended in any way. This way, tax payers will not find it difficult to comply with the relevant tax laws and regulations. This study is guided by the following theories.

2.2.1 The Theory of Planned Behavior

In order to understand and predict people's intentions and behavior, the theory of expected behavior is mostly used (Ajzen, 2011). The theory explores human behaviour that affects how they behave and react to certain circumstances. This theory suggests that many social influences that emerge from certain causes and evolve in a planned way influence the actions of individuals in a society. According to this theory, the tendency to act in a certain way depends on three variables: behavioral

attitude, subjective standards, and perceived behavioral influence. Ajzen (2002) concluded that if the outcome of the behavior is seen to be a positive thing, a person's attitude would be beneficial with a greater likelihood of a person participating in that behavior.

The principle is important to this study as it is primarily concerned with the ethics and morals of a tax payer. As per this theory, tax payers who believe that tax compliance is a good thing may comply even when the chances of being detected are low. Such tax payers will therefore comply voluntarily without having to be pushed or audited. The shift of a taxpayer's attitude towards tax enforcement is one of the value of tax education, and hence the theory of expected actions as a psychological theory plays a major role in shaping the taxpayer's attitude leading to tax compliance. Kaplan et al. (1997), based on their research on the theory of planned actions, argued that a taxpayer's moral growth is substantially associated with tax enforcement. Kaplan et al. (1997) have argued that the spiritual growth of taxpayers affects the efficacy of such educational messages that promote compliance with taxes.

Studies by Oyugi (2008), Katharina *et al* (2015) and Gitaru (2017) also applied the theory of planned behavior to explain their variables. Likewise, the current study uses the theory of planned behavior to explain the key role played by education on tax compliance.

2.2.2 Economic Deterrence Theory

Becker (1968) established this theory. The theory is based on the assumption that a person would shy away from committing such a crime if the consequences of committing a specific crime are greater than the benefits that result from the crime itself. The principle of economic deterrence is based on the assumption that it is easy

for all human beings to distinguish between what is wrong and what is right and the consequences of wrongdoing.

The advocates of this theory come from the school of thinking, which claims that after carefully examining the benefits and shortcomings of their actions, people chose to follow or disobey the rules. Allingham and Sandmo (1972) made an attempt to link the theory of economic deterrence and taxation when they developed an economic deterrence model that argued that a tax payer will most likely be tax non-compliant if he is assured that the economic benefit arising from non-compliance exceeds the cost of being caught.

Tax payers who comply based on their perceived economic benefits that arise from their compliance may be taken through an education program to make them appreciate that direct benefits are not a guarantee under taxation. According to Yusof, Ling and Wah (2014), no government in the world promises its citizens direct benefits based on the tax paid. Taxation serves the role of wealth distribution in the economy for the benefit of the less advantaged. Such education programs would make the taxpayers to be more tax compliant not necessary based on the benefits likely to accrue.

The economic deterrence principle is important in this research as it brings out the role of tax payer education in understanding the consequences that come with non-compliance. In particular, the theory makes it clear the intentions of any government for taxation is wealth distribution and not direct benefits for those paying taxes. The theory was also used by other related studies such as Misra (2004), Aksnes (2011) and Gitaru (2017) in their researches on tax payer education.

2.2.3 Optimal Taxation Theory

Optimal tax theory was developed by Ramsey (1927). It looks at how to best optimize a tax system in order to reduce any distortion and inefficiency that may arise. Government's operatives must therefore strike a balance when coming up with a tax system. In its effort to raise revenue from taxation, the government must not create a distortion in economic choices by tax payers. Ramsey argued that a tax that is neutral is a tax which fully avoids distortion and inefficiency. The theory suggests that a benevolent tyrant who respects both individual and social interests in order to attain equality, makes the policy. Auerbach (1986) argued that one may chose to ignore this theory based on the fact that the actual tendency is for the policy makers to represent the interests of some specific groups.

It's safe to say that if any tax system creates distortion and inefficiency, compliance level will most likely be low (Mankiw, Weinzierl &Yagan, 2009). The principle is relevant to this research as it explains situations or events when tax compliance may be low. It points out the need for efficient tax systems that do not encourage non-compliance. Previous studies such as Maxwel (2003), Ndirangu (2014) and Williams and Round (2009) also applied the theory in their researches on effects of tax payers education on tax compliance.

2.2.4 Presumptive Taxation Theory

Presumptive taxation theory advanced by Ahmad and Stern (1991) employs indirect means to ascertain the tax liability of a tax payer. This theory explores several procedures to ascertain the desired tax base is inferred from some simple indicators.

Thuronyi (1996) argues that this theory may be applied due to several reasons that include but not limited to; simplification especially for small tax payers whose

turnover is low, it helps in reducing if not eliminating tax avoidance among small tax payers, it ensures equitable distribution of tax burden as even the small tax payers that would have otherwise been difficult to comply contributes to the much needed tax revenue, it encourages small tax payers to maintain proper books of accounts that form the basis of their tax liability computation, they tend to offer incentives to the small tax payers as the tax paid is not progressive tax where the higher the income the higher the tax paid.

The presumptive taxation theory is relevant to this study as it tends to encourage tax compliance among tax payers by suggesting simple methods of calculating tax liability. The tax payers however must be educated on the presumptive method of computing tax liability to encourage them to comply with the tax regulations and tax laws. Other studies such as Devas and Kelly (2001), Tanui (2016), Ogembo (2019) and Ndirangu (2014) also applied the presumptive taxation theory to explain their variables.

2.3 Empirical Review on Tax payer Education and Tax Compliance

This section looked at what other scholars have done regarding tax-payers education and how it affects tax compliance. Tax compliance can be said to be the tendency of the tax payers to do as required by the tax rules and obligations (Marziana *et al.*, 2010). Tax compliance influenced by several factors some among them high compliance cost, lack of education or understanding of the existing tax laws and regulations. Williams and Round (2009) found that small tax payers either voluntarily or unwillingly refuse to comply with the current tax laws. There are some who chose not to comply and others don't know what's required of them thus unwillingly fail to comply. For such tax payers, it's important to educate them on the existing tax laws and regulations to enhance their compliance. For those who willingly fail to comply

despite the fact that they well understand the existing tax laws and regulations, they can be forced to comply through regular scrutiny and tax penalties.

There is need for the revenue authorities to turn their focus on the informal sector which is comprised of small and medium enterprises and educate them on tax compliance. Webley (2004) observed that to better understand SMEs, there's need to first understand their operations. Developing countries' economies are mostly driven by the informal sector and therefore there's need for these countries to encourage and support these SMEs to enhance their growth thereby enabling the governments to tap tax revenue from these sectors. The governments in developing countries should know that encouraging growth of SMEs alone is not enough. As the developing countries support SMEs, there's need for continued education on tax matters and any new tax regulations that affect these small and medium tax payers.

Hijattulah and Pope (2008) argued that developed countries must build a favorable climate for the growth of small and medium-sized enterprises and thus enable countries 'economies to grow as well. In addition, tax awareness among tax payers has a very important role to play in improving tax enforcement in this era of self-assessment systems (SAS) (Mohdi Rizal et al., 2013). This also means that in order for the revenue authorities to meet their tax revenue goals, the level of tax education and tax awareness needs to be high. Tax education and knowledge also ensures that taxpayers are able to accurately calculate their tax obligation and file their tax returns on time as well. A research study on the effect of taxpayer education on VAT tax compliance was conducted by Ndirangu (2014) and found that tax awareness and education had a positive impact on VAT compliance among motor vehicle part dealers in Nairobi CBD. Gitaru (2017) conducted a similar study on the effects of tax

payer education on SMEs in the Nairobi CBD and found that education for taxpayers plays a very critical role in tax enforcement.

Richardson (2006) enunciated that tax knowledge that is achieved through tax education plays an important role in enhancing tax compliance. Since tax education is not compulsory in Kenya, even those who are better educated need to be sensitized on matters tax to enhance compliance. Loo and ho (2005) carried out a study that sought to investigate if salaried workers possessed tax knowledge. They found that these workers did not possess sufficient tax knowledge. This was despite the fact the workers possessed tertiary education. Bearing in mind that some of such workers would end up as business people, it would be important to sensitize them on tax matters through tax education to increase their tax compliance when such time comes. Some research, such as one conducted by Marziana et al. (2010), found that if they understood the definition of taxation well, tax payers were able to comply. Therefore, educating tax payers on tax matters is paramount. Another study conducted by Park and Hyun (2003) also stressed that the most productive method to boost tax enforcement is tax education. In a study conducted in 45 countries around the world, Richardson (2006) found that the relationship between tax education and tax evasion is negative, indicating that the more tax payers are educated, the less likely they are to evade taxes. Junainah (2002) noticed that most were reluctant to follow it as they discovered difficulties in filling up tax returns and estimating the tax liability, while trying to ascertain why some tax payers were unwilling to adopt the Self-assessment tax system. Tax education will also play a major role for such tax payers in ensuring

that they accept the SAS.

Developing countries governments mostly depend on tax revenue for their growth safe for the emerging tendency to indebt the countries with numerous unsustainable debts. Despite the trend to turn to debts to ensure development, developing countries must create a conducive environment that will encourage growth of businesses as tax revenue is still required to service the loans as and when they fall due. The tendency to borrow more loans to service the existing loans is ill advised as it continues to overburden developing countries. Developing countries must therefore not be encouraged to follow this route but instead create or establish tax systems that will be easy to operate and that will encourage compliance with the tax laws. James and Alley (2004) argued that compliance with existing tax laws should be the goal of every tax system.

There's need to educate tax payers through for example counselling on matters related to tax. The aim of tax advice is to assist taxpayers in their tax matters, thereby enhancing tax compliance by providing correct tax returns and remitting taxes to the taxpayer (Therkildsen, 2004). The low tax compliance in developing countries need to be urgently addressed as these governments so much rely on tax revenue for development and financing of recurrent expenditure. As Ayoki *et al.* (2005) found that many factors lead to low tax compliance among them being corruption, weak legal systems, rampant informal sector economy, complexity of tax laws, high tax rates, lack of adequate information among others. One reason for the non-compliance as observed by Ayoki *et al.* (2005) is inadequate information. This paper will seek to address this problem by studying whether tax-payers education to bridge the information gap will result to increased compliance.

A study carried out in Malaysia by Normala (2007) found out that increased tax knowledge through education led to increased tax-compliance. Another study of small

business taxpayers conducted in Australia by Mckerchar (1995) found that these business owners are not even conscious of a lack of tax awareness that may lead to unintentional non-compliance actions. Therefore, tax awareness is an important aspect when it comes to voluntary enforcement by tax-payers (Kasippilai, 2000). This is particularly important when it comes to tax liability estimates (Palil, 2005) and (Saad et al., 2003). This paper seeks to replicate the same in the Kenyan context for traders in Nakuru County Town, Suburb area.

2.3.1 Main Stream Media Education and Tax Compliance

Tax education to the tax payers through this media is mainly passed through televisions and radio stations. It's worth noting that most homes in Kenya have access to either a television or a radio station. Tax authorities should therefore use this opportunity to reach tax payers and sensitize them on the need to comply with the set tax laws and regulations. In the area of study, it was found that most of the traders have either a television or a radio to kill the boredom that comes spending too much time in one place. Others keep televisions and radios to attract more customers (OECD, 2011). Therefore, any tax information passed through these two Medias would effectively reach the traders.

Sas (2007) argued that use of electronic media to view the tax payers and pass tax education would enhance compliance by applying dynamic comprehensive approaches. The researcher further argued that this approach to electronic media would allow the tax payer to have a single view of the revenue authority or any agency, increase auditor productivity and enhance performance management.

Mathias *et al.* (2013) carried out a research to determine if electronic media coverage on tax matters led to tax compliance. The findings showed that media reports dealing

with tax problems had the potential to affect the trust of citizens in government authorities. The findings also showed that the approach to electronic media had a positive effect on the intent of taxpayers to pay their taxes. They also found that information passed through electronic media about the tax system's accountability, service orientation, and government credibility had a positive and important effect on government confidence that contributed to tax enforcement.

Cyan, Koumpias and Martinez-Vazquez (2016) analyzed the efficacy of TV and national newspaper media initiatives used by Pakistan's Federal Revenue Board to increase visibility, tax filing, and, eventually, tax morale. For respondents who were exposed to TV and newspaper ads, the researchers found enhanced expectations of tax compliance. Since the latter is more effective, the choice of the advertising delivery device is essential. Their results provide empirical proof that well-timed campaigns can increase voluntary tax filing enforcement.

Koumpias (2017) examined the impact on collections of unpaid personal income tax obligations in Greece of phone call compliance reminders by the tax authority. The goal of the reminders is to raise awareness of the payment deadlines and, in the event of non-compliance, to warn about the possible tax levies. An e-mail is received by all tax delinquent individuals with a registered e-mail address, while a subset of individuals also receive a follow-up phone call alert, resulting in a natural experiment. The results show that nudging of data can lead to two-way behavioral responses and even backfire under some circumstances. Recipients of compliance reminders for phone calls pay less. The effect is influenced by the especially negative reactions of those with tax arrears in previous years, while the payments of newly-delinquent taxpayers do not change dramatically.

2.3.2 Social Media Education and Tax Compliance

Social media education is relatively new approach being employed by the revenue authorities to reach tax payers and little if any research has been done to measure the effectiveness of this education on tax compliance on the part of the tax payers. With the invention of the internet and increased access to smart phones, there's increased use of social media that include Facebook, Twitter, Instagram and other social media applications (Shafer & Wang, 2018). According to the data from Communication Authority of Kenya (CAK), as at 2017, 89.4% of Kenyans had access to internet.

Most organizations have established their presence in the social media sites including hiring social media managers who are responsible for disseminating information through social media. Kenya Revenue Authority has not been left behind. KRA has presence in Facebook and Twitter where information is shared on daily basis and almost hourly. KRA has used these social media platforms to educate tax payers on tax compliance such as filing of annual tax returns and filing of monthly tax returns such as VAT and PAYE. Before every 9th of every month when tax payers are required to file their PAYE and before every 20th of every month when tax payers are required to file their VAT, KRA through platforms such as Facebook and Twitter send reminders on these important dates. Tax payers are also presented with an opportunity to engage the tax man on any matter that they feel needs further clarification on matters of tax compliance. Any complain is also passed through Social media to the revenue authority with feedback or solution to the complaint also passed through the same social media platform (Karugo, 2017).

The impact of taxpayer education on voluntary tax compliance among small and micro enterprises (SMEs) in Tanzania has been identified by Machogu and Amayi (2016). In particular, the study focused on the level of taxpayer education, the level of

voluntary tax compliance, and the influence of taxpayer training on the level of voluntary tax compliance among entrepreneurs. It used a cross-sectional descriptive research style. The results showed that 85 % of respondents admitted that they had developed an understanding of basic tax laws and procedures. 78.7 percent of respondents agreed that they were able to recognize and become aware of their taxpayer rights and responsibilities through taxpayer training. 83 percent of respondents agreed that taxpayer education enabled them to clearly grasp the tax payment process.

2.3.3 KRA's Stakeholders Education Forums and Tax Compliance

From time to time KRA carries out education forums to enhance tax compliance among tax payers. KRA operations have been decentralized meaning that a tax payer in Nakuru doesn't have to travel to Nairobi to sort out tax matters with the Revenue Authority. KRA carry out education workshops in their various stations across the country. Through these forums KRA is able to disseminate any information that require the attention of the tax payers. A case in example is when KRA was introducing ITAX. Various workshops were carried out across the country to educate tax payers on the new system. KRA also use these forums to bring to the attention of the tax payers on any new regulations or change in tax laws. KRA uses such workshops to collect feedback from the tax payers on any tax matter (Malonza, 2016).

KRA also conduct these education forums by visiting tax payers in their places of business to sensitize them on tax matters and to also ensure that they are complying with the relevant tax laws. Through such forums KRA is also able to get feedback from the tax-payers that informs the revenue authority continued transformation and also helps it to analyses risks and how to mitigate them (Musyoka, 2019). The

continued interaction between revenue authorities and the taxpayers lead to the increase in trust.

Schneider (2013) indicated that the conceptualization of the relationship between authorities and citizens draws on the conventional psychological viewpoint. They also argued that this relationship produces a particular social climate that gives rise to the degree of voluntary cooperation of taxpayers with the applicable tax laws.

Katharina et al. (2015) conducted a study on tax authorities' experiences with taxpayers and their effect on tax enforcement, and found that this relationship is characterized by a service and customer attitude that ensures that taxpayers and tax authorities come together under well-defined rules and standards. Therefore, taxpayers should be viewed by tax authorities as practitioners who deserve consideration and support services enhanced through these educational platforms of the KRA. Furthermore, Katharina et al. (2015) reports that taxpayers who regard the authorities as supportive and professional are likely to comply with the applicable tax legislation.

The efficacy of taxpayer education in revenue collection by KRA in Nairobi County was evaluated by Oyugi (2008). A descriptive research design was applied to the analysis. The knowledge was evaluated by applying a mixture of both quantitative and qualitative approaches. The results showed that taxpayer education had increased KRA's revenue collection. In particular, the results showed that in terms of revenue collection, taxpayer education had increased the following aspects: the public level of awareness of different taxes; tax enforcement among non-cooperating taxpayers: the reduction of tax evasion; and the ease of taxpayers filing tax returns.

2.3.4 Print Media Education and Tax Compliance

Print media education involves the use of magazines, newspaper, booklets among others. Kenya Revenue Authority regularly use newspapers with national circulation to communicate to the tax payers and to also educate them on new tax laws or amendments (Achieng (2014). Research on Kenya's individual tax enforcement was checked by Angus Young, et al. (2016). Although empirical study is still in its infancy in this jurisdiction, the size of the problem may be under-estimated, or at least ignored. The effectiveness of TV media promotions, the use of tax knowledge magazines, business customers / prospects, and national newspapers would increase awareness among tax payers, tax filing, and eventually tax morale.

Achieng (2014) conducted a study on how taxation is reported in the print media in Kenya a case of the Daily Nation and the Standard newspapers. The period taken was June to December 2013; during the budget reading, post budget review and after the 1st revenue quarter. A content analysis of the daily newspapers (Monday to Friday) publications specifically Nation and Standard was done. The research concludes that taxation reporting in the print media is sensational and seasonal. Media houses are primarily profit making organizations. They focus their reporting to news that will sale and hence report taxation prominently when it touches on top government officials. The study recommends that the media as an informational tool should give taxation prominence in their reporting and must play a watch dog role in highlighting government projects that are implemented using the government tax.

The effects of tax awareness and knowledge on tax compliance among SMEs in Ghana have been investigated by Tetteh (2019). In the analysis of data, Structural Equation Modeling was used. The findings showed that most of the participants had no experience or engaged in any training and sensitization programs aimed at

generating tax knowledge and awareness. The study's results showed that electronic media, print media and stakeholder sensitization initiatives were statistically relevant and had a positive effect on SME tax compliance.

The effect of contact networks on tax enforcement by small taxpayers in Nairobi City County, Kenya, was investigated by Pere and Theuri (2019). The basic objectives were to assess the effect on tax enforcement by small taxpayers of electronic, print media and stakeholder sensitization initiatives. A descriptive research design was employed in this report. The findings indicated that it is very costly to introduce and maintain investing in electronic communication networks, but government must make efforts as this is one of the factors that increase enforcement among small taxpayers. Furthermore, the results showed that the sensitization program for electronic, print media and stakeholders had a positive and important impact on small taxpayers' tax enforcement.

2.4 Research Gaps

After the literature review, it's evident that there's need for more research to be undertaken on this area of tax payers education and its effect on tax compliance. Previous researches in Kenya on the topic have limited themselves to the county of Nairobi. With the devolved units (counties), several businesses and companies have been opened in the counties. These businesses also contribute towards tax revenue in Kenya. Kenya Revenue Authority has also moved with time and circumstances by opening tax stations across the country. It's therefore important to change the scope of the research to evaluate how tax-payers compliance in the counties is affected by tax-payers education.

There is also the new area of tax-payers education program in the name of social media. Currently, there is scant information and empirical evidence on the use and effect of social media on tax compliance. Few studies have attempted to create the link between social media as a source of tax education and tax enforcement among tax payers. Therefore, there is need to address the underlying knowledge gap.

2.5 Conceptual Framework

A conceptual structure is a network of interrelated concepts or a plane that together provide a detailed explanation of a phenomenon or phenomena (Yosef, 2009). A conceptual framework is defined by Wong and Wai-Yee (2015) as a collection of broad ideas and values taken from a particular field of study and used to structure a subsequent presentation. The conceptual structure for this analysis is illustrated in Figure 2.1.

As displayed in the conceptual framework, the independent variables included: main stream media education, social media education, KRA stakeholder's education forums and print media tax payers education. On the other hand, the dependent variable was tax compliance.

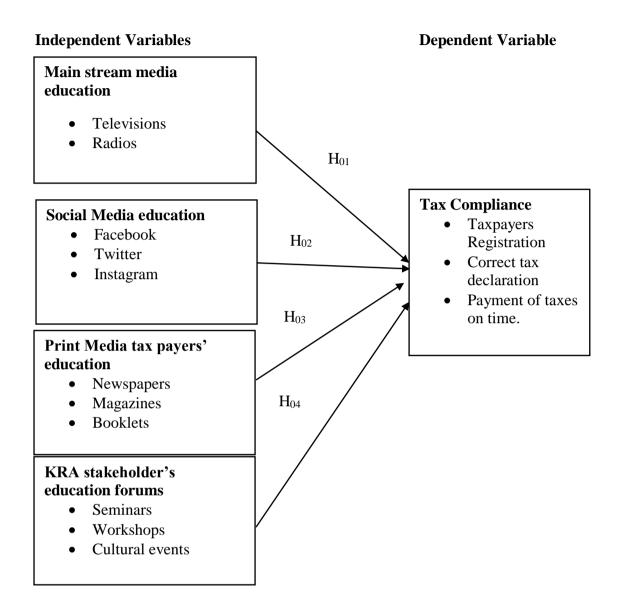


Figure 2.1: Conceptual Framework

Source: (Researcher, 2020)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Overview

This chapter focuses on how the study was conducted. The chapter describes the applied research design, target population, sample size and technique of sampling, data collection, diagnostic tests, and techniques of data analysis.

3.2 Research Design

Research design is the plan and a mechanism used for the collection, measurement and analysis of the data (Schwart & Yanow, 2013). According to Etikan and Bala (2017) a research design is a roadmap of carrying a research study. This study employed an explanatory research design. This design sought to find out what is causing a certain occurrence to happen. It sought to determine the effect of one variable (Gray 2013) on the other. For this study, the design is appropriate as it seeks to establish the causal effect between the independent variables (education of taxpayers) and the dependent variable (tax compliance).

3.3 Study Area

The location of this study was the suburb area of Nakuru town. The location was selected because most of the motor vehicles spare trading businesses operate within the area and they are part of tax payers that are expected to be tax complaint. These SMEs are also part of the larger informal sector where cases of tax non-compliance have been increasing.

3.4 Target Population

Target population refers to the population constituting of individuals sharing similar characteristics (Sekaran & Bougie, 2010), and is useful since it forms the basis of a

research scope. This study target population was 300 motor vehicles spare traders operating in the suburb area of Nakuru town (Nakuru County Directorate, 2018). The choice of traders as units of observation was justified because they are the owners of these businesses and the tax liability of the company trickles down to them as individuals. Furthermore, the traders as tax payers are expected to comply with tax regulations set by Kenya regulatory authority.

3.5 Sample Size and Sampling Procedure

A sample is a fraction of the study population and is necessitated when the study population is relatively large (Etikan & Bala, 2017). On the other hand, sampling is the procedure of obtaining the sample from the study population. A selection of units selected from the population to represent it is also a sample (Bryman & Bell, 2015). In deriving a sample size, this study followed the Fisher formula.

$$n = \frac{z^2 p(1-p)}{d^2}$$

Where;

n= sample size

z= the standard normal deviate value for the level of confidence, for instance 95% level of confidence =1.96.

d= margin of error or level of precision at 0.08 for CI at 92%

p= proportion to be estimated, assumed, p=0.5

Therefore, sample size is arrived at as follows:

$$n = \frac{(1.96^2)(0.5)(1 - 0.5)}{(0.08)^2}$$

$$n = 150$$

Consequently, the sample size of the study was 150-motor vehicle spare traders operating in the Nakuru town suburb area. In choosing the respondents, simple random sampling was used. The process involved randomly selecting individual traders and each member of the population had an equal opportunity to be included in the survey. The method was suitable because it allowed researcher to sample respondents who share similar characteristics and have same knowledge in regard to the study subject. In this study, the mentioned sampling procedure was appropriate since the respondents (motor vehicles spare traders) are engaged in the same line of business and therefore share similar work-related characteristics.

3.6 Data Types and Sources

Data collection refers to the process of gathering information from target respondents (Sutton & Austin, 2015). This study collected primary data using structured questionnaires. The use of questionnaires as a data collection method appears to be less expensive, takes less time and needs less administrative effort (Marshall & Roseman, 2006). Questionnaires also make it simple to compile data after collection.

3.7 Data Collection Procedures

In the processing of data and the creation of useful data for study, the data collection method is an integral element (Groves, 2009). The researcher sought the approval of the university prior to the collection of data. This was followed by an application for a research permit and authorization letter from the National Council of Science,

Technology and Innovation (NACOSTI). Questionnaires were distributed to the sampled traders. For the busy traders, questionnaires were left with them to fill at their own convenience and collected later while for the less busy traders' questionnaires were filled immediately and collected thereafter. After collection of the questionnaires; both field and desk editing was conducted to ensure consistency of the data.

3.8 Validity of the Instrument

It is necessary for the analysis to have a clear picture of the process of collecting data and choose appropriate tools used to collect information. Good data analysis and interpretation are improved by accurate data collection from the field (Kombo & Tromp, 2006). The validity of the tools denotes this. The efficiency, precision or soundness with which an instrument tests what it is supposed to measure is validity. The validity of face, material and build was tested. The researcher discussed the data collection instrument with the supervisor who offered expertise for both face and material validity and ensured that the instrument calculates what it is supposed to measure.

Construction validity, on the other hand, was evaluated using factor analysis, which was used to summarize data to be more manageable without losing any relevant data and thereby encouraging the testing of hypotheses (Field, 2009). Factor loading values greater than 0.4 should be approved, according to Kaiser (1974), and values below 0.4 should contribute to the collection of more details to assist the researcher in deciding the values to be used. Values are mediocre between 0.5 and 0.7, values are nice between 0.7 and 0.8, values are fantastic between 0.8 and 0.9, and values above 0.9 are superb. Objects with values of 0.4 and above were used in this research and those with values below 0.4 were dropped.

Two statistical tests, namely the Kaiser-Meyer-Olkin (KMO) sampling adequacy measure and Bartlett's Sphericity Test, were used to verify the suitability of data for structure detection. The sampling adequacy calculation of Kaiser-Meyer - Olkin (KMO) indicates the proportion of variance in your variables that may be caused by underlying factors, whereby high values (close to 1.0) usually suggest that your data may be useful for a factor analysis (Pallant, 2010). Bartlett's Sphericity Test checks the hypothesis that the correlation matrix of one is an identity matrix, suggesting that the variables are unrelated and thus unsuitable for the identification of structures. Small values (p<0.05) of the significance level suggest that with one's results, a factor analysis might be helpful.

3.9 Reliability of the Instrument

Reliability is the degree to which a study test is internally reliable and provides consistent testing and retesting outcomes (Orodho, 2009). In this analysis, by piloting 10 per cent of the sample population, the reliability of the instrument was established. Seventeen (17) questionnaires, which will not be part of the actual report, were given to traders. This helped the research to change the methods to eliminate ambiguities in the tools and discrepancies arising from the reactions of the respondents. Using Cronbach's Alpha Coefficient, Cronbach (1951), the reliability of the instrument was calculated, determining the internal consistency or homogeneity among the items of the research instrument. The alpha coefficient varies from 0 to 1 in value. The higher the alpha coefficient of Cronbach is to 1, the larger the internal accuracy of the objects on the scale (Taber, 2018). As the cutoff point, the Cronbach alpha coefficient value of 0.7 was used and all objects whose value was less than 0.7 were considered to be weak and therefore discarded.

3.10 Measurement of Variables

The dependent variable in this study was tax compliance. The measurements for tax compliance were taxpayers' registration, tax declaration and payment of tax on time using the five (5) point Likert Scale with as described on table 3.1 with (1) strongly disagree to (5) strongly agree. Machogu and Amayi (2016) also used similar proxies for tax compliance.

The independent variables in the study included: main stream media education, social media education, print media education, and KRA stakeholders' forums education. Main stream media education was measured in terms of televisions and radios using the five (5) point Likert Scale as described on table 3.1 with (1) strongly disagree to (5) strongly agree. Similar indicators were also used by Cyan, Koumpias and Martinez-Vazquez (2016).

Social media education was measured using Facebook, Twitter and Instagram using the five (5) point Likert Scale as described on table 3.1 with (1) strongly disagree to (5) strongly agree. The indicators were adopted from Machogu and Amayi (2016) study. Print media education was measured in terms of newspapers, magazines and booklets using the five (5) point Likert Scale as described on table 3.1 with (1) strongly disagree to (5) strongly agree. Studies by Pere and Theuri (2019) and Tetteh (2019) also used the same proxies for print media. KRA stakeholders' forums education was measured using seminars, workshops and cultural events using the five (5) point Likert Scale as described on table 3.1 with (1) strongly disagree to (5) strongly agree. The measurements were borrowed from Oyugi (2008).

Table 3.1: Measurement of variables

	Type of		Measurement
Variable	Variable	Indicators	scale
T. C. II		Taxpayers Registrat	ion 5-point
Tax Compliance	Dependent	Likert	
		Correct tax declaration	on
		Payment of taxes on t	ime.
Main stream media			
education	Independent	Televisions	5-point Likert
		Radios	
Social Media education	Independent	Facebook	5-point Likert
		Twitter	
		Instagram	
Print Media tax payers			
education	Independent	Newspapers	5-point Likert
		Magazines	
		Booklets	
		Pamphlets	
KRA stakeholder's			
education forums	Independent	Seminars	5-point Likert
		Workshops	
		Cultural events	

3.11 Data Analysis Techniques and Model Specification

The method of structuring and adding order and meaning to the bulk of collected data is data analysis (Connaway & Powell, 2010). To illustrate the characteristics of the study variables, quantitative data collected was measured and analyzed using descriptive statistics (frequencies, ratios, means and standard deviations). The relationship between independent and dependent variables was also evaluated using inferential statistics (Pearson's correlation and regression). Data was analysed using

35

Statistical Package for Social Sciences (SPSS) v21.0) and findings presented in form

of tables and figures.

Multiple regression model was used for this study. The model aimed to determine the

degree to which the predictor variables influence the dependent variable. The model

adopted by the study is as shown below:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where

Y= Tax Compliance

 $\alpha = Constant$

β1, β2, β3, β4- The slope that represent the degree to which tax compliance changes as the

independent variable changes by one unit.

X₁- Main stream (electronic) media education

X2- Social Media Education

X₃- Print Media education

X4- KRA's Stakeholders forums

 ε = error term

3.12 Diagnostic Tests

Prior to running the regression analysis, several diagnostic tests were conducted on all

the variables data. These tests included; normality, Multicollinearity,

Heteroscedasticity and autocorrelation test. This was done to ensure that the analysis

results are accurate and free from bias.

3.12.1 Test of Normality

The normality test strengthens the regression model by ensuring that the data which can be evaluated by plotting is normally distributed. Data normality was evaluated by means of the Kolmogorov-Smirnov test. The criteria was that the probability value for the data to be distributed normally should be greater than 0.05 (Saunders & Thornhill, 2012).

3.12.2 Test of Linearity

Using scatterplots, linearity was checked to demonstrate whether there is a linear relationship between two continuous variables before regression analysis was performed. It is expected that the relationship between variables should be fairly linear before the regression models are applied (Jain, Agarwal, Thinakaran & Parekhji, 2017).

3.12.3 Test of Multicollinearity

Multicollinearity occurs when the independent variables are highly correlated, which influences the significance of the individual variables. In this study, it was checked using Variance Inflation Factor (VIF). A VIF value more than 10 implies presence of Multicollinearity problem while a VIF value less than 10 implies no Multicollinearity problem. Furthermore, the tolerance value greater than 0.2 implies that independent variables are not highly correlated.

3.12.4 Test of Heteroscedasticity

If the variance of the error is not constant, then the data contains heteroscedasticity. Running a regression model would result in biased parameter estimates without accounting for heteroscedasticity. The Breusch-Pagan / Godfrey test (1979) was applied to the Heteroscedasticity test. The null hypothesis indicates that the variance

of error is homoscedastic, so when the error term was found to be varying, the null hypothesis was rejected.

3.12.5 Test of Autocorrelation

The autocorrelation test was performed to determine whether the residuals are serially correlated or not, using the Durbin-Watson autocorrelation test. A test statistic with a value of 0 to 4 is reported by the Durbin Watson test, where: 2 denotes no autocorrelation; 0 to 2<2 denotes a positive autocorrelation; whereas > 2 denotes a negative autocorrelation. The rule of the decision is that test statistical values in the 1.5 to 2.5 range are relatively normal. Outside this range, values could be cause for concern (Field, 2009).

3.13 Ethical Considerations

Ethics refer to the norms or standards that bring out the difference between right and wrongs. The researcher ensured high standards of ethics by treating the information collected from the respondents with utmost confidentiality. The researcher also sought respondents' consent and only included those who were willing to participate. Further, the researcher informed respondents the purpose of the research and guaranteed them of anonymity. Data collected from the respondents was reported without any distortion or bias.

CHAPTER FOUR

DATA ANALYSIS, DISCUSSION AND PRESENTATION OF THE STUDY FINDINGS

4.1 Introduction

The chapter begins by providing results on the rate of response and data reliability. Second, findings are provided on the respondents' context profiles. The results of descriptive analysis on each variable are then presented, followed by regression assumptions, results of correlation and finally multiple regression models.

4.2 Response Rate

This is the outcome as decided by the cooperation of the respondents in giving their opinion on the questions asked that were expressed in various themes.

Table 4.1: Response Rate

Response	Frequency	Percentage
Returned	117	78%
Unreturned	33	22%
Total	150	100

Source: Research Data (2020)

The questionnaires properly filled and returned were 117 out of the 150. This reflects a 78 percent response rate. This was done because the investigator was able to dispense and gather the questionnaires while allowing enough time to respond to the respondents. As similar research had the same results, the response rate was considered to be very good (Allen, 2016), since a response rate above 50 percent is sufficient for analysis.

4.3 Pilot Results

4.3.1 Reliability results

Reliability of the data was determined using internal consistency measure, that is, Cronbach's Alpha, which was computed using the SPSS software. The results are in Table 4.2.

Table 4.2: Reliability Results

		Number of	Number of Items	
Variable	Cronbach's Alpha	Respondents		Comment
Overall		17		
Reliability	0.758		22	Reliable

The pilot results showed that the variable statements with an average reliability of Cronbach's alpha 0.758 were highly accurate.

4.3.2 Test for Validity

The validity test for the study was the Kaiser-Meyer - Olkin (KMO). Table 3.3 shows the KMO and Bartlett's validity test for dependent and independent variables.

Table 4.3: Factorial test results for Validity

	KMO	Bartlett's Test of Spher	ricity		Conclusion	Validity
Variable		Approx. Chi-Square	df	Sig.		
Tax compliance	0.633	5.768	6	0.024	Mediocre	Valid
Main Stream						
Media Education	0.627	7.923	6	0.044	Mediocre	Valid
Social Media						
Education	0.513	6.352	6	0.005	Miserable	Valid
KRA's						
Stakeholders						
Education Forums	0.579	18.434	10	0.040	Miserable	Valid
Print media tax						
payers education	0.694	14.559	10	0.019	Mediocre	Valid

Source: Research Data (2020)

The values of the KMO Sampling Adequacy Test were above 0.500 for all the variables. A Chi-Square test and a critical probability value of 0.05. were used to determine the significance of the KMO coefficient. A coefficient of Chi-Square ranging from 5,768 to 18,434 and a p-value greater than 0,000 indicates that the coefficients were important. This denotes that the statements are good aspects for sampling adequacy of the instrument.

4.4 Demographic characteristics of the Respondents

In this study, the general characteristics of the population under study was considered, which included: gender, age, level of education and number of years in the job.

Table 4.4: Demographic profile of the Respondents

Variable	Category	Frequency	Percent
Gender	Female	22	18.8
	Male	95	81.2
Age	Below 25 years	19	16.2
	25-34 years	61	52.1
	35-44 years	21	17.9
	45-50 years	10	8.5
	Above 51 years	6	5.1
Level of Education	Secondary Certificate	34	29.1
	Diploma level	63	53.8
	Bachelor's Degree Level	14	12
	Masters Level	6	5.1
	PhD	0	0
Years of tenure	0 – 2 years	9	7.7
	3 – 5 years	50	42.7
	6 – 10 years	40	34.2
	11 years & above	18	15.4

Source: Research Data (2020)

The findings in Table 4.4 reveal that most of the participants (81.2%) are male compared to their female counterparts who are 18.8% showing a representation of both genders in the study without bias. The results of the above table indicate that the majority of respondents (52.1 percent) are between the ages of 25 and 34. The findings show that most of the participants (53.8 percent) have a diploma level education, with none of them getting a PhD. It was likewise indicated that 76.9% of the respondents have been in the motor vehicles spare trading business in the suburb area of Nakuru town for between 3 and 10 years.

4.5 Descriptive Statistics for the Variables

In order to illustrate the description of the results by including mean and standard deviation per variable, descriptive statistics were carried out. This was achieved using the Strongly Agree (5) Agree (4) Neutral (3) Disagree (2) and Strongly Disagree (1) 5-point scale.

4.5.1 Tax Compliance

The dependent variable in the study was tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya. The participants were requested to rate their agreement or otherwise against each statement posed to them. The results are indicated in Table 4.5.

Table 4.5: Descriptive Statistics on tax compliance

						М	Std.
Statements	1	2	3	4	5	IVI	D
I am aware of the due							
dates for filing my tax							
returns	10.26%	10.26%	13.68%	37.61%	28.21%	3.63	1.28
I always make tax							
payments on time.	11.11%	8.55%	11.11%	35.90%	33.33%	3.72	1.31
I always make correct							
tax declaration	5.13%	6.84%	7.69%	45.30%	35.04%	3.98	1.08
I have complied with all							
tax registration							
requirements by KRA	8.55%	6.84%	4.27%	36.75%	43.59%	4.00	1.24
Average						3.83	1.23

Source: Research Data (2020)

The findings in Table 4.5 show that most of the respondents (65.82%) agreed that they were mindful of the due dates for their tax returns to be filed. The findings further indicate that (69.23 percent) of the respondents believed that tax payments are

often made on time. Moreover, (80.34%) of the respondents also agreed that they always make correct tax declaration. In addition, (80.34%) of the respondents agreed that they have complied with all tax registration requirements by KRA. In summary, with a standard deviation of 1.23, the average mean answer was 3.83. This suggests that the majority of the respondents agreed with the tax enforcement claims.

4.5.2 Main Stream Media Education

The study's first objective was to determine the impact of mainstream media education on tax compliance among spare motor vehicle spares traders in the Nakuru Town suburb of Kenya. The participants were requested to rate their agreement or otherwise against each statement posed to them. The results are indicated in Table 4.6.

Table 4.6: Descriptive Statistics on main stream media education

Statements	1	2	3	4	5	M	Std.
Main stream media		_					
taxpayer education has							
enlightened the motor	4.30%	9.40%	10.30%	35.90%	40.20%	3.98	1.13
vehicle spares traders							
on the need to pay taxes							
Main stream media							
taxpayer education							
programs have enabled motor vehicles spares	2.60%	8.50%	20.50%	32.50%	35.90%	3.91	1.07
traders file their returns							
easily							
Main stream media							
taxpayer education							
programs by KRA have	18.80%	6.80%	17.10%	30.80%	26.50%	3.39	1.43
led to increased tax							
revenue collection							
Main stream media							
taxpayer education programs have helped in							
changing the attitude of							
the motor vehicles							
spares traders.	16.20%	14.50%	17.90%	21.40%	29.90%	3.34	1.45
Average						3.66	1.27
Source: Research Dat	a (2020)						,

The findings in Table 4.6 show that the majority of respondents (76.10 percent) agreed that the mainstream education of taxpayers in the media informed the traders about the need to pay taxes. The results also revealed that most of the respondents (68.40 percent) agreed that mainstream taxpayer education programs in the media have allowed traders to easily file their returns. In addition, (57.30 percent) of the respondents agreed that KRA's mainstream media taxpayer education programs led to increased collection of tax revenue. The findings also showed that (51.30 percent) of the respondents agreed that mainstream taxpayer education programs in the media helped change taxpayers' attitudes. The average mean of the responses on a five-point scale was 3.66 with a standard deviation of 1.27. This means that most of the respondents agreed with the mainstream media education statements.

4.5.3 Social Media Education

The second objective of the research was to assess the impact of social media education on tax enforcement among traders of motor vehicle spare parts in the Nakuru Town Suburb, Kenya. The participants were requested to rate their agreement or otherwise against each statement posed to them. The descriptive results are indicated in Table 4.7.

Table 4.7: Descriptive Statistics social media education

							Std.
Statements	1	2	3	4	5	M	D
Social media taxpayer							
education has							
enlightened the motor							
vehicle spares traders							
on the need to pay taxes	3.40%	15.40%	16.20%	27.40%	37.60%	3.80	1.20
Social media taxpayer							
education programs							
have enabled motor							
vehicles spares traders							
file their returns easily	6.00%	14.50%	17.90%	29.90%	31.60%	3.67	1.23
Social media taxpayer							
education programs by							
KRA have led to							
increased tax revenue							
collection	9.40%	12.00%	12.80%	29.10%	36.80%	3.72	1.33
Social media taxpayer							
education programs							
have helped in changing							
the attitude of motor							
vehicles spares traders							
towards paying of taxes.	10.30%	6.80%	11.10%	24.80%	47.00%	3.91	1.34
Average						3.78	1.28

Source: Research Data (2020)

The findings in Table 4.7 show that the majority of respondents (65 percent) agreed that education through social media, has told the traders about the need to pay taxes. The findings also showed that (61.50 percent) of respondents agreed that taxpayer education services for social media helped traders to easily file their returns. Moreover, (65.90 percent) of the respondents agreed that KRA's social media taxpayer education services have contributed to improved collection of tax revenue.

Most of the respondents (71.80 percent) accepted that taxpayer education services for social media helped shift traders attitudes about paying taxes. In conclusion, with a standard deviation of 1.28, the average mean of the responses was 3.78. This suggests that the majority of respondents agreed with the social media education claims.

4.5.4 KRA's Stakeholders Education Forums

The third objective of the study was to analyze the impact of the training of KRA stakeholder forums on tax enforcement among traders of motor vehicle spares in the Nakuru Town Suburb, Kenya. The participants were requested to rate their agreement or otherwise against each statement posed to them. The descriptive results are indicated in Table 4.8.

Table 4.8: Descriptive Statistics on KRA's stakeholders' education forums

) <i>(</i>	Std.
Statements	1	2	3	4	5	M	D
KRA's stakeholder's taxpayer education forums have enlightened the motor vehicle spares traders on the	9.40%	8.50%	17.10%	34.20%	30.80%	3.68	1.26
need to pay taxes. KRA's stakeholder's taxpayer education forums have enabled motor vehicle spares traders file their returns easily.	8.50%	6.80%	16.20%	36.80%	31.60%	3.76	1.22
KRA's stakeholders' taxpayer education forums have led to increased tax revenue collection	19.70%	7.70%	15.40%	27.40%	29.90%	3.40	1.48
motor vehicles spares traders towards paying	14.50%	10.30%	9.40%	31.60%	34.20%	3.61	1.42
of taxes. KRA's stakeholders' taxpayer education forums have helped in sensitizing motor vehicle spares traders on new tax laws/policies.	6.80%	7.70%	4.30%	35.90%	45.30%	4.05	1.20
Average						3.70	1.32

Source: Research Data (2020)

The findings in Table 4.8 show that most of the respondents (65 percent) agreed that KRA's taxpayer education platforms for stakeholders have educated the traders about the need to pay taxes. It was also revealed that most of the respondents (68.40 percent) suggested that the taxpayer education forums of KRA stakeholders have helped traders to easily file their returns. Furthermore, the table showed that most of the respondents (57.30 percent) suggested that the taxpayer education forums of KRA stakeholders have contributed to improved tax revenue collection. It was also agreed by majority of the respondents (68.40%) that KRA's stakeholders' taxpayer education forums have helped in changing the attitude of the traders towards paying of taxes. Likewise, the findings showed that the majority of respondents (81.20 percent) suggested that the taxpayer education forums of KRA stakeholders helped raise taxpayers' consciousness about new tax laws/policies. In general, the answers offered an average of 3.70, meaning that most of the respondents agreed with the statements on the education platforms for stakeholders of KRA; however, the answers were varied as shown by a standard deviation of 1.32.

4.5.5 Print media tax payers education

The fourth objective of the research was to evaluate the effect of print media education on tax compliance among motor vehicles spares traders in Suburb area of Nakuru town, Kenya. The participants were requested to rate their agreement or otherwise against each statement posed to them. Table 4.9 shows the outcome.

Table 4.9: Descriptive Statistics on print media tax payers education

•		-					
Statements	1	2	3	4	5	M	Std. D
Print media tax payers							
education has							
enlightened the motor							
vehicle spares traders							
on the need to pay taxes	10.30%	10.30%	13.70%	37.60%	28.20%	3.63	1.28
Print media tax payers							
education has enabled							
tax payers file their							
returns easily	11.10%	8.50%	11.10%	35.90%	33.30%	3.72	1.31
Print media tax payers							
education has led to							
increased tax revenue							
collection	17.90%	12.80%	17.10%	29.90%	22.20%	3.26	1.41
Print media tax payers							
education has helped in							
changing the attitude of							
motor vehicle spares							
traders towards paying							
of taxes.	6.80%	11.10%	23.90%	28.20%	29.90%	3.63	1.21
Print media tax payers							
education has helped in							
sensitizing motor							
vehicle spares traders on							
new tax laws/policies.	12.80%	9.40%	5.10%	29.90%	42.70%	3.80	1.41
Average						3.61	1.32

Source: Research Data (2020)

The findings in Table 4.9 show that most of the respondents (65.80 percent) agreed that the education of print media tax payers educated the traders about the need to pay taxes. Most respondents (69.20 percent) agreed that education for print media taxpayers helped traders to easily file their returns. Moreover, (52.10%) of the

respondents agreed that Print media tax payers education has led to increased tax revenue collection. The results also showed that (58.10%) of the respondents agreed that Print media tax payers education has helped in changing the attitude of the traders towards paying of taxes. Majority of the respondents (72.60%) agreed that Print media tax payers education has helped in sensitizing traders on new tax laws/policies. In short, the average response is 3.61 on a five-point scale, which indicates that the majority of respondents agreed with the comments on the education of print media tax payers. The standard deviation was 1.32, indicating that the responses differed.

4.6 Diagnostic Tests

Prior to conducting the inferential analyses, several diagnostic tests were checked. These tests included: normality, linearity, multicollinearity, heteroscedasticity and autocorrelation tests. This was done to ensure that the analysis results are accurate and free from bias.

4.6.1 Normality Test

The study used Kolmogorov-Smirnov test for normality of the data. Results are shown in Table 4.10.

Table 4.10: Test for Normality

Kolmogorov-Smirnova			
Statistic	df	Sig.	
0.832	117	0.493	
1.219	117	0.102	
1.179	117	0.124	
1.192	117	0.116	
1.017	117	0.253	
	Statistic 0.832 1.219 1.179 1.192	Statistic df 0.832 117 1.219 117 1.179 117 1.192 117	

Source: Research Data (2020)

The results in Table 4.10 reveal that all the variables data had significant (Sig) values greater than 0.05 implying that data series was normally distributed. The null hypothesis of normal distribution was therefore accepted.

4.6.2 Test of Linearity

Linearity was tested using scatterplots. It is expected that the relationship between variables should be fairly linear before the regression models are applied (Jain, Agarwal, Thinakaran & Parekhji, 2017).

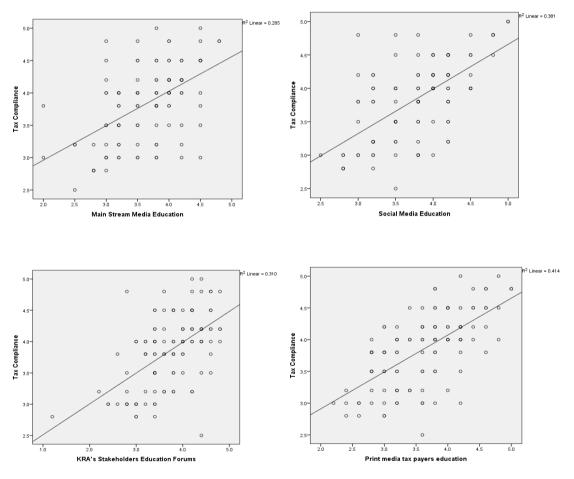


Figure 4.1: Linearity test using Scatter Plots

Source: Research Data (2020)

The scatter plots in Figure 4.1 reveal existence of linear dependence between the independent variables (main stream media education, social media education, KRA's

stakeholder's education forums, print media tax payers education) and tax compliance. This is demonstrated by the fit lines in each of the plots.

4.6.3 Multicollinearity Test

Multicollinearity between independent variables was tested using collinearity statistics. The outcomes are shown in Table 4.11.

Table 4.11: Multicollinearity Results

Variable	Tolerance	VIF
Main Stream Media Education	0.749	1.335
Social Media Education	0.656	1.523
KRA's Stakeholders Education Forums	0.711	1.407
Print media tax payers education	0.697	1.434
Mean VIF		1.424

Source: Research Data (2020)

The outcome in Table 4.11 indicate VIF values less than 10 implying that there was no multicollinearity among the independent variables.

4.6.4 Heteroscedasticity Test

The heteroskedasticity test was carried out using the Breusch-Pagan Test.

Table 4.12: Breusch-Pagan Test for heteroscedasity

Breusch-Pagan Chi2	0.05
Prob> Chi2	0.8301 >0.05

Source: Research Data (2020)

The findings in Table 4.12 show that the value of the chi square probability value was 0.8301, the significance value of which was greater than 0.05. The findings suggest that there is no existence of heteroscedasticity, since the null hypothesis of this analysis suggests that the error variance is homoscedastic.

4.6.5 Auto-correlation Test

The Durbin Watson test was used to check for auto-correlation. The results are illustrated in Table 4.13.

Table 4.13: Durbin-Watson Test for Serial Correlation

			Adjusted R	Std. Error of	Durbin-
Model	R	R Square	Square	the Estimate	Watson
1	.784a	0.615	0.602	0.3623	2.120

a Predictors: (Constant), Print media tax payers education, Main Stream Media Education, KRA's Stakeholders Education Forums, Social Media Education

b Dependent Variable: Tax Compliance

Source: Research Data (2020)

The results show that there is no auto-correlation from the results in table 4.13, so the null hypothesis is accepted. This is supported by the Durbin-Watson statistic (2.120) which was within the 1.5 and 2.5 limit.

4.7 Correlation Analysis

This section provides findings on the correlation between the independent variables - main stream media education [X1], social media education [X2], KRA's stakeholders education forums [X3], print media tax payers education [X4], and dependent variable - tax compliance [Y]. Table 4.14 shows the outcome.

Table 4.14: Correlation Matrix; Tax-Payers Education and Tax Compliance

Correla	tions	Y	\mathbf{X}_1	X ₂	X 3	X 4
	Pearson					
	Correlation	1				
	Sig. (2-tailed)					
Y	N	117				
	Pearson					
	Correlation	.533**	1			
	Sig. (2-tailed)	0.000				
\mathbf{X}_1	N	117	117			
	Pearson					
	Correlation	.617**	.423**	1		
	Sig. (2-tailed)	0.000	0.000			
X_2	N	117	117	117		
	Pearson Correlation	.557**	.385**	.458**	1	
	Sig. (2-tailed)	0.000	0.000	0.000		
X 3	N	117	117	117	117	
	Pearson					
	Correlation	.643**	.386**	.476**	.421**	1
	Sig. (2-tailed)	0.000	0.000	0.000	0.000	
X_4	N	117	117	117	117	117

^{**} Correlation is significant at the 0.01 level (2-tailed).

Source: Research Data (2020)

The results in Table 4.14 show that the relationship between mainstream media education and tax compliance was positive and significant (r=0.533 **, p=0.000). It further demonstrates that there is a positive and significant relationship between social media education and tax compliance (r=0.617 **, p=0.000). The results also showed that there is a positive and significant association between the education forums of KRA stakeholders and tax compliance (r= 0.557 **, p= 0.000). In addition, the table also shows that there is a positive and significant association between education and

tax compliance for print media tax payers (r=0.643 **, p=0.000). All the r values indicated absolute values of greater than 0 which indicates that main stream media education, social media education, KRA's stakeholder's education forums and print media tax payers education have a linear and positive relationship with tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya.

4.8 Univariate Regression Analysis

This section presents univariate regression analysis where each of the independent variable is regressed against the dependent variable.

4.8.1 Main stream media education and Tax compliance

Table 4.15: Regression Results; Main stream media education and Tax compliance

Variable	β	Std. Error	t	Sig.
(Constant)	1.894	.293	6.455	.000
Main Stream Media Education	.534	.079	6.763	.000
R square	0.285			
Adj. R square	0.278			
F statistic	45.743			
Sig (F statistics)	0.000			

Source: Research Data (2020)

The results in Table 4.15 show that mainstream media education has a positive and significant impact (β =0.534, p=0.000) on tax compliance. This indicates that a one-unit increase in mainstream media education would enhance tax compliance by 0.534 units. The F statistic of 45.743 and P value of 0.000<005 further indicate that main stream media education is a significant predictor of tax compliance. Additionally, the R square of 0.285 imply that individually, main stream media education accounts for 29% of total variations in tax compliance among motor vehicles spare traders.

4.8.2 Social media education and Tax compliance

Table 4.16: Regression Results; Social media education and Tax compliance

Variable	β	Std. Error	t	Sig.
(Constant)	1.320	.304	4.337	.000
Social Media Education	.668	.079	8.407	.000
R square	0.381			
Adj. R square	0.375			
F statistic	70.683			
Sig (F statistics)	0.000			

Source: Research Data (2020)

The results in Table 4.16 show that education on social media has a positive and significant impact on tax compliance (β =0.668, p=0.000). This denotes that an increase by one unit in social media education would improve tax compliance by 0.668 units. The F statistic of 8.407 and P value of 0.000<005 further indicate that social media education is a significant predictor of tax compliance. Additionally, the R square of 0.381 imply that individually, social media education accounts for 38% of total variations in tax compliance among motor vehicles spare traders.

4.8.3 KRA's stakeholder's education forums and Tax Compliance

Table 4.17: Regression Results; KRA's stakeholder's education forums and Tax compliance

Variable	β	Std. Error	t	Sig.
(Constant)	2.019	.259	7.788	.000
KRA's stakeholder's education forums	0.493	.069	7.186	.000
R square	0.310			
Adj. R square	0.304			
F statistic	54.65			
Sig (F statistics)	0.000			

Source: Research Data (2020)

The findings in Table 4.17 indicate that KRA's stakeholder's education forums has a positive and significant effect on tax compliance (β =0.493, p=0.000). This denotes that an increase in KRA's stakeholder's education forums by one unit would improve

tax compliance by 0.493 units. The F statistic of 7.186 and P value of 0.000<005 further indicate that KRA's stakeholder's education forums is a significant predictor of tax compliance. Additionally, the R square of 0.310 imply that individually, KRA's stakeholder's education forums account for 31% of total variations in tax compliance among motor vehicles spare traders.

4.8.4 Print media tax payers education and Tax Compliance

Table 4.18: Regression Results; Print media tax payers education and Tax compliance

Variable	β	Std. Error	t	Sig.
(Constant)	1.750	.237	7.379	.000
Print media tax payers education	.581	.064	9.010	.000
R square	0.414			
Adj. R square	0.409			
F statistic	81.17			
_Sig (F statistics)	0.000			

Source: Research Data (2020)

The results in Table 4.18 show that the education of print media tax payers has a positive and substantial impact on tax enforcement (β =0.581, p=0.000). This suggests that an increase of one unit in the education of print media tax payers would boost tax enforcement by 0.581 units. The F statistic of 9.010 and P value of 0.000<005 further indicate that print media tax payers education is a significant predictor of tax compliance. Additionally, the R square of 0.414 imply that individually, print media tax payers education account for 41% of total variations in tax compliance among motor vehicles spare traders.

4.9 Multiple Regression Analysis

The main objective of this study was to determine the impact of the tax-payer education mode on tax compliance among spare motor vehicle dealers in the Nakuru

Town Suburb, Kenya. Having identified that each of the independent variables has a positive and meaningful correlation with tax compliance, it was important to decide how a combination of the four variables jointly affects tax compliance. Therefore, a multiple linear regression analysis was conducted where the predictor variables on the dependent variable were regressed.

Table 4.19: Model Summary; Tax-Payers Education and Tax Compliance

			Adjusted R	Std. Error of	Durbin-
Model	R	R Square	Square	the Estimate	Watson
1	.784a	0.615	0.602	0.3623	2.120

a Predictors: (Constant), Main Stream Media Education, Social Media Education, KRA's Stakeholders Education Forums, Print media tax payers education b Dependent Variable: Tax Compliance

Source: Research Data (2020)

The results of the fitness regression model used to describe the phenomenon of the analysis are shown in Table 4.19. Main stream media education, social media education, KRA's stakeholder's education forums and print media tax payers education were found to be essential variables in the tax compliance. This was supported by R square of 0.615. This indicate that main stream media education mode, social media education mode, KRA's stakeholder's education forums mode and print media tax payers education mode explain 61.5% of the tax compliance.

Table 4.20: ANOVA; Tax-Payers Education and Tax Compliance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.509	4	5.877	44.774	.000b
	Residual	14.702	112	0.131		
	Total	38.211	116			

a Predictors: (Constant), Main Stream Media Education, Social Media Education, KRA's Stakeholders Education Forums, Print media tax payers education

b Dependent Variable: Tax Compliance

Source: Research Data (2020)

Table 4.20 provides the ANOVA results. The findings shows that main stream media education mode, social media education mode, KRA's stakeholder's education forums mode and print media tax payers education mode collectively significantly influence the tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya. The F statistic 44.774 further confirms this, where the value was greater than the critical value at the level of significance 0.05, F statistics = 44.774 > F critical = 2.42 (4,112).

Table 4.21: Coefficients; Tax-Payers Education and Tax Compliance

Variable	β	Std. Error	t	Sig.
(Constant)	0.170	0.285	0.597	0.552
Main Stream Media Education	0.205	0.068	3.026	0.003
Social Media Education	0.292	0.078	3.723	0.000
KRA's Stakeholders Education Forums	0.184	0.062	2.987	0.003
Print media tax payers education	0.315	0.063	4.965	0.000
R square	0.615			
Adj. R square	0.602			
F statistic	44.77			
Sig (F statistics)	0.000			

a Dependent Variable: Tax Compliance

Source: Research Data (2020)

The results of the coefficients of regression are shown in Table 4.21. The independent contribution of each variable to the dependent variable (when working together in one model) is calculated by running a joint regression of coefficients.

The results revealed that main stream media education mode and tax compliance are directly and meaningfully related (β =0.205, p=0.003). This denotes that an increase in 1 unit of aspects related to main stream media education mode improves tax

60

compliance among motor vehicles spare traders in Suburb area of Nakuru town,

Kenya by 0.205 units.

Moreover, social media education mode and tax compliance are directly and

meaningfully related (β =0.292, p=0.000). This denotes that an increase in 1 unit of

aspects related to social media education mode improves tax compliance among

motor vehicles spare traders in Suburb area of Nakuru town, Kenya by 0.292 units.

The findings further reveal that KRA's stakeholder's education forums mode and tax

compliance are directly and meaningfully related (β=0.184, p=0.003). This denotes

that an increase in 1 unit of aspects related to KRA's stakeholder's education forums

mode improves tax compliance among motor vehicles spare traders in Suburb area of

Nakuru town, Kenya by 0.184 units.

In addition the findings reveal print media tax payers education mode and tax

compliance are directly and meaningfully related (β =0.315, p=0.000). This denotes

that an increase in 1 unit of aspects related to print media tax payers education mode

improves tax compliance among motor vehicles spare traders in Suburb area of

Nakuru town, Kenya by 0.315 units.

Thus, the hypothesized model: $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$, now becomes:

 $Y = 0.205X_1 + 0.292X_2 + 0.184X_3 + 0.315X_4$

Where:

Y is Tax Compliance

X₁- Main stream media education mode

X₂- Social Media Education mode

X₃- KRA's Stakeholders forums mode

X₄- Print Media education mode

 α = Constant, implies that holding all the predictors constant, the value of Y is 0.170.

 ϵ = error term, it denotes variables that are likely to affect Y but are not captured in the model.

It is very clear from the regression weights in Table 4.17 that all the independent variables greatly affect the dependent variable to varying degrees. The most powerful indicator of tax enforcement when all of them are integrated in one model is the print media tax payer education mode (β 4= 0.315), followed by the mode of social media education (β 2= 0.292), then the main stream media education mode (β 1= 0.205) and lastly the mode of KRA stakeholder education forums (β 3= 0.184).

4.10 Hypothesis Testing

Table 4.22: Hypotheses Test Results

Hypoth	neses	P value	Decision
i	Main stream media education mode has no significant		
	effect on tax compliance among motor vehicles spare	0.003<0.05	Rejected
	traders in Suburb area of Nakuru town, Kenya		
ii	Social media education mode has no significant effect on		
	tax compliance among motor vehicles spare traders in	0.000<0.05	Rejected
	Suburb area of Nakuru town, Kenya		
iii	KRA's Stakeholders forums education mode has no		
	significant effect on tax compliance among motor vehicles	0.003<0.05	Rejected
	spare traders in Suburb area of Nakuru town, Kenya		
iv	Print media education mode has no significant effect on tax		
	compliance among motor vehicles spare traders in Suburb	0.000<0.5	Rejected
	area of Nakuru town, Kenya		

Source: (Research data, 2020)

Based on the multiple regression findings (Table 4.21), all the four study null hypotheses were rejected since the P values were less than 0.05. Table 4.22 summarizes the study hypotheses and their rejection criteria. Rejection of the null hypotheses implies that main stream media education mode, social media education mode, KRA's stakeholders forums education mode and print media education mode have significant effects on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya.

Based on the multiple regression findings in Table 4.21, the null hypothesis (H01) that main stream media education mode has no significant effect on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya was rejected. This was supported by a P value of 0.003<0.05 and (β 1= 0.205). This implied that main stream media education mode has a significant effect on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya. The results align with those of Mathias et al. (2013) who found that knowledge passed through the electronic media about tax system accountability, service orientation and government credibility had a positive and important effect on government confidence leading to tax enforcement.

The null hypothesis (H02) that social media education mode has no significant effect on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya was rejected. This was supported by a P value of 0.000<0.05 and ($\beta 2=0.292$). This implied that social media education mode has a significant effect on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya. The results were consistent with the findings of Machogu and Amayi (2016), in which most of the respondents admitted that they understood the basic tax laws and procedures.

The null hypothesis (H03) that KRA's Stakeholders forums education mode has no significant effect on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya was rejected. This was supported by a P value of 0.003 < 0.05 and ($\beta = 0.184$). This implied that KRA's Stakeholders forums education mode has a significant effect on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya. The findings supported the assertion by Katharina *et al* (2015) that taxpayers who perceive the authorities as supportive and competent are likely comply with the relevant tax laws.

The null hypothesis (*H04*) that print media education mode has no significant effect on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya was rejected. This was supported by a P value of 0.000<0.05 and (β4= 0.315). This implied that print media education mode has a significant effect on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya. The findings are similar to those of Tetteh (2019) who found that print media programs were statistically significant and positively influenced tax compliance.

4.11 Discussion of the Key Findings

The reliability results indicated that the items measuring main stream media education mode, social media education mode, KRA's stakeholder's education forums mode and print media tax payers education mode and tax compliance, were reliable and valid. This was confirmed by Cronbach alpha coefficient greater than 0.7 and significant values of the KMO. From the descriptive analysis findings, majority of the respondents agreed with statements relating to the study variables.

The correlation analysis results indicated that all the independent variables (main stream media education mode, social media education mode, KRA's stakeholder's

education forums mode and print media tax payers education mode) had a strong positive and significant relationship with tax compliance. This was confirmed by the following correlation coefficients: 0.533, 0.617, 0.557 and 0.643 for main stream media education mode, social media education mode, KRA's stakeholder's education forums mode and print media tax payers education mode respectively.

The multiple regression findings indicated that all the predictor variables had a direct and meaningful effect on tax compliance. In particular, the study indicated that print media tax payers education mode (β =0.315, p=0.000), social media education mode (β =0.292, p=0.000), main stream media education mode (β =0.205, p=0.003) and KRA's stakeholders education forums mode (β =0.184, p=0.003) had a direct and meaningful effect on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya.

The findings imply that electronic taxpayer education mode contributes significantly towards voluntary tax compliance. This finding was in line with that of Ling Nuruld and Hidayah Aham and Nawawi (2010), who discovered that students' perception of ICT and electronic tax systems had a positive effect on tax enforcement. A holistic view of taxpayers through the use of electronic means, according to (Sas, 2007), through the use of complex, systematic approaches, will promote enforcement.

The findings further imply that tax-payers education significantly and positively influence tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya. These results align with Mathias et al. (2013), who demonstrated that the approach to electronic media had a positive effect on the intentions of taxpayers to pay their taxes. Likewise, Cyan, Koumpias and Martinez-

Vazquez (2016) found that taxpayer education strengthened expectations of tax enforcement for respondents subjected to TV and newspaper advertising.

These results are consistent with Machogu and Amayi (2016), who revealed that most of the respondents acknowledged that they understood the fundamental tax laws and procedures. In addition, Katharina et al. (2015) also reports that taxpayers who see the authorities as supportive and professional are likely to comply with the applicable tax legislation. Angus Young, et al. (2016) notes that the efficacy of TV media promotions, the use of tax information magazines, company clients/prospects, and national newspapers would increase awareness among tax payers, tax filing, and eventually tax morale.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

A review of the findings, conclusions, recommendations and suggestions for further study is thus outlined in the chapter.

5.2 Summary of the Findings

This section presented a description of the results of the research that was carried out in accordance with the study's goals.

5.2.1 Main stream media education and Tax Compliance

The study sought to determine the effect of main stream media education on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya. The study showed that mass media education and tax enforcement were positively and substantially linked. In addition, the results were also confirmed by the questionnaire statements accepted by the majority of respondents. The regression results established that main stream media education and tax compliance are positively and significantly related (β =0.205, p=0.003). This led to the rejection of the null hypothesis in favor of the alternative. Therefore, main stream media education has a significant effect on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya.

5.2.2 Social media education and Tax Compliance

The study likewise, sought to assess the effect of social media education on tax compliance among motor vehicles spares traders in Suburb area of Nakuru town, Kenya. The study further revealed that there is a positive and important relationship between social media education and tax enforcement. The results were confirmed by

the claims in the questionnaire, which were approved by most respondents. The findings of regression have also shown that education in social media and tax enforcement are positive and statistically related (β =0.292, p=0.000). This led to the rejection of the null hypothesis in favor of the alternative. Therefore, social media education has a significant effect on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya.

5.2.3 KRA's stakeholder's education forums and Tax Compliance

The study sought to examine the effect of KRA stakeholders' forums education on tax compliance among motor vehicles spares traders in Suburb area of Nakuru town, Kenya. The results also showed that there is a positive and meaningful link between the education forums of KRA stakeholders and tax enforcement. The results were confirmed by the claims in the questionnaire, which were approved by most respondents. The regression results further indicated that KRA's stakeholder's education forums and tax compliance are positive and significantly related (β =0.184, p=0.003). This led to the rejection of the null hypothesis in favor of the alternative. Therefore, KRA's stakeholders forums education has a significant effect on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya.

5.2.4 Print media tax payers education and tax compliance

The study evaluated the effect of print media education on tax compliance among motor vehicles spares traders in Suburb area of Nakuru town, Kenya. The results showed that there is a strong and substantial correlation between education and tax enforcement for print media tax payers. The results were confirmed by the claims in the questionnaire, which were approved by most respondents. In addition, the findings of the regression showed that education and tax enforcement of print media tax payers

are positive and statistically related (β = 0.315, p= 0.000). This led to the rejection of the null hypothesis in favor of the alternative. Therefore, print media education has a significant effect on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya

5.3 Conclusions

Overall, the study concluded that when combined, main stream media education, social media education, KRA's stakeholder's education forums and print media tax payers education positively and significantly affect tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya. In particular, print media tax payers education was identified as the most significant predictor of tax compliance, followed by social media education, then main stream media education and lastly KRA's stakeholders' education forums.

5.3.1 Main stream media education and Tax Compliance

The study concluded that main stream media taxpayer education is significant in influencing taxpayers' decisions to comply to taxation systems. The study has confirmed that taxpayers' education through main stream media enlightens the motor vehicles spare traders on the need to pay taxes. In addition, the education programmes impact positively on the ability and willingness of the tax payers to file their returns. This type of education changes the attitude of the tax payers towards paying their obligatory taxes to the tax authorities and thus, leads to increased tax revenue collection.

5.3.2 Social media education and Tax Compliance

The study concluded that it is important and significant to include the element of taxpayer education by use of social media. The study found that social media

education is positively related to compliance to taxation, therefore, the study underscores that social media plays an integral part in enlightening the public on the need to pay taxes due to the convenience brought about by use of social media in smartphones. This has made it easier for the taxpayers to easily file their returns at their comfort zones. In essence, the use of social media has shifted the taxpayers' attitude towards paying taxes and thus, they are more willing to comply than before which makes KRA collect more revenue annually.

5.3.3 KRA's stakeholder's education forums and Tax Compliance

The study further concluded that the uptake of education and enlightenment programmes by the KRA itself is an initiative to assure the taxpayer of the need to adhere to taxation system. KRA can involve the relevant stakeholders in the taxpayer education to enlighten the public on the need to pay taxes. These stakeholders can go a long way in informing the public on how simple, convenient and easy it is to file their returns for the betterment of the overall economy of Kenya. These stakeholders likewise, ensure that the taxpayer are aware of the current and new tax laws/policies regarding tax compliance. In the long run, the taxpayer is aware and obliged to paying taxes because of the benefits it brings to the country's economy rather the fear of facing the penalties of tax non-compliance.

5.3.4 Print media tax payers education and tax compliance

The study noted that the dissemination of tax education/information to tax payers through magazines, newspaper and booklets is worthwhile and a significant factor in the tax compliance. The study noted that the use of print media such as the magazines, and newspapers enlightens the taxpayers just as the other forms of tax payers' education. It informs the taxpayer on the need/obligation/reasons to pay taxes and informs them on how it is easy to file returns though the various digital platforms. As

well, the taxpayers are aware on the procedures involved in paying taxes by either visiting a cybercafé or the HUDUMA Centres. This in turn, helps in changing the taxpayer's attitude towards tax compliance and therefore, ensures that the collection of taxes is optimized.

5.4 Theoretical Implications

This theory was pinned on four theories being the theory of the planned behavior, economic deterrence theory, optimal taxation theory and presumptive taxation theory. For the theory of planned behavior the study concludes that taxpayers education help in shaping the attitude of the tax payers towards believing that tax compliance is a good thing and hence leading to more tax compliance. On the economic deterrence theory, the study found that tax payers need to be educated on the cost implication of non-compliance to the existing tax laws. This way, tax payers will refrain from weighing the cost and benefit of non-compliance to tax laws thus increasing tax compliance. For the optimal taxation theory, the study found that the government in its effort to come up with tax policies should find a balance so that there is no distortion in the economic choices for the tax payers that might lead to non-compliance to the tax laws. Lastly, on the presumptive taxation theory, the government should ensure that the method of coming up with the tax liability should be as simple as possible to make it easy for the tax payers. This will lead to increased tax compliance hence leading to increased tax revenue to the government.

5.5 Recommendations

Since the results of the study show that greater education potentially increases tax compliance due to increased taxpayers' awareness on their responsibilities and the consequences that come with non-compliance, the study recommends that Kenya

Revenue Authority continues with its educational programs as this will help it in realizing its target tax revenue through increased tax compliance.

The study recommends that the KRA needs to scale up its social media engagement of the enlightenment of taxpayers since the use of social media platforms is very convenient given the advent and advantages brought about by use of smartphone technology.

The motor vehicles business traders in Nakuru town, Suburb area are likewise, encouraged to adhere to tax compliance since the compliance is more beneficial to the country's economy.

In addition, the business traders need to acknowledge the information updated on the social media platforms, newspapers as well as the ones advertised on national televisions. The study also recommends introduction of tax education to the Kenya Education curriculum both for primary and secondary education to better prepare learners who are future tax payers to the importance of tax compliance at an early age.

5.6 Contribution of the Study

Social media education is a new media being used by Kenya Revenue Authority to educate tax payers on the importance of tax compliance as well as educating them on the various tax laws. Social media education was one the variables adopted by this study. With the advent of smart phones and cheap internet connection a big percentage of the traders interviewed agreed that taxpayers education through social media would easily reach them and help in tax compliance by impacting knowledge and changing their attitude towards tax compliance. This study therefore adds new knowledge in this area by finding that social media education has positive and significant effect on tax compliance.

5.7 Limitations of the Study

Since the concept of taxation is a sensitive matter due to the punitive measures that come with non-compliance, there might have been some level of subjectivity when it came to the respondents responding to questions on tax compliance. At the beginning, however, the investigator made it clear that the data collected was to be handled with the highest degree of confidentiality and that it was to be used for academic purposes only. The research was also carried in a limited time period which can potentially affect the interpretations of the findings. There's thus need to carry out other studies over an extended period of time. The study only concentrated on one type of businessemotor vehicle spares. Other studies should be extended to other type of businesses.

5.8 Areas for Further Studies

This study sought to establish the effect of tax-payers education on tax compliance among motor vehicles spare traders in Suburb area of Nakuru town, Kenya. The study, therefore, narrowed its findings to Nakuru town, Kenya. An extrapolation could be done on other neighboring counties for the purposes of comparison. This would expound on the scope of the study and enable the generalization of findings and ultimately be able to fill some knowledge gaps as the contextual gap. In addition, to expand the current study, other moderating /intervening factors/variables such as the internal organizational factors as well as macroeconomic factors as government policies could be incorporated in the research in order to establish how the study variables are affected by such factors.

REFERENCES

- Achieng O.M. (2014). *Print media reporting of taxation issues in kenya* (Doctoral Dissertation, School of Journalism and Mass Communication, University of Nairobi).
- Ahmad, E, Stern, N, & Stern N.H, (1991). The theory and Practice of tax reforms in developing countries.
- Ahmed, Q., & Mohammed, S. (2010). Determinant of Tax Buoyancy: Empirical Evidence from Developing Countries. *European Journal of Social Sciences Volume 13*, Number 3
- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. Journal of Applied Social Psychology, 32(4), 665–683
- Ajzen, I. (2011). Design and evaluation guided by the theory of planned behavior. Soc Psychol Eval, Guilford Publications, 74–100.
- Aksnes, F. (2011) "Tax compliance, Enforcement and Taxpayer Education" Being a paper presented at workshop organised by International Centre for Tax and Development, in Maputo, 30-31 March.
- Allingham, M.G., & Sandmo, A. (1972) Income Tax Evasion: A Theoretical Analysis. *Journal of Public Economics1* (3-4), 323–338
- Amrizah, K. And Nero, M. (2005). Tax literacy and Tax Awareness of Salaried
- Andreoni, J., et. al., (1998). Taxpayer Compliance. *Journal of Economic Literature*, 36, 818–860.
- Anis Barieyah Mat Bahari; Lai Ming Ling (2009): Introducing Tax Education in Non-Accounting Curriculum in Higher Education: Survey Evidence, Journal of Financial Reporting and Accounting, ISSN 1985-2517, Vol. 7, Iss 1, pp. 37-51
- Auerbach, A.J, (1986) Tax reforms and adjustments costs: The impact on investments and market value.
- Ayoki, M., Obwona, M., Ogwapus, M., (2005). Tax Reforms and Domestic Revenue
- Azjen, I., & Fishbein M. (1980). *Understanding attitudes and predicting social behavior*. NJ: Prentice Hall Englewood Cliffs.
- Azubike, J.U.B. (2009). "Challenges of Tax Authorities, Tax Payers in the Management of Tax Reform Process." The Nigerian Accountants. Vol. 42(2). pp. 36-42.
- Becker, G.S. (1968), Crime and punishment: An economic approach, *Journal of Political Economy*, Vol. 76 No. 2, 169-217
- Bryman, A., & Bell, E. (2011). Business research methods (3rd ed.). Oxford: Oxford University Press

- Clifford, G.M, Jairus B.A. (2013), The effects of tax payers education on voluntary tax compliance among SMEs in Mwanza City, Tanzania.
- Connaway, L. S., & Powell, R. R. (2010). Basic research methods for librarians. ABC-CLIO
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *psychometrika*, 16(3), 297-334
- Cyan, M., Koumpias, A., & Martinez-Vazquez, J. (2016). The Effects of Media Campaigns on Individual Attitudes towards Tax Compliance; Quasi-experimental Evidence from Survey Data in Pakistan. *Andrew Young School of Policy Studies Research Paper Series*, (16-17).
- Devas, N., & Kelly, R. (2001). Regulation or revenues? An analysis of local business licences, with a case study of the single business permit reform in Kenya. *Public Administration and Development: The International Journal of Management Research and Practice*, 21(5), 381-391.
- Etikan, I., & Bala, K. (2017). Sampling and sampling methods. Biometrics & *Biostatistics International Journal*, 5(6), 00149.
- Field, A. (2009). Discovering statistics using SPSS. Sage publications
- Fjeldstad, O. & L. Rakner. (2003). Taxation and Tax Reforms in Developing Countries
- Gitaru, K. (2017), The Effect of Tax Payers Education on Tax Compliance in Kenya. (A Case Study of SMEs in Nairobi Central Business District)
- Groves, R.M, Fowler, F.J, Couper, M.P, Lepkowski J.M, (2009). Survey Methodology.
- Hijattulah, A, & Jeffrey L. (2008) Tax Compliance Costs of Small and Medium Enterprises in Malaysia: Policy Implications.
- Icek A, (1980). The theory of Planned behavior
- Jain, N., Agarwal, N., Thinakaran, R., & Parekhji, R. (2017). Low cost dynamic error detection in linearity testing of SAR ADCs. In 2017 IEEE International Test Conference (ITC) (pp. 1-8). IEEE
- James, S., & Alley C., (2002). Tax compliance, self assessment and tax administration. *Journal of Financial and Management in Public Services*, 2, 27-42
- Junainah Jaidi. (2002). Sistem Taksiran Sendiri: Satu Kajian Kes Tanggapan Pembayar Cukai Individu di Kota Kinabalu. Tesis Sarjana. UKM
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39(1), 31-36.

- Kamau, S. K. (2014). The adoption of technology as strategic tool in enhancing tax compliance in Kenya: A case study of large taxpayers of Kenya Revenue Authority (Doctoral dissertation, United States International University Africa).
- Kaplan, S., K. Newberry and P. Reckers: 1997, _The Effect of Moral Reasoning and Educational Communications on Tax Evasion Intentions, *Journal of the American Taxation Association* 19(2), 38–54.
- Karugo, B. (2017). *Millenials and the Work Place Environment; Case Study of Kenya Revenue Authority* (Doctoral dissertation, United States International University-Africa).
- Kasippilai, J. (2000). Taxpayer knowledge index as a clue for non-compliance. Journal on Pakistan's Taxation Laws, 81(3).
- Katharina, G, Eva, H, Erich K, (2015), Tax Authorities Interactions with Tax Payers by Power and Trust.5y
- Kirchler, E. (2007). *The economic psychology of tax behavior*. Cambridge University Press: Cambridge, UK.
- Kombo, D. K., & Tromp, D. L. (2006). *Proposal and thesis writing: An introduction*. Nairobi: Paulines Publications Africa, 5, 814-30.
- Koumpias, A. M. (2017). The Effects of Compliance Reminders on Personal Income Tax Payments in Greece; Evidence from a Regression Discontinuity Design.
- KRA, (2018). Seventh Corporate Plan, Nairobi: Government Press
- Kristina, M. (2008). Enforcing tax compliance: To punish or persuade.
- Loo, E.C., and Ho, J.K., (2005). Competency of Malaysian Salaried Individuals in Relation to Tax Compliance under Self-Assessment. http://www.austlii.edu.au/au/journals/eJTR/2005
- Lymer, A., and Oats, L. (2009). Taxation: Policy and Practice. 16th ed. Birmingham:
- Machogu, C., & Amayi, J. B. (2016). The effect of taxpayer education on voluntary tax compliance, among SMEs in Mwanza City-Tanzania.
- Malonza, B. M. (2016). Effect of use of iTax on corporation tax compliance by medium corporate taxpayers in Kenya. *Unpublished master's thesis, University of Nairobi, Nairobi, Kenya*.
- Mankiw, N.G., Weinzierl, M., & Yagan, D. (2009). Optimal Taxation in Theory and Practice. *Journal of Economic Perspectives*, American Economic Association, 23(4), 147-74.
- Marshall, C, Rossman, G.B, (2006). Designing Qualitative Research.

- Marziana Hj. Mohamad, Norkhazimah Ahmad, Mohmad Sakarnor Deris (2010): Perceptions of Taxpayers With Level of Compliance: A Comparison in the East Coast Region, Malaysia: *Journal of Global Business and Economics*, vol.1, issue 1, pages 241-257
- Maseko, N. (2014). The impact of personal tax knowledge and compliance costs on tax compliance behaviour of SMEs in Zimbabwe. *Elite Research Journal of Accounting and Business Management*, 2(3), 26-37.
- Mathias, K. Christopher, K. Erich, K, (2013). Tax policy and the news: An empirical analysis of tax payers perceptions of tax related media coverage and its impact on tax compliance.
- Maxwell, S. (2003) "Revenue Impacts of Uganda's Trade Integration Strategy", a report prepared for the Tax Policy Department, Ministry of Finance, Planning and Economic Development
- McKerchar, M. (1995). Understanding small business taxpayers: Their sources of information and level of knowledge of taxation. Australian Tax Forum, 12(1), 25 41.
- Mohd, R.P, Mohd, R.M, Wan, F.D (2013): The Perception of Tax Payers on Tax Knowledge and Tax Education with Level of Tax Compliance: A Study of Religiosity.
- Murphy, K (2008) Enforcing Tax Compliance: To Punish or Persuade.
- Musyoka, N. N. (2019). Effect of tax reforms on voluntary tax compliance among small and medium enterprises in Kenya: a case of Nairobi County (Doctoral dissertation, Strathmore University).
- Ndirangu, M.N, The Effect of Tax Payers Education on Value Added Tax Compliance by Motor Vehicle Part Dealers in Nairobi Central Business District.
- Ogembo, D. (2019). Are Presumptive Taxes a Good Option for Taxing Self-Employed Professionals in Low & Middle-Income Countries?. *Journal of Tax Administration*, 5, 2.
- Olowookere, J.K, Fasina, H.T, (2013), Tax Payers Education; A Key Strategy in Achieving Voluntary Compliance in Lagos State Nigeria.
- Onuba, I. (2011). Bridging tax-compliance gap
- Orodho, A. J. (2009). Elements of Education and Social Science Research Methods: Maseno. Kenya: Kanezja Publishers
- Oyugi, O. N. B. (2008). A study of the effectiveness of taxpayer education as a revenue collection strategy in KRA: a case study of the Nairobi region (doctoral dissertation, university of Nairobi).
- Palil M, R Akir, M, Ahmad W. (2013) The Perception of Tax Payers on Tax Knowledge and Tax Education with Level of tax Compliance.

- Palil, M. R. (2005). Does tax knowledge matter in self assessment system? Evidence from the Malaysian tax administration. Journal of American Academy of Business, 6(2), 80 85.
- Pallant, J. (2010). A step by step guide to data analysis using SPSS. *Berkshire UK: McGraw-Hill Education*.
- Park, C.G., and Hyun, J.K., (2003). Examining the determinants of tax compliance by experimental data: A case of Korea. Journal of Policy Modeling 25, 673-684
- Pere, M. W., & Theuri, J. M. (2019). Communication Channels and Tax Compliance in Kenya by Small Taxpayers in Nairobi City County, Kenya. *Journal of Finance and Accounting*, 3(1), 51-66.
- Ramsey, F.P. (1927). A Contribution to the Theory of Taxation. *The Economic Journal*, 37, no. 145, (March 1927), 47-61
- Rani, J. S. (2005). SAS for Individuals: Preparing for effective management of tax
- Richardson, G., (2006). Determinants of Tax Evasion: A Cross Country Investigation. Journal of International Accounting, Auditing & Taxation 15 . 150-169
- Saad, N., Mansor, M., & Ibrahim, I. (2003). The self assessment system and its compliance costs. Paper presented at the Accounting Seminar, Malaysia
- Saunders, M., & Thornhill, A. (2012). Research methods for business students (6. utg.). *Harlow: Pearson*
- Schneider, F. (2013). Organizational climate and culture. Annual Review of Psychology, 64, 361e388.
- Schwartz, P, Yanow, D. (2013). Interpretive Research Design: Concepts and Processes.
- Sekaran, U., & Bougie, R. (2010). Research Methods for Small Business. A Skill Building Approach.
- Shafer, W. E., & Wang, Z. (2018). Machiavellianism, social norms, and taxpayer compliance. *Business Ethics: A European Review*, 27(1), 42-55.
- Sutton, J., & Austin, Z. (2015). Qualitative research: Data collection, analysis, and management. The Canadian journal of hospital pharmacy, 68(3), 226.
- Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. Research in Science Education, 48(6), 1273-1296.
- Tanui, P. (2016). Demystifying the key taxation concepts to improve compliance by small and medium enterprises in Kenya. *European Journal of Accounting, Auditing and Finance Research*, 4(6), 47-60.

- Tetteh, M. O. S. E. S. (2019). *The Effects of Tax Awareness and Tax Knowledge on Tax Compliance in Ghana* (Doctoral dissertation, University of Ghana). the Uganda Revenue Authority in Forum for Development Studies No. 1 2004
- Therkildsen, O. (2004). Autonomous Tax Administration in Sub-Saharan Africa: The Case of
- Thuronyi, V. Ed. (1996). Tax law design and drafting. Washington DC: International Monetary Fund (IMF). Volume 31, Norwegian Institute of International Affairs
- Webley, P. (2004). Audit Probabilities and Tax Evasion in a Business Simulation. Economics Letters 25 (3), 267–270
- Williams, C.C, Round, J, (2009). Evaluating informal entrepreneurs motives: evidence from Moscow.
- Wong R., & Waiyee A. (2015) Can Education Improve Tax Compliance
- Yosef, J. (2009): Building a conceptual framework: Philosophy, definitions and procedures
- Yusof, N. A. M., Ling, L. M., & Wah, Y. B. (2014). Tax non-compliance among SMCs in Malaysia: Tax audit evidence. *Journal of Applied Accounting Research*.

79

APPENDICES

Appendix I: Letter of Introduction

Dear respondent,

I am a master's student, at the Kenya School of Revenue Administration (KESRA) in

collaboration with Moi University and as part of my course requirement I am

currently conducting a study on "Effects of Tax Payer Education on Tax

Compliance among Motor Vehicles Spares Traders in Nakuru Town Suburb

Area."

You are requested to kindly participate in the survey. The information you will

provide is for academic purpose only and shall be treated with utmost confidentiality.

Thank you in advance for your co-operation and active participation to this academic

effort.

Yours Faithfully,

JOHN MWANGI NJOKI

Appendix II: Questionnaire

1. Please indicate your gender

This questionnaire is designed to collect data on effect of taxpayer education on tax compliance among traders in Suburb area of Nakuru town, Kenya. The data will be used for academic purposes only and will be treated with the confidentiality it deserves.

SECTION A: DEMOGRAPHIC INFORMATION

a) Female []
b) Male []
2. Please indicate where you fall among the following age brackets (years)
a) Below 25 []
b) 25-34 []
c) 35-44 []
d) 45-50 []
e) Above 51 []
3. Please indicate your level of education
a) Secondary Certificate []
b) Diploma level []
c) Bachelor's Degree Level []
d) Masters Level []

e) PhD	[]

4. Please indicate how long your business has been in operation;

$$0-2 \text{ years } [\] 3-5 \text{ years } [\] 6-10 \text{ years } [\] 11 \text{ years } \& \text{ above } [\]$$

SECTION B: TAX COMPLIANCE

5. Please rate the following statements in regard to your tax compliance. Rate on a scale of 1-5 where; {1 represents Strongly Disagree, 2 represents Disagree, 3 represents Neutral, 4 represents Agree, and 5 represents Strongly Agree}.

Statements	1	2	3	4	5
I am aware of the due dates for filing my tax					
returns					
I always make tax payments on time.					
I always make correct tax declaration					
I have complied with all tax registration					
requirements by KRA					

SECTION C: MAIN STREAM MEDIA EDUCATION

6. Please rate the following statements in regard to taxpayer education through the main stream media conducted by KRA.

Rate on a scale of 1-5 where; {1 represents Strongly Disagree, 2 represents Disagree, 3 represents Neutral, 4 represents Agree, and 5 represents Strongly Agree}.

Statements	1	2	3	4	5
Main stream media taxpayer education has					
enlightened motor vehicles spares traders on					
the need to pay taxes					
Main stream media taxpayer education					
programs has enabled motor vehicles spares					
traders to file their returns easily					
Main stream media taxpayer education					
programs by KRA have led to increased tax					
revenue collection					
Main stream media taxpayer education					
programs have helped in changing the attitude					
of the Motor vehicles spares traders.					

SECTION D: SOCIAL MEDIA EDUCATION

7. Please rate the following statements in regard to taxpayer education through the social media education conducted by KRA.

Rate on a scale of 1-5 where; {1 represents Strongly Disagree, 2 represents Disagree, 3 represents Neutral, 4 represents Agree, and 5 represents Strongly Agree}.

1	2	3	4	5
	1	1 2	1 2 3	1 2 3 4

Social media taxpayer education programs has			
enabled motor vehicles spares traders to file			
their returns easily			
Social media taxpayer education programs by			
KRA have led to increased tax revenue			
collection			
Social media taxpayer education programs			
have helped in changing the attitude of motor			
vehicle spares traders towards paying of taxes			

SECTION E: KRA's STAKEHOLDERS EDUCATION FORUMS

8. Please rate the following statements in regard to taxpayer education through KRA's stakeholders' forums conducted by KRA.

Rate on a scale of 1-5 where; {1 represents Strongly Disagree, 2 represents Disagree, 3 represents Neutral, 4 represents Agree, and 5 represents Strongly Agree}.

Statements	1	2	3	4	5
KRA's stakeholder's taxpayer education					
forums have enlightened motor vehicles spares					
traders on the need to pay taxes.					
KRA's stakeholder's taxpayer education					
forums have enabled motor vehicles spares					
traders to file their returns easily.					
KRA's stakeholders taxpayer education					

forums have led to increased tax revenue			
collection			
KRA's stakeholders' taxpayer education			
forums have helped in changing the attitude of			
motor vehicles spares traders towards paying			
of taxes			
KRA's stakeholders' taxpayer education			
forums have helped in sensitizing motor			
vehicles spares traders on new tax			
laws/policies.			

SECTION F: PRINT MEDIA TAX PAYERS' EDUCATION

9. Please rate the following statements in regard to taxpayer education through the print media. Rate on a scale of 1-5 where; {1 represents Strongly Disagree, 2 represents Disagree, 3 represents Neutral, 4 represents Agree, and 5 represents Strongly Agree}.

Statements	1	2	3	4	5
Print media tax payers education has					
enlightened motor vehicles spares traders on					
the need to pay taxes					
Print media tax payers education has enabled					
motor vehicles spares traders to file their					
returns easily					
Print media tax payers education has led to					

increased tax revenue collection			
Print media tax payers education has helped in			
changing the attitude of motor vehicles spares			
traders towards paying of taxes			
Print media tax payers education has helped in			
sensitizing motor vehicles spares traders on			
new tax laws/policies.			

THANK YOU FOR YOUR COOPERATION

Appendix III: Summary of Empirical Literature

Author/ Year	Methods	Country	Focus	Findings
Ahmed, Q & Mohammed, S (2010)	Panel data was used. Collected Secondary data	Pakistan	Determinant of Tax Buoyancy: Empirical Evidence from Developing Countries	Defined Tax Compliance as tendency of the tax payers to do as required by tax rules
				Found out that growth in import and and manufacturing sector have impact on growth of tax collection
Marziana, HJ, Mohamad. Norkhazima Ahmad, Mohamad, SD (2010)	Primary data	Malaysia	Perceptions of tax payers with level of Compliance	Tax payers knowledge and education influences their perception hence influencing their tax compliance
Hijattulah, A, Jeffrey, L (2008)	Primary data collected through use of questionnaires	Malaysia	Tax Compliance Costs of Small and Medium Enterprises in Malaysia: Policy Implications.	Tax payers education is important in order to reduce the cost of tax compliance
Therkildsen O, (2004)	Primary and Secondary data were collected	Uganda	Autonomous Tax Administration in Sub-Saharan Africa	There's need to educate tax payers on changes in tax administration or policy. Tax payers in Uganda revolted against VAT yet it was cheaper to be

				administered as compared to sales tax.
Ayoki, M, Obwona, M, Ogwapus, M, (2005)	Primary and Secondary data was collected	Uganda	Tax Reforms and Domestic Revenue	One reason for tax noncompliance is inadequate information
Katharina, G, Eva, H, Erich K, (2015)	Primary data through questionnaires	Australia	Tax Authorities Interactions with Tax Payers by Power and Trust	Education interaction between tax authorities and tax payers enhances the trust between Revenue Authorities and tax payers leading to tax compliance
Kristina, M,(2008)	Primary data through Survey	Australia	Enforcing Tax Compliance: To Punish or Persuade	Deterrence methods of enhancing tax compliance are counter- productive thus persuasive methods like education need to be employed.
Ndirangu, M.N, (2014)	Primary data through use of questionnaires	Kenya	The Effect of Tax Payers Education on VAT Compliance in Nairobi CBD	Tax knowledge and education has positive impact on tax compliance
Gitaru,K. (2017),	Primary Data through use of Questionnaires	Kenya	The Effect of Tax Payers Education on Tax Compliance in Kenya (A Case Study of SMEs in Nairobi	The Study found out that tax payers education plays a critical role in enhancing tax compliance

CBD

Olowookere,J.K,	Primary Data	Nigeria	Tax Payers	The Study
Fasina,H.T,(2013)	through use of Questionnaires	-	Education; A Key Strategy in Achieving Voluntary	found out that tax education is a major contributor of
			Compliance in Lagos State, Nigeria	tax compliance.

Appendix IV: NACOSTI Permit



Appendix V: Authorization Letter from KESRA





REF: KESRA/NBI/036

14th September, 2020

TO WHOM IT MAY CONCERN

RE: REQUEST FOR RESEARCH PERMIT:

NAME ; JOHN MWANGI NJOKI REG. NO.; MU/KESRA/105/0050/2017

This is to confirm that the above named is a student at Kenya School of Revenue Administration (KESRA) Nairobi Campus pursuing Masters in Tax & Customs Administration.

The named student is undertaking Research on "Effect of Tax payer Education on Tax compliance among motor Vehicle spare Traders in Nakuru Town suburb Area, Kenya."

The purpose of this letter is to request your good office to assist the above student with the information to enable him work on his project.

Thank you.

Dr. Marion Nekesa PHD, Head Academic Research

KESRA

1 4 SEP 2020