EFFECT OF TAXPAYER EDUCATION ON TAX COMPLIANCE AMONG MICRO & SMALL ENTERPRISES IN KENYA: A CASE OF TAX PAYERS IN EAST TAX AREA-NAIROBI COUNTY

BY

STELLA WANJIKU WANJIRU

A THESIS SUBMITTED TO THE SCHOOL OF BUSINESS AND ECONOMICS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER DEGREE IN TAX AND CUSTOM ADMINISTRATION

MOI UNIVERSITY

2020

DECLARATION

Declaration by Candidate

This thesis is my original work and has not been presented for examination for an award of a degree in any other University. No part of this thesis may be reproduced without prior written permission of the author and / or Moi University.

Student……………………………….. Date………………………………

WANJIRU, STELLA

MU/KESRA/0060/2016

Declaration by the Supervisors

This project has been submitted with our approval as the University supervisors.

Sign: ………………………………. Date: ………………………………

DR. ROBERT ODUNGA

Department of Accounting and Finance

School of Business & Economics

Moi University, Kenya

Sign: ………………………………. Date: ………………………………

PROF. PETER OMBOTO

Department of Economics

School of Business & Economics

Moi University, Kenya

DEDICATION

I dedicate this thesis to my husband, whose untiring support and assistance has made possible the fruition of my efforts.

ABSTRACT

Tax Compliance concerns are as old as taxes themselves and will remain an area of discovery as long as taxes exist. Taxes are the biggest source of revenue for governments to finance development. Poor tax knowledge has a number of potentially serious implications, mainly it can certainly affect tax compliance. There is therefore the need to establish whether a bridge in the knowledge gap would result in enhanced compliance. This study sought to address this gap by establishing the effect of taxpayer education on tax compliance among MSEs in Kenya. Specifically, the study endeavoured to determine the influence of taxpayer education programs on tax compliance, establish the effect of tax knowledge on tax compliance, assess the effect of use of technology on tax compliance and investigate if taxpayer's profile affects tax compliance. The independent variable was taxpayer education whilst the dependent variable was tax compliance. The study explored the theory of reasoned action, economic deterrence theory, and the social influences theory to explain the concept of tax compliance and the various motives behind tax non-compliance. The study was conducted in Migingo Block - (Nairobi's Riveroad and Kamukunji areas) Nairobi county as classified by KRA. The target population was 612 taxpayers with a sample size of 242. Data was analysed using both descriptive and inferential statistics. The study also used regression analysis to establish the relationship between the independent and dependent variables. The study revealed that taxpayer education programs influence tax compliance positively ($\beta=0.402$, p $=0.007$). In addition, tax knowledge influences tax compliance positively ($\beta=0.402$, p$=0.005$). Further, use of technology has a positive and significant effect on tax compliance ($\beta=0.376$, p$=0.002$). Finally, taxpayer's profile had a positive and significant effect on tax compliance ($\beta=0.227$, p$=0.003$). The study concluded that taxpayer education programs, tax knowledge, use of technology, taxpayer's profile influence tax compliance which is proved by the R square of 0.610, thereby rejecting the null hypotheses. The study findings forms a new body of knowledge in the stated objectives. The results also form a platform for relevant policy advocacy and change and empower taxpayers to know more and articulate their rights regarding tax compliance. The study concluded that taxpayer education affected tax compliance among MSEs in Kenya. Specifically, the study concluded that taxpayer education programs, tax knowledge, use of technology, taxpayer's profile affected tax compliance positively. Further, the study concluded that improved taxpayer education would help to improve tax compliance. The study recommends further studies focusing on specific types of taxes such as VAT, Presumptive tax performance should be conducted. This would help to determine the difference of effect tax education on each of their performances compared to tax compliance. Further, studies focusing custom duties tax payers should be conducted since they were not targeted in this study. This would help to make comparisons.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACKNOWLEDGEMENTS

I wish to express my special appreciation to my family and friends for their encouragement, understanding and support throughout the duration of my study. May God Almighty bless you abundantly.

Secondly, I would like to express my sincere appreciation to my supervisors Professor Peter Omboto and Doctor Robert Odunga for supervising the research project and their patience reading the drafts and guiding me, without which the research project would not have been a reality. In addition, I thank the entire Kenya School of Revenue Administration fraternity, the favorable learning environment facilitated me to pursue my MTC programme. My appreciation to the staff at the School of Business- Moi University Nairobi for their support.

Finally, I thank the Almighty God for His guidance and providence, which enabled me to undertake this project. This is truly His faithfulness, an answered prayer in my life.

ABBREVIATIONS AND ACRONYMS

DTD   Domestic Taxes Department

iTax   Kenya Revenue Authority's online tax system

IEA   Institute of Economic Affairs

KICD   Kenya Institute of Curriculum Development

KRA   Kenya Revenue Authority

MSEs   Micro and Small Enterprises

SMEs   Small and Medium Enterprises

SPSS   Statistical Package for Social Scientists

TPB   Theory of Planned Behaviour

TRA   Theory of Reasoned Action

OPERATIONAL DEFINITION OF TERMS

Micro enterprise – Enterprises with a maximum turnover of up to kshs. 500,000 and employ less than 10 people (Micro and Small Enterprise Act 2012, Kenya)

Small enterprise - Enterprises with a turnover of between kshs. 500,000 and 5 million and employ 10-49 people (Micro and Small Enterprise Act 2012, Kenya)

Tax – A compulsory contribution by taxpayers irrespective of any corresponding return of services or goods by the government (James & Nobes, 2000)

Tax Compliance- Taxpayer's willingness to pay their tax liability as per tax laws and regulations (Kirchler, 2007)

Taxpayer - Means a person liable for tax under a tax law whether or not they have accrued any tax liability in a tax period (Tax Procedures Act 2015)

Taxpayer Education – A method of educating people about the whole process of taxation and why they should pay tax (Aksnes, 2011).

CHAPTER 1

INTRODUCTION

1.1 Overview

This chapter presents an introduction to the study on the effect of taxpayer education on tax compliance. The chapter begins with the background of the study, followed by the problem statement, purpose of the study, study hypothesis, significance of the study and scope of the study.

1.2 Background of Study

Tax Compliance concerns are as old as taxes themselves and will remain an area of discovery as long as taxes exist.A high level of tax compliance remains the goal of revenue authorities across the world; as taxes are the biggest source of revenue for governments to finance development, meet day-to-day service provision expenses to its populace and have a firm control of the fiscal measures of their economies (Rai, 2004). Taxation remains the main source of government revenue in both developed and developing economies (OECD, 2009). Disparities in tax collection between developed and developing countries exist-the former register relatively higher tax compliance levels (35%) while the latter record less than 23% tax compliance level (Seelmann et al., 2011). Some of the key determinants of successful revenue generation by governments are; the role of information especially taxpayers' knowledge, effective and efficient use of technology in tax collection and the policy environment within which tax laws are effected (Brondolo et al. 2008) In African countries, there is low taxpayer knowledge, as the majority of Africans do not know what taxes they owe to the government or what tax payments are for (Aiko and Logan 2014; Isbell 2017).

Taxpayer education is rapidly becoming a strategic line of business for tax administrations. As governments and their tax administrations worldwide explore alternative approaches to complement traditional enforcement-oriented techniques, they turn to taxpayer education programmes to improve tax compliance (OECD, 2015).

Many developing countries are increasingly reaching out to engage today's and tomorrow's taxpayers. This is in an effort to improve tax compliance through nurturing the culture of paying taxes among their people. Taxpayer knowledge on their obligations and rights regarding tax is a vital component in collection and compliance to tax. Several studies have demonstrated that taxpayers' compliance to their tax obligations is dependent on their willingness to pay, tax collection methods, tax rates, and penalties (Devano & Kurnia, 2006; Kamil, 2015, Fauziati et al., 2016). Tax evasion is a big challenge to tax authorities in both the developed and developing countries. It hampers resource mobilization by governments for investment in critical areas of social and personal development including health, education and infrastructure development (Cummings, 2007). Even in the most advanced economies in the world, tax evasion undermines revenue collection substantially (Rile, 2011). If the Kenya government is to increase its social expenditure, then it needs to reduce tax evasion in the informal economy (Griffiths, 2005).

According to Misra (2004), the main objective of tax payer education is in three folds: impart knowledge as regards tax laws and compliance; change taxpayer's attitude towards taxation and increase tax collection through voluntary compliance. Taxpayer education assists taxpayers in meeting their tax obligations to the government. This means that the primary existence of taxpayer education is to encourage voluntary compliance amongst taxpayers.

Kenya's SME is dominated by the micro and small enterprise. Given their vibrant existence and immense contribution to the economy, it is necessary to enhance their tax compliance. According to KRA, approximately 3.2 million taxpayers out of the 7 million registered taxpayers filed their income tax returns by 30th June 2018. This could be partly due to lack of knowledge on and understanding of their tax obligations.

1.2.1 Aspects of Taxpayer education

Taxpayer education entails various activities and participants. These range from government programmes to encourage tax compliant behaviour, to civil society initiatives to involve citizens in policy debates on tax collection and redistribution, to efforts by business organizations to mobilize and represent the interests of their members on tax issues. The focus of this study will be the impact of the efforts by KRA to help taxpayers understand how to meet their tax obligations thereby complying voluntarily.

1.3 Statement of the Problem

Ideally each government across the world endeavours to meet its expenditure from its national i.e. domestic income without borrowing. The biggest source of this income comes from taxes. Tax compliance levels continue to remain low in most of the developing countries. This has remained a thorn in the flesh to governments as taxes are their biggest source of revenue to finance development, meet day-to-day service provision expenses to its populace and have a firm control of the fiscal measures of their economies (Rai, 2004).

Weak tax knowledge has a number of potentially serious implications. First of all, it can certainly affect tax compliance. Smaller, less educated, or lower-income taxpayers

are more likely to feel confused about complex tax rules, thus potentially failing to comply (Giulia, Fabrizio, & Denis, 2019).

Despite the rollout of the i-Tax online system by KRA in 2013, many challenges regarding timely submission of tax returns as well as payment of taxes due by taxpayers continue to be witnessed. The inability of taxpayers to effectively use the i-Tax platform has a negative direct impact on tax compliance and consequently, the total revenues collected by KRA. Approximately 3.2 million taxpayers out of the 7 million registered taxpayers filed their income tax returns by 30th June 2018, representing only 46%. There is therefore the need to establish whether a bridge in the knowledge gap would result in enhanced tax compliance, hence the need for this study. This would in effect result in increased tax collection, i.e. revenues for the government to fund its expenditure from domestic income without borrowing.

Several studies conducted in Kenya (Lumumba et al., 2010; Thananga et al., 2013; Kuria et al., 2013; Karanja, 2014; Nzioki & Osebe, 2014; Waithira, 2016) have attempted to explain the different reasons why attitude and tax compliance still remain a challenge, despite the many incentives, reprisals and policies in place. Oyugi (2008) explored the effectiveness of taxpayer education in revenue collection by KRA. Gitaru (2017) examined the effect of taxpayer education on tax compliance among SMEs in Nairobi central business district. However, none of these studies has explicitly evaluated and quantified the net effect of taxpayer knowledge on tax compliance among the micro taxpayers, who form majority of taxpayers and who are generally ignorant of tax matters. This study seeks to address this gap by investigating the effect of taxpayer education on tax compliance among micro and small enterprises in Kenya.

5

1.4 Objectives of the Study

The study was guided by the following general and specific objectives

1.4.1 General Objective

The General Objective of this study was to establish the effect of Taxpayer education on Tax compliance among MSEs in Kenya.

1.4.2 Specific Objectives

i. To determine the influence of taxpayer education programs on tax compliance.

ii. To establish the effect of tax knowledge on tax compliance.

iii. To assess the effect of use of technology on tax compliance.

iv. To investigate if taxpayer's profile affects tax compliance.

1.5 Study Hypotheses

The following hypotheses were tested:

H_{01} Taxpayer education programs have no significant effect on tax compliance.

H_{02} Tax knowledge has no significant effect on tax compliance.

H_{03} Use of technology has no significant effect on tax compliance.

H_{04} Taxpayer's profile has no significant effect on their tax compliance.

1.6 Significance of the Study

It is projected that the results of this study will provide concepts and bases on which to develop a framework for exploring taxpayer education among MSEs. The Government of Kenya, its tax administration body (KRA) and policy makers will gain more

knowledge resulting from this study in its effort to design suitable tax policies for MSEs. The research will be useful to the business community and organization's management teams identify their tax knowledge needs. It will assist KRA in designing taxpayer education strategies to employ to foster compliance among MSEs.

The findings of the study will inform various Governmental agencies, Ministries and education stakeholders on the role of tax education and sensitization of taxpayers as well as young Kenyans towards enhancing compliance. The study recommends to the KRA management on the options for improvement of its taxpayer education programme in future. This will ensure that the Authority is able to achieve its set revenue collection targets over the respective financial years. The findings of the study will also inform donor agencies that support tax administration reforms on the existing strengths, weaknesses, threats, and opportunities available in view of tax compliance. Finally, the research will be of value to scholars and researchers advancing their knowledge in the field of tax compliance and administration.

1.7 Scope of the Study

The study was limited to micro and small enterprises in Migingo Block - (Nairobi's Riveroad and Kamukunji areas) Nairobi county as classified by KRA. The population of Nairobi which is the capital city of Kenya is about 7 million Kenyans. The target population for this study was taxpayers in micro and small businesses within Nairobi's Riveroad and Kamukunji areas. This helped conduct the research on time, as opposed to large population which if adopted, could take more time and resources. The study confined itself to assessing the effect that Taxpayer education has had in helping KRA meet its revenue objectives.

CHAPTER 2

LITERATURE REVIEW

2.1 Overview

Chapter two reviews available literature on the impact that taxpayer education has on tax compliance in Kenya. The chapter comprises theoretical literature review, the empirical literature review and finally a summary of literature review.

2.2 Theoretical Literature Review

The study explored the theory of reasoned action, economic deterrence theory, and the social influences theory to explain the concept of tax compliance and the various motives behind tax non-compliance.

2.2.1 Theory of Reasoned Action

Ajzen and Fishbein (1980) introduced the Theory of Reasoned Action. According to this theory, taxpayers' behaviour is determined by their intentions, which are a function of: their attitudes towards behaviour and perception of subjective norms. The attitude towards behaviour is described as a positive or negative judgement regarding the behaviour and the perception of subjective norms as the social pressure influencing a person to perform behaviour. Lewis (1982) and Cialdini (1989) used the TRA to study the psychology of taxation. Firstly, they examined attitudes and perceptions of taxpayers in order to understand compliance behaviour whereby they found several factors affecting evasion intentions: personal and demographic characteristics, moral outlook, age and perception of others evasion. The second used the model to determine the possibility of improving compliance by educating taxpayers about their social responsibility of paying taxes. After, Ajzen (1991) introduced the Theory of Planed Behaviour . TPB links beliefs and behaviour, in a bid to explain human behaviour. The

concept aimed at improving on the predictive power of the theory of reasoned action by including perceived behavioural control. According to this theory, the behaviour of individuals within the society is influenced by definite factors which originate from certain reasons and emerge in a planned way. The ability to perform a particular behaviour depends on the fact that the individual has a purpose towards that behaviour (behavioural intention). Behavioural intention in turn depends on three factors that is Attitude towards the behaviour, Subjective norms and Perceived behavioural control. These three factors are also influenced by behavioural beliefs, normative beliefs and control beliefs.

The focus of this theory therefore is on the taxpayer's ethics and morals. The theory suggests that a taxpayer may comply even when the probability of detection is low. As opposed to the economic theories that emphasize on intensifying audits and penalties as solutions to compliance issues, psychological theories lay emphasis on changing individual attitudes towards tax systems. This is achieved majorly through taxpayer education.

2.2.2 The Economic Deterrence Theory

The theory was as a result of the work of Allingham and Sandmo (1972). This theory affirmed that the behavior of a taxpayer is usually influenced by the factors that determine the benefits and cost of tax evasion (Allingham & Sandmo, 1972). The economic deterrence theory views the individual taxpayer as a rational economic agent, who assesses the costs (determined by possibility of detection and penalties or a fine for the offense) and benefits (determined by tax rate) of evading taxes, and therefore chooses not to pay, if the benefit of non-compliance outweighs the costs (Walsh, 2012). The theory assumes tax payer maximizes expected advantages of non-compliance tax

risks. The taxpayer therefore seeks to balance between tax cheating benefits against detection and sanctions (Sandmo, 2005). One usually takes part in activities which have the potential of optimizing their returns or rewards as well as reducing their costs, for example tax amnesty. If sanctions are likely, and the costs severe enough to outweigh the rewards of an act, the act will not be performed (Mengere, 2014). This theory concludes that tax compliance depends more on tax audit and the penalties or fines.

This implies that, taxpayers will only pay their taxes due to the fear of being sanctioned. Thus, an increase in sanctions or fines and penalties will increase tax revenue (Awa &Ikpor, 2015). It is on the basis of this assumption that the model recommends rigorous audits and severe penalties for offenders as a basis for reducing non-compliance (Fjeldstad, Schulz-Herzenberg &Sjursen, 2012). Taxpayer education is to a great extent done during tax audit exercises. This model is relevant in tax compliance in that when there are fewer audits and penalties, tendency for evasion by taxpayers rises, while if there is a high chance for detection and penalties are severe, fewer taxpayers will evade. Hite (1989) stated that deterrence can be achieved by a persuasive approach, with the use of better education, increased advertising and incentives to improve taxpayers' attitudes towards tax administration and honest tax reporting. An analysis of small taxpayers with similar economic incentives is important to understand taxpayers' compliance behaviour.

2.2.3 Social Influences Theory

This theory states that, tax compliance by citizens is specifically influenced by their individual behavior and social norms. The theory assumes that individual behavior in taxation is basically influenced by social interactions like other forms of behavior (Ali et al., 2013). One is most likely to comply with tax requirements if he believes members

of his reference groups also comply, just as he is also likely not to comply if he believes that members of his referent group do not comply (Walsh, 2012). The social influence theory presumes that individual behavior in taxation is basically influenced by social interactions like other forms of behavior (Bello & Danjuma, 2014). The theory also presumes that the fear of social stigmatization as one of the possible deterrent factors to tax compliance (Kirchler, 2007), and that existence of the social norms effect on compliance behavior. This theory is relevant in that taxpayers are likely to be influenced by social groups, family members, friends and other taxpayers to comply on payment of tax.

The researcher sought to further answer the question on how the effect of knowledge on tax obligations by taxpayers is critical and explain why it is difficult to collect tax from persons ignorant of tax matters. Moreover, this established whether tax knowledge increases the tax consciousness in taxpayers which may compel them to willingly comply.

2.3 Empirical Literature Review

2.3.1 Tax Compliance

The economic deterrence theory explains that detection and penalties for fraud reduce the likelihood to evade taxes while several scholars have indicated that income levels, tax knowledge and attitude as key variables that influence tax compliance in several business entities Maseko (2014) researched the impact of personal tax knowledge and tax compliance costs behaviour of SMEs in Zimbabwe. The findings of the study revealed that unlike large companies, SMEs face different business conditions which make them to endure high tax compliance burden.

Oyugi (2008) explored the effectiveness of taxpayers' education in revenue collection by KRA. The study was conducted in Nairobi region and applied a descriptive research design. The findings established that taxpayer education had enhanced revenue collection by KRA. Taxpayer education had enhanced the following aspects regarding revenue collection: the public level of understanding on various taxes at KRA; tax compliance among non- cooperate taxpayers; reduction of tax evasion; and ease of filing tax returns by taxpayers.

Gitaru (2017) examined the effect of taxpayer education on tax compliance among SMEs in Nairobi central business district. The findings of the study established that compliance could be influenced by educating taxpayers of their social responsibilities to pay and thus their intention would be to comply. As a behavior problem, tax compliance depends on the cooperation of the public. There is a positive relationship between the level of tax knowledge and tax compliance. The noncompliance among non- cooperate taxpayers; reduction of tax evasion; and ease of filing tax returns by taxpayers -compliance may be unintentional, where the taxpayer is not aware of his/her tax obligations or fails to fulfill his/her tax obligations due to ignorance of tax laws and procedures or may be intentional due to the compliance attitudes.

2.3.2 Taxpayer Education Programs and Tax Compliance

The impact of education on tax compliance produces mixed results in tax compliance studies. Education and tax compliance levels might positively correlate (Richardson, 2006; Saad, 2010). Richardson (2006) found a positive relationship between education and tax compliance levels.

Various countries such as the USA, the UK and Australia also have developed interactive websites, disseminated leaflets together with tax returns, opened call centers', created advertisements or supplied reminders via television and radio (e.g. to remind taxpayers of deadline dates for filings). Carroll (2011) on taxation among women in the informal sector in Ghana found out that even though more than half (65 per cent) of the women surveyed were aware that they have to pay taxes, more than half were not well informed as to why they paid tax and more than 50 per cent did not enjoy' the benefits of paying it. However, tax education alone cannot guarantee continued tax compliance. Palil (2010) states that, in addition to tax education, knowledge about tax laws also plays a major role in determining taxpayers' compliance behaviour. Tax authorities must embrace continuous education programmes and effective monitoring mechanisms to ascertain that taxpayers have a good and reasonable knowledge and understanding of tax matters. These include schools outreach and tax club programs, radio and television talk shows, tax clinics and seminars, educational materials-brochures & newspapers, stakeholder training and forums, sensitization campaigns as well as call/support centres for low literacy taxpayers. In October 2018, KRA and KICD partnered to mainstream tax education in the education curriculum.

2.3.3 Tax Knowledge and Tax Compliance

Leading tax agencies describe in detail the rights of taxpayers as well as their responsibilities. In Australia this approach is supported by a Taxpayers' Charter. If the Taxpayers' Carter is given relevance in the tax agency, then it helps to shape culture in a way that helps to bridge the gap between the tax agency and taxpayers and their advisers (James, Murphy, & Reinhart, 2004). Knowledge about taxation, the benefits of taxation and the dangers of non-compliance remain a key impediment to tax

compliance in many countries. Countries such as the US, Canada, Japan, New Zealand, Australia, the UK and Malaysia have all been implementing a continuous tax education for taxpayers and children as future taxpayers (Palil, 2010).

This study holds that tax education and knowledge is critical in tax compliance. To begin with, the taxpayer must understand their rights and obligations about tax. Secondly, the taxpayer needs to know the various taxes that they could be obligated to pay, their compliance requirements in terms of rates applicable, filing, paying as well as the penalties for noncompliance. Thirdly, the ability to use the tax system. In Kenya for instance, KRA's iTax system. Finally, knowledge on the laws governing tax collection and how they operate is fundamental to know their recourse in case they commit an offense.

2.3.4 Technology and Tax Compliance

There is a wide perception by the tax payer that tax is a burden especially the small and medium enterprises (Vihanto, 2000). Economic theories on taxation hold that, taxpayers' amoral utility maximizes. They are influenced by economic motives such as profit maximization, therefore, they analyse alternative compliance paths for instance whether or not to evade tax. Therefore, the cost of accessing the internet play a key role in enhancing tax compliance. Costs are incurred in acquiring and organizing information, hiring internal auditors and purchase of materials and stationeries. A lot of time is spent in calculation and filing of taxes, an average of 210 hours in a year (OECD, 2009). In most cases, this requires hiring of professional services. All these amount to compliance costs in addition to the tax payable which may discourage taxpayers from complying with taxes. Another factor is the skills needed to be able to embrace and use technology. The taxpayer must be able to use a computer, laptop or a smart phone to

file and pay tax. Access to technology is also crucial since internet is required to access the iTax system.

2.3.5 Taxpayer profile and Tax Compliance

Compliance is driven by attitude. There is poor tax culture especially in developing countries. There is therefore the need to cultivate a good tax culture in the broader public, especially for children and young people to ensure sustainable government revenue from taxation. There is a positive correlation between tax compliance and education level attributable to improved tax fairness perceptions when taxpayers are better educated and with a capacity to deal with complex tax laws (Dubin, Graetz, & Wilde, 1990; Saad, 2010). However, awareness and attitude of the taxpayer himself is more important as the effectiveness of tax education depends on the readiness, acceptance and honesty of taxpayers

Engaging the various tax authority stakeholders in their specific roles in taxpayer education needs to be embraced, thereby enhancing tax compliance by their members (tax payers). These include government ministries, legislators, local governments, professionals' associations, the media, business associations, civil society among others.

Some taxpayers prefer direct assistance from the tax authorities, particularly where the political history of the country has caused taxpayers to trust only information they get directly from authorities (Investment Climate Advisory Services of the World Bank Group, 2009). Tax administrations must always make it possible, through tax assistance centers, for taxpayers to directly approach them with their questions especially with matters that require legal interpretation due to complexities in tax law.

2.4 Summary of Literature Review

This section has reviewed existing literature on the effect of taxpayer education on tax compliance in developing countries. In addition, several studies have also been explored. For instance, Misra (2004) studied the impact of taxpayer education on tax compliance in South Africa. Oyugi (2008) explored the effectiveness of taxpayer education as a revenue collection strategy in KRA while Gitaru (2017) examined the effect of taxpayer education on tax compliance among SMEs in Nairobi central business district. Additionally, Maseko (2014), Musau (2015), Mukabi (2014) and Makori et al (2013) assessed the various factors which influence tax compliance by SMEs in various parts of Kenya.

However, most of the existing and reviewed studies have focused more on small and medium enterprises. No research has addressed the micro enterprises, which form majority of taxpayers and who are generally ignorant of tax matters.

2.5 Critiques of Literature

Oyugi (2008) explored the effectiveness of taxpayer education as a revenue collection strategy in KRA while Gitaru (2017) examined the effect of taxpayer education on tax compliance among SMEs in Nairobi central business district. The study, although relevant to the prevailing phenomenon, focused on larger taxpayers and there needs to be a study carried focusing on micro taxpayers MSEs. Most of the existing and reviewed studies have focused more on small and medium enterprises with regard to tax compliance. No research has addressed the micro enterprises, which form majority of taxpayers and who are generally ignorant of tax matters.

2.6 Literature Gaps

There is therefore a literature gap on the on the contribution of tax education in enhancing tax compliance among MSEs in developing countries by their respective revenue authorities. This study therefore sought to fill this gap by evaluating how KRA can effectively use taxpayer education to enhance tax compliance among MSEs.

2.7 Conceptual Framework

The researcher investigated role of taxpayer education in enhancing tax compliance. As shown in the figure below, the independent variable of the study was taxpayer education that was evaluated in terms of taxpayer education programs, tax knowledge, use of technology and taxpayer profile by taxpayers while the dependent variable was improved tax compliance. Tax compliance was measured through timely filing of return, accurate declarations as well as timely payment whereby an increase in these indicators results in improved tax compliance and consequently growth in tax revenue.

Taxpayer education programs included schools outreach and tax club programs, radio and television talk shows, tax clinics and seminars, educational materials- brochures & newspapers, stakeholder training and forums, sensitization campaigns as well as call/support centres for low literacy taxpayers. Tax knowledge was measured in terms of the taxpayer's rights and obligations, the tax types, rate and laws as well as the tax system used in Kenya. Use of technology by taxpayers was measured in terms of taxpayer's ability to access iTax system, the costs involved in the process and easy availability of technology especially the internet given the tax system uses internet. Taxpayer profile was measured in terms of taxpayer's level of education, attitude and perceptions of tax, influence by fellow traders and competitors and their behaviour with respect to tax matters.

Independent Variables   **Dependent Variable**

Taxpayer education programs

-School projects & outreach

-Radio & TV talk shows

-Tax clinics, seminars & campaigns

-Educational materials

-Stakeholder training & forums

-Support centres

Tax Knowledge

-Rights and obligations

-Tax types, rates

-Tax system (iTax)

-Tax law

Use of technology

-Taxpayer's IT skills(basic)

-Costs

-Access.

Taxpayer Profile

- Level of education

-Taxpayer's attitude/perception

-Peer(business) influence

-Compliance behaviour

•**Tax compliance**

•Timely filing of returns

• - Accurate Declaration

• - Timely payment

Figure 2.1: Conceptual Framework

Source; Author (2019)

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Overview

This chapter covers the research methodology that was used for the study. It also describes the characteristic of the population which were used in the study, detailed description of sampling methods and procedures, data collection instruments and the procedure of data collection. Finally, it describes the appropriate data analysis method.

3.2 Research Design

A research design helps to control the experimental, extraneous and error variables of a particular research problem being investigated (Creswell, 2005). The study was mainly quantitative in nature. It was therefore a systematic empirical inquiry in which the researchers do not have direct control of independent variables because they cannot be manipulated (Creswell, 2005). As this design does not allow the researcher to manipulate either the independent variables or the research setting, it is apt, because of its higher external validity and less cost.

The study employed inferential research design that enabled the researchers collect requisite information on the contribution of taxpayer education in enhancing tax compliance among micro & small taxpayers. Descriptive research design enquires on phenomena or the association among them and it describes the data in order to draw conclusions on the population of study (Kothari, 2012). The independent variable was taxpayer education whilst the dependent variable was tax compliance.

3.3 Target Population

A study population is a well-defined or specified set of people, group of things, households, firms, services, elements or events which were being investigated (Ngechu, 2004). The study was conducted in Migingo Block - (Nairobi's Riveroad and Kamukunji areas) of Nairobi East, Nairobi County. This area is boxed by Pumwani-Ladhies-Racecourse and Ring roads (KRA- DTD database, 2012). The area was selected because it largely comprises the micro taxpayers with an estimate of 500-700 and therefore a good representation of this specific category of taxpayers. The population consisted all the business people and employees within Migingo Block - (Nairobi's Riveroad and Kamukunji areas) during the study period. The target population was 612 taxpayers.

3.4 Sampling Design

Collection of data from all the business people and employees in the area is not feasible due to constraints imposed by limited time and financial resources. Thus, a representative sample was used in the study. The study employed stratified sampling technique, with simple random sampling being done in every stratum in the selection of the sample. With this sampling technique, each member of the population had an equal chance of being included in the sample and each sample of a particular size has the same probability of being chosen.

3.5 Sample Size

To make valid statistical inferences from the results obtained, it is necessary for statistical tests to have enough power, that is, the probability of finding a difference if in fact the difference existed. Small samples result in statistical tests having unacceptably low power, which inevitably results in an inability to reject a false null

hypothesis (Sedlmeier and Gigerenzer, 1989). The study used Yamane (1967:886) simplified formula to calculate sample sizes. Yamane (1967:886) provides a simplified formula to calculate sample sizes.

Given the total population number is known, Yamane's (1967) formula was used to calculate a sample size which could accurately represent the total 612 taxpayers (KRA-DTD database, 2012)

With an assumption of a 95% confidence level and P = .5

$$n = \frac{N}{1 + N(e)^2}$$

Where, n = sample size, N=population size, e=0.05 is the level of precision.

This formula was used to calculate the sample sizes for the study as follows:

$$n = \frac{612}{1 + 612(0.05)^2} = 242$$

Complete responses collected were from 186 respondents which is 77% of the targeted sample. This was because people are still apprehensive about tax matters for fear of reprisal or follow up by the KRA, some shunned the interviewers altogether. However, this was a good response which could be relied upon for data analysis.

3.6 Data Collection

The following data collection technique was employed in the study to gather primary data which was qualitative in nature. The primary data entailed use of questionnaires.

3.6.1 Data collection procedure

Information was obtained from the taxpayers using questionnaires to generate primary data. It involved the use of a semi-structured questionnaire. The questionnaire

comprised both closed and open-ended questions. The open-ended questions were asked mainly in sections where there was need to have a more detailed understanding of the taxpayers' precise feeling. The questionnaire was scripted and uploaded to the ODK (Open Data Kit) Server Edition to be access via computer tablet. This was mainly through administration of pre-tested structured Likert-scale questionnaires in the field. The data collected included information on tax compliance, biographical information of the respondents, proxy variables representing use of technology, tax knowledge and education, perceived opportunity for tax evasion and fines and penalties.

3.6.2 Data Collection Instrument

Questionnaires

This instrument was employed as the main tool of collecting data. Structured and self-administered questionnaires were employed. The interviewers asked the respondents the questions from questionnaires scripted and uploaded to the ODK (Open Data Kit) Server Edition accessed via computer tablet. Structured questionnaires are simple to administer and relatively inexpensive to analyze over other instruments.

The questionnaire was divided into two major sections. In Section A the respondent gave general information about the respondent. Section B, C, D, E and F was used to find out the contribution of taxpayer education in enhancing tax compliance as well as capture the various suggested areas of improvement in taxpayer education program. Except for Section A, the Likert scale was the instrument of measurement. The designed questionnaires was administered for employees and for business persons to assess their feelings on the value of taxpayer education.

Table 3.1: Measurement of the study Variables

Hypothesis	Independent Variables	Measurements	Type of Scale	Data Analysis Tools	Type of Data Analysis
H_{01} Taxpayer education programs have no significant effect on tax compliance	Taxpayer education programs	School projects & outreach Radio & TV talk shows Tax clinics, seminars & campaigns Educational materials Stakeholder training & forums Support centres	Nominal and Ordinal	Frequency Distribution tables, Percentages	Descriptive & Inferential statistics Regression analysis
H_{02} Tax knowledge has no significant effect on tax compliance	Tax knowledge	Rights and obligations Tax types, rates Tax system (iTax) Tax law	Nominal and Ordinal	Frequency Distribution tables, Percentages	Descriptive & Inferential statistics Regression analysis
H_{03} Use of technology has no significant effect on tax compliance	Use of technology	Taxpayer's IT skills(basic) Costs Access.	Nominal and Ordinal	Frequency Distribution tables, Percentages	Descriptive & Inferential statistics Regression analysis
H_{04} Taxpayer's profile has no significant effect on their tax compliance	Taxpayer's profile	Level of education Taxpayer's attitude/perception Peer(business) influence Compliance behaviour	Nominal and Ordinal	Frequency Distribution tables, Percentages	Descriptive & Inferential statistics Regression analysis
Dependent Variable Tax compliance	**Dependent Variable** Tax compliance	Timely filing of returns Accurate Declaration Timely payment	Continuous	Frequency Distribution tables, Percentages	Descriptive & Inferential statistics Regression analysis

3.7 Data Validity and Reliability Tests

3.7.1 Validity Test

A conclusion of any study can be affected by either a researcher's bias or subjective judgment in the data collection process. Accordingly, the researcher must provide supporting evidence that a measuring instrument does in fact measure what it appears to measure. There are four main validity test of the questionnaire namely; face validity, content validity, construct validity and criterion or concrete validity. Prior to the main survey, a pilot study was done whereby questions in the questionnaire were validated and the questionnaire adapted based on the pilot study.

3.7.2 Reliability Test

Reliability is the extent to which results are consistent over time and accurately represent the characteristics of the total population under study. A study is reliable if the results of a study can be reproduced under a similar methodology.

Further, reliability is the extent to which a measuring instrument contains variable errors, that is, errors that appear inconsistently from observation to observation during any one measurement attempt or that vary each time a given unit is measured by the same instrument. Testing for reliability is important as it refers to the consistency across the parts of a measuring instrument (Huck, 2007) Reliability of the study was measured using Cronbach Alpha coefficient and gave a 0.752 and thus the results can be relied upon.

3.8 Data Analysis and Presentation

Questionnaires received from respondents and interview schedules were checked for completeness to maintain the number of respondents. Statistics package for social scientists (SPSS) was used to analyze data collected through questionnaires.

Frequencies and percentages were used to summarize data collected, whilst summary statistics including tables were used to present the findings. Both descriptive and inferential tests were used in the analysis where applicable. Data was described and summarized using descriptive statistics such as mean and frequency distributions, standard deviation and percentages which helped in meaningfully describing the distribution of responses. Various inferential statistics were used to infer population characteristics from the sample including regression analysis and correlation analysis. Pearson's correlation coefficient was used to establish relationships between variables.

A Multiple linear regression model was used to predict tax compliance using the four independent variables in the study: taxpayer education programs, tax knowledge, technology and taxpayer profile. In addition, the β coefficients for each independent variable generated from the model will be subjected to a z –test, in order to test each of the hypotheses under study. The regression model to be used to test is shown below:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mathcal{E}$$

Where; Y – Tax Compliance

α - Constant

β_1, β_2, β_3 and β_4 - Coefficient indicating Tax compliance as a function of taxpayer education programs, tax knowledge, technology and taxpayer profile

X_1 - taxpayer education programs

X_2 - tax knowledge

X_3 - technology

X_4 – taxpayer profile

$\mathcal{E}$ - Error term

All the above statistical tests were analyzed using the Statistical Package for Social Sciences (SPSS), version 25. All results would be considered significant at $p < 0.05$.

3.9 Ethical Considerations

This study project was submitted for approval to the Moi University Ethics Review Board. Voluntary participation by the study participants required their prior consent. All data obtained from the study was handled in confidentiality by the researcher and the study tools did not contain information linking data to individuals. For anonymity of respondents, the tools contained unique numbers/codes and no names were put on them. During data collection no study subject was put at risk of harm, none was coerced, and the respondents were allowed to withdraw without giving prior notice. The confidentiality of study subject's data was ensured through pass-wording of data collected so that there was limited access to the privileged information obtained from them. Further authorization to conduct the study was obtained from Kenya School of Revenue Administration.

CHAPTER 4

RESEARCH FINDINGS AND DISCUSSION

4.1 Overview

This chapter comprises of research findings and discussions, presenting the results and discussions of the collected data. The chapter encompasses the response rate, demographic characteristics, descriptive statistics and the inferential statistics. Results are presented in tables and diagrams. The data is in line with the research objectives.

4.2 Response Rate

The study administered 242 questionnaires. Of the total, 186 questionnaires were duly completed and submitted via ODK server, which reveals an overall successful response rate of 77% as shown on Table 4.1 below. According to Babbie (2004), return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good. Based on these 77% response rate was considered adequate for the study.

Table 4.1: Response Rate

Statement	Frequency	Percentage
Returned	186	77
Unreturned	56	23

Source; Research Data (2019)

4.3 Demographic Characteristics

This section provides information that posits the basic characteristics such as gender, age, and level of education of the respondents.

4.3.1 Gender

The study sought to establish the gender of the respondents. Results revealed that 51% were male, while 49% were female. The results demonstrate that the researcher managed to collect data from both male and female business people and employees.

However, it is evident that the business people and employees within Migingo Block an almost equal gender representation.

Table 4.2: Respondent Gender

Gender	Frequency	Percent
Male	94	51%
Female	92	49%
Total	**186**	**100%**

Source; Research Data (2019)

4.3.2 Age

The study also implored the respondents to state their age bracket. Results in Table 4.3 reveal that majority (44%) were aged between 21-30 years, 34% were aged between 31-40 years, 16% were aged between 41-50 years, while 6% were between 51-60 years. The results depict that majority of the business people and employees within Migingo Block are middle aged.

Table 4.3: Respondents' Age Group

Age in Years	Frequency	Percent
21-30	82	44%
31-40	64	34%
41-50	29	16%
51-60	11	6%
Total	**186**	**100%**

4.3.3 Level of Education

Further, the study sought to determine the extent to which the respondents had pursued education. Results in below show that majority (47%) had acquired education up to college level and attained diploma or a certificate, 34% had studied up to high school level, and 18% had acquired education up to university level and attained a degree, while only 1% had pursued education up to the master's degree level. The results indicate that the respondents are literate.

Table 4.4: Highest Level of Education

Level of education	Frequency	Percent
High School	63	34%
Certificate/Diploma	87	47%
Degree	34	18%
Masters	2	1%
Total	**186**	**100%**

Source; Research Data (2019)

4.4 Descriptive Statistics

This section presents the descriptive results on taxpayer education programs, tax knowledge, use of technology, taxpayer's profile and tax compliance.

4.4.1 Taxpayer Education Programs

The study sought to determine the influence of taxpayer education programs on tax compliance. To start with, the study implored the respondents to state whether they are aware of any taxpayer education programs conducted by KRA. Results in Table 4.5 illustrate that 51% of the respondents were of the affirmative while 49% were not aware.

Table 4.5: Awareness of Taxpayers Education Programmes

Response	Frequency	Percent
Yes	95	51%
No	91	49%
Total	**186**	**100%**

Source; Research Data (2019)

The respondents were asked to identify the taxpayer education programs from which the respondents obtained tax information. Results in Table 4.6 demonstrate that majority (80%) indicated radio and television talk shows, 45% indicated tax clinics, seminars and campaigns, 31% stated school projects and outreach and tax support centres respectively, 23% stated educational materials while only 9% stated stakeholder training and forums.

Table 4.6: Taxpayers Education Programmes

Taxpayer Education Programme	Responses	Percent of Cases
School projects & outreach	58	31%
Radio & television talk shows	149	80%
Tax clinics, seminars & campaigns	84	45%
Educational materials	43	23%
Stakeholder training & forums	17	9%
Tax support centres	57	31%

Source; Research Data (2019)

Further, the respondents were asked to state which of these KRA trainings they have gone through. Table 4.7 depicts that 63% had been trained on electronic filing, 60% had been trained on electronic registration, 39% had been trained on mobile payment mode while 37% had been trained on electronic applications such as tax compliance certificate. Results also demonstrated that 24% had been trained on generating a payment registration number slip while 20% had been trained on electronic amendment.

Table 4.7: KRA Trainings

KRA Trainings	Responses	Percent of Cases
Electronic Registration	112	60%
Electronic Filling	117	63%
Generating a Payment Registration Number Slip	45	24%
Mobile Payment Mode	72	39%
Electronic Amendment	37	20%
Electronic Applications e.g. Tax Compliance Certificate	69	37%

Source; Research Data (2019)

4.4.2 Tax Knowledge

The study sought to identify the role tax knowledge plays in enhancing tax compliance. To start with, the study sought to establish whether the respondents have a KRA PIN number. Results in Table 4.8 illustrate that 82% were on the affirmative while 18% did not have a KRA pin number.

Table 4.8: Possession of KRA Pin

Possession of KRA PIN number	Frequency	Percentage
Yes	152	82%
No	34	18%
Total	**186**	**100%**

Source; Research Data (2019)

Secondly, the respondents who had KRA Pin numbers were asked to state whether they have you migrated to the iTax system if registered in 2013 and before. Results in Table 4.9 shows that most (96%) had migrated and only 4% were yet to migrate.

Table 4.9: Migration to i-Tax System

Migration to i-Tax System	Frequency	Percentage
Yes	146	96%
No	6	4%
Total	**152**	**100%**

The study also inquired from these respondents to state their tax obligation. Results in Table 4.10 depicts that most (59%) stated Income tax Individual (IT), 28% stated Value added tax (VAT), 10% stated Pay as you earn (PAYE) while only 1% stated Presumptive tax (formerly Turnover tax), Corporation tax (CT) and Withholding tax (WHT) respectively.

Table 4.10: Tax Obligation

Tax Obligation	Frequency	Percentage
Presumptive tax (formerly Turnover tax)	2	1%
Income tax Individual (IT)	89	59%
Value added tax (VAT)	43	28%
Pay as you earn (PAYE)	15	10%
Corporation tax (CT)	1	1%
Withholding tax (WHT)	2	1%
Total	**152**	**100%**

Source; Research Data (2019)

Further, the study sought to determine the respondent's knowledge about the Taxpayers' Service Charter that lists your rights as a taxpayer. Table 4.11 illustrates that most (78%) were not aware while only 22% were aware.

Table 4.11: Knowledge about Taxpayer's Service Charter

Knowledge about Taxpayer's Service Charter	Frequency	Percentage
Yes	33	22%
No	119	78%
Total	**152**	**100%**

Source; Research Data (2019)

Table 4.12 presents the results on the ability to use the i-Tax system. Results show that 83% were able to use the i-Tax system while 17% were not.

Table 4.12: Ability to Use i-Tax System

Ability to Use i-Tax System	Frequency	Percentage
Yes	126	83%
No	26	17%
Total	**152**	**100%**

Source; Research Data (2019)

The study also inquired about the respondent's level of knowledge about the tax laws governing tax collection in Kenya. Results in Table 4.13 demonstrate that less than half (47%) were aware while the most (53%) were not aware.

Table 4.13: Level of Knowledge about Tax Laws

Level of Knowledge about Tax Laws	Frequency	Percentage
Yes	71	47%
No	81	53%
Total	**152**	**100%**

Source; Research Data (2019)

Further, the study implored the respondents to state their level of agreement on statements about tax knowledge. Results in Table 4.14 depicts that 59% agreed that they know how to declare income on i-Tax System, 61% alluded that they know how

to compute taxable income and tax liability, 66% posited that they know their rights as tax payers while most (88%) retorted that they know their obligations as a taxpayer.

Results also revealed that 84% stated that they are conversant with the tax rate(s) for their tax obligation(s), majority (90%) stated that they are conversant with the due date(s) for their tax obligation(s), 86% were conversant with the penalty (ies) for late or non-filing while 66% stated that they have basic understanding of tax law. Further, results demonstrated   that 72% pointed out that taxpayer knowledge has enlightened the public on the need to pay taxes while 76% posited that taxpayer knowledge has enabled tax payers file their returns easily. On a scale of 1-5 the average mean was 3.8 which can be rounded up to 4.0 depicts that most of the respondents were agreeing to the statements on tax knowledge.

Table 4.14: Tax Knowledge

Statement	Strongly disagree	Disagree	Not Certain	Agree	Strongly agree	Mean
I know how to declare income on iTax System	4%	16%	21%	43%	16%	3.5
I know how to compute taxable income and tax liability	5%	14%	19%	44%	17%	3.5
I know my rights as a taxpayer	8%	10%	16%	51%	15%	3.6
I know my obligations as a taxpayer	3%	4%	5%	51%	38%	4.2
I am conversant with the tax rate(s) for my tax obligation(s)	3%	7%	7%	51%	32%	4.0
I am conversant with the due date(s) for my tax obligation(s)	1%	2%	7%	53%	38%	4.2
I am conversant with the penalty(ies) for late or non-filing	2%	7%	5%	52%	34%	4.1
I have basic understanding of tax law	3%	10%	20%	53%	14%	3.6
Taxpayer knowledge has enlightened the public on the need to pay taxes	8%	5%	16%	45%	26%	3.8
Taxpayer knowledge has enabled tax payers file their returns easily	4%	4%	16%	44%	32%	4.0
Average						**3.8**

Source; Research Data (2019)

4.4.3 Use of Technology

The study sought to assess the effect of use of technology on tax compliance. To start with, the researcher implored the respondents to indicate whether they are registered tax payers. Table 4.15 shows that 97% were registered and only 3% were not.

Table 4.15: Registered Taxpayer

Response	Frequency	Percentage
Yes	148	97%
No	4	3%
Total	**152**	**100%**

Source; Research Data (2019)

The study also sought to identify the ability of the respondents to perform various tasks through KRA's iTax system. Results in Table 4.16 depicts that 89.9% were file returns electronically, 55.4% were able to generate a payment registration number slip while 66.2% were able to make payment using a mobile phone. Results also revealed that only 45% were able to do electronic amendment, 73% retorted that they were able to obtain electronic applications such as Tax Compliance Certificate while 86.5% posited that they can readily access KRA's iTax system.

Table 4.16: Ability to Perform Tasks through KRA i-Tax System

Statement	Yes	No
Electronic Filing	89.9%	10.1%
Generating a Payment Registration Number Slip	55.4%	44.6%
Make payment using a mobile phone	66.2%	33.8%
Electronic Amendment	45.9%	54.1%
Electronic Applications e.g. Tax Compliance Certificate	73.0%	27.0%
Readily access KRA's iTax system	86.5%	13.5%

Results in Table 4.17 demonstrate that 65% state that i-Tax system is swift while 70% stated that i-Tax system is safe and secure. On a scale of 1-5 the average mean was 3.5 which can be rounded up to 4.0 depicts that most of the respondents were agreeing to the statements on effectiveness of KRA i-Tax system.

Table 4.17: Effectiveness of KRA i-Tax System

Statement	Strongly disagree	Disagree	Not Certain	Agree	Strongly agree	Mean
iTax system is swift	5%	5%	25%	51%	14%	3.6
iTax system is safe	3%	5%	22%	54%	16%	3.8
iTax system is secure	4%	2%	24%	49%	21%	3.8
Average						**3.7**

Source; Research Data (2019)

4.4.4 Taxpayer's Profile

The study sought to explore how taxpayer's profile impacts tax compliance. Results demonstrate that 70% of the respondents indicated that taxpayer sensitization has played a vital role in changing the attitudes of taxpayers, 51% stated that Kenya's tax laws are easy to understand and apply while 68% disagreed that failure to pay taxes by fellow traders influences their decision to pay tax. Results also demonstrate that 72% were in agreement that tax rates in Kenya are too high while 56% retorted that tax collectors are dishonest. On a scale of 1-5 the average mean was 3.5 which can be rounded up to 4.0 depicts that most of the respondents were agreeing to the statements on taxpayer's profile.

Table 4.18: Taxpayers Profile

Statement	Strongly disagree	Disagree	Not Certain	Agree	Strongly agree	Mean
Taxpayer sensitization has played a vital role in changing the attitudes of taxpayers	3%	9%	18%	51%	19%	3.7
Kenya's tax laws are easy to understand and apply	3%	15%	31%	43%	7%	3.4
Failure to pay taxes by fellow traders influences my decision to pay tax	15%	53%	6%	10%	16%	2.6
Tax rates in Kenya are too high	0%	24%	4%	13%	59%	4.1
Tax collectors are dishonest	2%	34%	9%	5%	51%	3.7
Average						**3.5**

Source; Research Data (2019)

4.4.5 Tax Compliance

The study sought to establish the level of tax compliance among the respondents. Results in Table 4.19 depicts that 74% stated that they have been accurately filling on i-Tax, another 74% noted that they have been filling on iTax on time, 77% alluded that they have been paying their taxes correctly while 80% posited that they have been paying my taxes on time. Results also demonstrate that 48% reiterated that they are fully satisfied with the tax requirements put forth by KRA while 41% were in disagreement.

Further, results show that 48% agreed that people who do not pay taxes that they should from their income do wrong and should be punished while 44% were in disagreement. Results also reveal that only 34% agreed that filling and paying takes a lot of time and effort while 44% were in disagreement, another 34% agreed that completing a tax return is a complicated and difficult process while 44% were in disagreement, 62% affirmed

that Kenya's tax administration system is unfair while 48% agreed that taxpayers do not have the ability to pay tax while 40% were in disagreement. On a scale of 1-5 the average mean was 3.5 which can be rounded up to 4.0 depicts that most of the respondents were agreeing to the statements on tax compliance.

Table 4.19: Tax Compliance

Statement	Strongly disagree	Disagree	Not Certain	Agree	Strongly agree	Mean
I have been accurately filling on iTax System	1%	20%	4%	38%	37%	3.9
I have been filling on iTax on time	1%	20%	5%	38%	35%	3.9
I have been paying my taxes correctly	1%	16%	6%	39%	38%	4.0
I have been paying my taxes on time	1%	17%	3%	41%	39%	4.0
I am fully satisfied with the tax requirements put forth by KRA	17%	24%	11%	34%	15%	3.1
People who do not pay taxes that they should from their income do wrong and should be punished	22%	23%	10%	33%	13%	2.9
Filling and paying takes a lot of time and effort	9%	35%	22%	20%	15%	3.0
To complete a tax return is a complicated and difficult process	8%	35%	23%	19%	15%	3.0
Kenya's tax administration system is unfair	6%	23%	8%	28%	34%	3.6
Taxpayers do not have the ability to pay tax	9%	31%	12%	24%	25%	3.2
Average						**3.5**

4.5 Inferential Statistics

The inferential statistics is used to make a conclusion about the whole population at hand using the various types of tests. Pearson's correlation coefficient was used to establish relationships between variables. A Multiple linear regression model was used to predict tax compliance using the four independent variables in the study: taxpayer education programs, tax knowledge, technology and taxpayer profile. Inferential statistics encompassed the regression analysis.

4.5.1 Correlation Analysis

Correlation analysis is a statistical measure that establishes the relationships between two or more variables, and shows the level of significance of the relationship. In addition it shows the course and degree of the relationship between the variables. Pearson's correlation coefficient was used to establish relationships between independent variables and dependent variable. Table 4.20 shows the correlation matrix between independent variables and dependent variable. There is a positive relationship between tax compliance and taxpayer education programs, tax knowledge, technology and taxpayer profile of the degree 0.68, 0.11, 0.175 and 0.368 respectively. The positive relationship indicates that there is a correlation between the independent variables and dependent variables.

Table 4.20: Correlations

		tax_complia nce	tax_educati on	tax_knowle dge	tax_technol ogy	taxpayer_pro file
tax_complia nce	Pearson Correlati on	1	.068	.011	.175*	.368**
	Sig. (2-tailed)		.356	.890	.033	.000
	N	186	186	152	148	152
tax_educatio n	Pearson Correlati on	.068	1	.170*	.295**	.355**
	Sig. (2-tailed)	.356		.037	.000	.000
	N	186	186	152	148	152
tax_knowled ge	Pearson Correlati on	.011	.170*	1	.197*	.221**
	Sig. (2-tailed)	.890	.037		.016	.006
	N	152	152	152	148	152
tax_technolo gy	Pearson Correlati on	.175*	.295**	.197*	1	.104
	Sig. (2-tailed)	.033	.000	.016		.207
	N	148	148	148	148	148
taxpayer_pro file	Pearson Correlati on	.368**	.355**	.221**	.104	1
	Sig. (2-tailed)	.000	.000	.006	.207	
	N	152	152	152	148	152

*. Correlation is significant at the 0.05 level (2-tailed).

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

Source; Research Data (2019)

4.5.2 Test of Assumptions

The study performed tests on statistical assumptions that included autocorrelation, homogeneity of variance and multicollinearity.

4.5.2.1 Homoscedasticity Test

Homoscedasticity test is done to check whether all the items in the population have same characteristics. Homoscedasticity, also known as homogeneity of variance describes a set of data that has the same variance i.e. the variance of the error term is constant.

Table 4.21: Homogeneity

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	534.804[a]	350	0.000000000685851
Likelihood Ratio	290.975	350	0.990480044424211
Linear-by-Linear Association	20.406	1	0.000006263441549
N of Valid Cases	152		

a. 389 cells (99.7%) have expected count less than 5. The minimum expected count is .01.

Source; Research Data (2019)

4.5.2.2 Multicollinearity Test

Multicollinearity is a situation in which the independent variables are correlated. To detect for multicollinearity, the study examined the correlation matrix using Variance Inflation Factor (VIF) as shown in Table below. The Variance Inflation Factor (VIF) measures the severity of multicollinearity in an ordinary least- squares regression analysis. VIF's greater than 10 are a sign of multicollinearity; the higher the value of VIF's, the more severe the problem.

Table 4.22: Multicollinearity Test

Coefficients[a]

Model	Standardized Coefficients		t	Sig.	Collinearity Statistics	
	B	Std. Error			Tolerance	VIF
1 (Constant)	2.563	0.064	39.819	0		
tax_education	0.402	0.142	2.842	0.007	.759	1.317
tax_knowledge	0.402	0.134	2.998	0.005	.852	1.174
tax_technology	0.376	0.113	3.339	0.002	.889	1.125
taxpayer_profile	0.227	0.075	3.027	0.003	.784	1.276

a. Dependent Variable: tax_compliance

Source; Research Data (2019)

Results show that all the variables had a variance inflation factors (VIF) of less than 10. This implies that there was no multicollinearity with the variables thus all the variables were maintained in the regression model.

4.5.2.3 Reliability Test

Reliability of the study was measured using Cronbach Alpha coefficient gave a 0.752 and thus the results can be relied upon.

Table 4.23: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.760	.752	5

Source; Research Data (2019)

4.5.3 Regression Analysis

The findings show that the independent variables had a substantial influence on the dependent variable. Table 4.24 show that taxpayer education programs, tax knowledge, use of technology, taxpayer's profile were considered satisfactory in explaining tax

compliance. This is proved by the adjusted R square of 0.610. This demonstrates that taxpayer education programs, tax knowledge, use of technology, taxpayer's profile explain 61% of the variations in tax compliance. It further implies that this model used to link variables relationships is adequate. However, other factors not studied in this research contribute 39% of the variation in tax compliance among MSEs.

Table 4.24: Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.786[a]	.618	.610	.37069

a. Predictors: (Constant), taxpayer_profile, tax_technology, tax_knowledge, tax_education

Source; Research Data (2019)

The results in Table 4.25 prove that the entire model was statistically significant in predicting tax compliance among MSEs and this is shown by F statistic of 73.346 and a p value of <0.05. The entire model therefore was a good fit. Thus taxpayer education programs, tax knowledge, use of technology, taxpayer's profile are good predictors of tax compliance.

Table 4.25: Analysis of Variance

ANOVA[a]

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	40.314	4	10.078	73.346	.000[b]
Residual	24.871	181	.137		
Total	65.185	185			

a. Dependent Variable: tax_compliance

b. Predictors: (Constant), taxpayer_profile, tax_technology, tax_knowledge, tax_education

The regression function extracted using the standardized betas is as follows;

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mathcal{E}$$

$$Y = 2.563 + 0.402 X_1 + 0.402 X_2 + 0.376 X_3 + 0.227 X_4$$

Table 4.26 show that taxpayer education programs, tax knowledge, use of technology and taxpayer's profile were positively and significantly related with tax compliance as shown β coefficients of 0.402, 0.402, 0.376, 0.227. This implies that a unit increase in taxpayer education programs will result to an increase in tax compliance by 0.402 units, a unit increase in tax knowledge will result to an increase in tax compliance by 0.402 units. Further, a unit increase in use of technology will result to an increase in tax compliance by 0.376 units and a unit increase in taxpayer profile will result to an increase in tax compliance by 0.227 units.

Table 4.26: Regression of Coefficients

Coefficients[a]

Model	Standardized Coefficients		t	Sig.
	B	Std. Error		
1 (Constant)	2.563	.064	39.819	.000
tax_education programs	.402	.142	2.842	.007
tax_knowledge	.402	.134	2.998	.005
tax_technology	.376	.113	3.339	.002
taxpayer_profile	.227	.075	3.027	.003

a. Dependent Variable: tax_compliance

Source; Research Data (2019)

4.6 Interpretation of Findings

According to the findings of the study, independent variables taxpayer education programs, tax knowledge, use of technology, taxpayer's profile had each a positive substantial influence on the dependent variable tax compliance demonstrated by high adjusted R square of 0.610. This demonstrates that taxpayer education programs, tax knowledge, use of technology, taxpayer's profile explain 61% of the variations in tax

compliance. It further implies that this model used to link variables relationships is adequate. However, other factors not studied in this research contribute 39% of the variation in tax compliance among MSEs.

Based on these findings therefore, the study rejected all the null hypothesis that there is no significant relationship between taxpayer education and tax compliance among MSEs in Kenya.

The study is in line with the findings of Oyugi (2008) who explored the effectiveness of taxpayers' education in revenue collection by KRA. The findings established that taxpayer education had enhanced revenue collection by KRA. Further, the findings of Gitaru (2017) on the effect of taxpayer education on tax compliance among SMEs in Nairobi central business district are also in agreement with those determined in the study. He found out that compliance could be influenced by educating taxpayers of their social responsibilities to pay and thus their intention would be to comply, and that there is a positive relationship between the level of tax knowledge and tax compliance. Moreover the findings in this study align to those of (Richardson, 2006; Saad, 2010) who established that education and tax compliance levels might positively correlate.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Overview

This chapter brings out the main discussions of the major findings, conclusions and recommendations based on the research findings. It includes a discussion of findings, gives the recommendation following the research findings and suggests areas for further study in some related area.

5.2 Discussion of the Findings

This section includes a discussion of the influence of taxpayer education programs on tax compliance, the role tax knowledge plays in enhancing tax compliance, the effect of use of technology on tax compliance and the effect of taxpayer's profile on tax compliance.

5.2.1 Taxpayers Education Programs and Tax Compliance

The first objective of the study was to determine the influence of taxpayer education programs on tax compliance among MSEs in Kenya. The results revealed that taxpayer education programs influenced tax compliance positively. These was as reflected by the regression results which showed that taxpayer education programs had a positive and significant effect on tax compliance (β=0.402, p =0.007).

Results also revealed that 51% of the respondents were aware of existence taxpayer education programs conducted by KRA. Results also showed that the tax payers obtained tax information from various programmes namely radio and television talk shows (80%), tax clinics, seminars and campaigns (45%), school projects and outreach (31%), tax support centres (31%) educational materials (23%) and stakeholder training

and forums (9%). Results also illustrated that the respondents have gone through various KRA trainings. These trainings included electronic filing (63%), electronic registration (60%), mobile payment mode (39%), electronic applications such as tax compliance certificate (37%), generating a payment registration number slip (24%) and electronic amendment (20%).

5.2.2 Tax Knowledge and Tax Compliance

The second objective of the study was to identify the role tax knowledge plays in enhancing tax compliance among MSEs in Kenya. The results revealed that tax knowledge influenced tax compliance positively. These was as reflected by the regression results which showed that tax knowledge had a positive and significant effect on tax compliance ($\beta=0.402$, $p=0.005$).

Results also revealed that most (82%) respondents have a KRA PIN number. Results also revealed that the respondents had different tax obligations. This included Income tax Individual (IT) (59%), Value added tax (VAT) (28%), Pay as you earn (PAYE) (10%), stated Presumptive tax (formerly Turnover tax) (1%), Corporation tax (CT) (1%) and Withholding tax (WHT) (1%). Further, results revealed that only 22% respondent's had knowledge about the Taxpayers' Service Charter that lists your rights as a taxpayer. The ability to use the i-Tax system was also strong (83%). Results showed that the respondent's level of knowledge about the tax laws governing tax collection in Kenya was low, only 47% were aware.

Results also revealed that 59% respondent know how to declare income on i-Tax System, 61% know how to compute taxable income and tax liability, 66% know their rights as tax payers and 88% know their obligations as a taxpayer. Further, results

revealed that the respondents are conversant with the tax rate(s) for my tax obligation(s) (84%), 90% are conversant with the due date(s) for my tax obligation(s), 86% were conversant with the penalty(ies) for late or non-filing while 66% stated that they have basic understanding of tax law. Further, results demonstrated that 72% pointed out that taxpayer knowledge has enlightened the public on the need to pay taxes while 76% posited that taxpayer knowledge has enabled tax payers file their returns easily.

5.2.3 Use of IT and Tax Compliance

The third objective of the study was to assess the effect of use of technology on tax compliance among MSEs in Kenya. The results revealed that use of technology influenced tax compliance positively. These was as reflected by the regression results which showed that use of technology had a positive and significant effect on tax compliance ($\beta=0.376$, p=0.002).

Results also revealed that 97% respondents are registered tax payers. Results also demonstrated that 89.9% were able to file returns electronically, 55.4% were able to generate a payment registration number slip, 66.2% were able to make payment using a mobile phone, 45% were able to do electronic amendment, 73% were able to obtain electronic applications such as Tax Compliance Certificate and 86.5% can readily access KRA's iTax system. Further, results showed that i-Tax system is swift (65%), stated that i-Tax system is safe and secure (70%).

5.2.4 Taxpayers Profile and Tax Compliance

The fourth objective of the study was to explore how taxpayer's profile impacts tax compliance among MSEs in Kenya. The results revealed that taxpayer profile influenced tax compliance positively. These was as reflected by the regression results

which showed that taxpayer's profile had a positive and significant effect on tax compliance (β=0.227, p=0.003).

The results also revealed that 70% of the respondents reiterated that taxpayer sensitization has played a vital role in changing the attitudes of taxpayers, 51% stated that Kenya's tax laws are easy to understand and apply while 68% disagreed that failure to pay taxes by fellow traders influences their decision to pay tax. Results also demonstrate that 72% were in agreement that tax rates in Kenya are too high while 56% retorted that tax collectors are dishonest.

5.3 Conclusion

The study found that taxpayer education affects tax compliance among MSEs in Kenya. Specifically, the study concluded that taxpayer education programs, tax knowledge, use of technology, taxpayer's profile affected tax compliance positively. Further, the study concluded that improved taxpayer education would help to improve tax compliance.

5.4 Recommendations for Policy and Practice

Based on the study findings, the study recommends that KRA should revamp taxpayer education as it impacts tax compliance positively. Particularly, the study recommends that KRA should focus using TV and radio as this are the programmes that are popular among the targeted tax payers. The study also recommends that KRA should focus on training taxpayers on the tax amendments and tax laws as the taxpayers seem to have little knowledge on the same.

5.5 Limitation and Delimitation of the Study

Due to sensitivity of information the study sought, some respondents were hesitant to provide accurate information either due to lack of knowledge or fear of reprisal or

follow up by the KRA. To mitigate against this, the researcher: conducted a thorough sensitization of taxpayers on the scope of the study and appropriate knowledge of tax-related issues. The researcher gave assurance that the findings of the study will not use identifiers that would compromise respondent identity, and assured respondents that the results will be only for academic and policy improvement purposes (and not for reprisal).

Due to time and financial constraints, the researcher used the least sample size that would give scientifically sound results. To ensure valid and reliable findings, a robust sampling methodology was used for representation and replicability.

5.5 Suggestion for Further Research

The study recommends further studies focusing on specific types of taxes such as VAT, Presumptive tax performance should be conducted. This would help to determine the difference of effect tax education on each of their performances compared to tax compliance. Further, studies focusing custom duties tax payers should be conducted since they were not targeted in this study. This would help to make comparison

REFERENCES

Aiko, R. and Logan, C. (2014) *Africa's Willing Taxpayers Thwarted by Opaque Tax Systems, Corruption*, Afrobarometer Policy Paper 7,

Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.

Ajzen, I. & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior.* Englewood Cliffs, NJ: Prentice-Hall.

Allingham, M.G. & Sandmo, A. (1972). Income tax evasion: a theoretical analysis. *Journal of Public Economics,* 1: 323-338.

Babbie, E. (2004). *The practice of social research* (10th ed.) Belmont: California.

Brondolo,J., Silvani,C., Borgne, E., and Bosch, F., 2008. Tax Administration Reform and Fiscal Adjustment: The Case of Indonesia (2001-07). IMF Working Paper No. 08/129.

Cialdini, R.B. (1989).Social motivations to comply: Norms, values and principle. *Taxpayer Compliance*, 2, 220-227.

Devano, S. & Kurnia, S. R. (2006). *Taxation: Concepts, Theories and Issues*. Jakarta: Prenada Media Group.

Dubin, J., Graetz, M. & Wilde, L. (1990). The Effect of Audit Rates on the Federal Individual Income Tax. *National Tax Journal,* 43: 363-409.

Giulia, M., Fabrizio, S., & Denis, M. (2019). Teach to Comply? Evidence from a Taxpayer Education Programme in Rwanda ICTD Working Paper No.91

James, S., Murphy, K., & Reinhart, M. (2004). Taxpayer's Charter: A Case Study in Tax Administration'. *Journal of Australian Taxation*, 7(2), 336-356. Retrieved from http://69.195.124.80/~jausttax/?s=Taxpayer+charter+Case+Study+in+Tax+Administration

James, S., & Nobes, C. (2000). *The Economic of Taxation* (7th ed.) London: Prentice Hall.

Hite, P.A. (1989). A Positive Approach to Taxpayer Compliance. *Public Finance*, 44(2), 249-267.

Huck, S. W. (2007). *Reading Statistics and Research,* United States of America, Allyn & Bacon.

Isbell, T. (2017) *Tax Compliance: Africans Affirm Civic Duty but Lack Trust in Tax Department, Afrobarometer Policy Paper 43,*

Kamil, N.I. (2015). The Effect of Taxpayer Awareness, Knowledge, Tax Penalties and Tax Authorities Services on the Tax Compliance: (Survey on the Individual Taxpayer at Jabodetabek & Bandung. *Research Journal of Finance and Accounting* 6(2)

Karanja E.K. (2014). Factors affecting voluntary tax compliance on rental income: a case study of Nairobi landlords. *MBA Dissertation*, United States International University

Kirchler, E. (2007) *The Economic Psychology of Tax Behaviour*. New York: Cambridge University Press.

Kothari, C. (2004). *Research Methodology: Methods and Techniques*. (2nd ed.) New Delhi: New Age International (P) Ltd Publishers.

Lewis, A. (1982), The psychology of taxation. *Journal of Economic Psychology*, 3(2), 177-181.

Lumumba, M. O., Wanjohi, M. S., Magutu, P. O., & Mokoro, J. M. (2010). Taxpayers' Attitudes And Tax Compliance Behaviour In Kenya: How The Taxpayers' Attitudes Influence Compliance Behavior among SMEs Business Income Earners in Kerugoya Town, Kirinyaga District. *African Journal of Business and Management (AJBUMA)*, 1.

Misra, R. (2004). A Thesis on: The Impact of Taxpayer Education on Taxpayer Education on Tax Compliance in South-Africa.

Nzioki, P.M., & Osebe, R.P., (2014) Analysis of Factors Affecting Tax Compliance in Real Estate Sector: A Case of Real Estate Owners in Nakuru Town. *Kenya Research Journal of Finance and Accounting,* 5(11),1.

OECD The International and Ibero-American Foundation for Administration & Public Policies (FIIAPP) (2015). *Building Tax Culture, Compliance & Citizenship: A Global Source Book on Taxpayer Education,* OECD Publishing, Paris

Seelmann, J., Lerche D., Kiefer, A., & Lucante, P., (2011), *Benefits of a computerized integrated system for taxation: iTax case study. A handbook for practitioners based on GIZ tax sector experience in Tanzania and the Philippines.* Longhorn

Sandmo, A. (2005). The theory of tax evasion: A retrospective view. *National Tax Journal,* 53(4), 643-648.

Thananga, A.G., Wanyoike, D.M., & Wagoki, A.G., (2013). Factors Affecting Compliance on Rental Income Tax Policy by Landlords in Nakuru Municipality. *Journal of Agriculture and Environmental Sciences,* 2(1), 26-28.

Victor-Nyambo, G.T. (2009), The role of information and communication technology (ICT) in Taxation: the case of Large Taxpayer Department Tanzania Revenue Authority, *MBA dissertation*, Mzumbe University

Wathira, A.W. (2016). Determinants of Residential Income Tax Compliance by Property Owners in Thika Town, *MBA Dissertation*, University of Nairobi

APPENDICES

Appendix I: Table of Random Numbers

Table of Random Numbers

```
36518 36777 89116 05542 29705 83775 21564 81639 27973 62413 85652 62817 57881
46132 81380 75635 19428 88048 08747 20092 12615 35046 67753 69630 10883 13683
31841 77367 40791 97402 27569 90184 02338 39318 54936 34641 95525 86316 87384
84180 93793 64953 51472 65358 23701 75230 47200 78176 85248 90589 74567 22633
78435 37586 07015 98729 76703 16224 97661 79907 06611 26501 93389 92725 68158
41859 94198 37182 61345 88857 53204 86721 59613 67494 17292 94457 89520 77771
13019 07274 51068 93129 40386 51731 44254 66685 72835 01270 42523 45323 63481
82448 72430 29041 59208 95266 33978 70958 60017 39723 00606 17956 19024 15819
25432 96593 83112 96997 55340 80312 78839 09815 16887 22228 06206 54272 83516
69226 38655 03811 08342 47863 02743 11547 38250 58140 98470 24364 99797 73498
25837 68821 66426 20496 84843 18360 91252 99134 48931 99538 21160 09411 44659
38914 82707 24769 72026 56813 49336 71767 04474 32909 74162 50404 68562 14088
04070 60681 64290 26905 65617 76039 91657 71362 32246 49595 50663 47459 57072
01674 14751 28637 86980 11951 10479 41454 48527 53868 37846 85912 15156 00865
70294 35450 39982 79503 34382 43186 69890 63222 30110 56004 04879 05138 57476
73903 98066 52136 89925 50000 96334 30773 80571 31178 52799 41050 76298 43995
87789 56408 77107 88452 80975 03406 36114 64549 79244 82044 00202 45727 35709
92320 95929 58545 70699 07679 23296 03002 63885 54677 55745 52540 62154 33314
46391 60276 92061 43591 42118 73094 53608 58949 42927 90993 46795 05947 01934
67090 45063 84584 66022 48268 74971 94861 61749 61085 81758 89640 39437 90044
11666 99916 35165 29420 73213 15275 62532 47319 39842 62273 94980 23415 64668
40910 59068 04594 94576 51187 54796 17411 56123 66545 82163 61868 22752 40101
41169 37965 47578 92180 05257 19143 77486 02457 00985 31960 39033 44374 28352
76418
```

The target population is 612 taxpayers. Each shop was assigned a number from 1 to 612. We randomly sampled only 242 of the shops for the study. Since the population size is a three-digit number, we used the first three digits of the numbers listed in the table. We pointed to a starting spot in the table and landed on 05542 (4th column, 1st entry).This location gives the first three digits to be 055. This choice is within 001 to 612 (representing shops). We continued with the second choice on the same column, the third, fourth, fifth down the column and found the following 055 (05542), 194 (19428), 514 (51472), 592 (59208), 083 (08342), 204 (20496), 269 (26905), 435 (43591), 294 (29420).

This was repeated until the entire table was covered, which gave 175 numbers whose first three digits are less than or equal to 612. It was decided that 2 responses would be taken from shops with several taxpayers, so as to achieve the sample size of 242.

RESULT: Shops 55, 194, 514, 592, 83,204,269, 435, 294, 024, 561, 473, 589, 485,044, 382,098, 600, 596, 472, 393, 126, 578, 136, 226, 158, 446, 140, 570, 008, 574, 439, 357, 333, 19, 401, 283, 390, 467, 525, 2, 410, 48, 506, 504, 211, 243, 62, 179, 425, 191, 547, 152, 232, 34, 431, 104, 493, 183, 27, 339, 517, 532, 162, 237, 87, 407, 70, 371, 510, 290, 38, 247,286, 399, 521, 585, 351, 45, 475, 346, 265, 172, 12, 6, 222, 495, 378, 560, 527, 557, 319, 411, 409, 116, 463, 16, 40, 389, 258, 254, 130, 418, 318, 461, 365, 297, 275, 403, 553, 478, 568, 119, 343, 500, 76, 421, 482, 511, 52, 279, 350, 549, 66, 397, 168, 581, 489, 329, 322, 538, 301, 311, 546, 429, 610, 398, 9, 108, 453, 190, 542, 94, 474, 151, 51, 457, 59, 394, 234, 227, 443, 367, 375, 72, 386, 606, 147, 354, 564, 602, 450, 590, 379, 215, 200, 23, 442, 115 and 414 were used for our random sample.

Shops 307, 361, 30, 536 and 174 which had also been arrived at were not visited as the sample size of 242 had been realised given that 72 shops had 2 respondents giving 144 responses out of the total 186 complete responses returned. 56 shops did not return any response but shunned the interviewers instead.

The sample set of shops was randomly selected where each shop had an equal chance of being selected and the selection of one shop did not influence the selection of other shops.

Appendix II: Questionnaire

Dear respondent,

This questionnaire is meant to collect data on the effect of taxpayer education on tax compliance in Kenya. The data shall be used for academic purposes only and it will be treated with utmost confidentiality. Many thanks for your profound contribution towards this study.

Please Tick your appropriate Choice

SECTION A: DEMOGRAPHICS

1. Gender: Male ☐   Female ☐

2. Age (Years): 21-30 ☐   31-40 ☐   41-50 ☐ 51- 60 ☐ Above 60 ☐

3. Level of Education

High School ☐ Certificate/Diploma ☐ Degree ☐ Masters ☐

 PHD ☐ Any other please specify ……………………………………………

Section B: Tax Compliance

Please Tick your appropriate Choice

	Strongly disagree 1	Disagree 2	Not Certain 3	Agree 4	Strongly agree 5
1.I have been accurately filling on iTax					
2.I have been filling on iTax on time					
3.I have been paying my taxes correctly					

4.I have been paying my taxes on time					
5.I am fully satisfied with the tax					
6. People who do not pay taxes that they should from their income do wrong and should be punished					
7.Filling and paying takes a lot of time and effort					
8. To complete a tax return is a complicated and difficult process					
9.Kenya's tax administration system is unfair					
10. Taxpayers do not have the ability to pay tax					

Section C: Taxpayer education programs

1. Are you aware of any taxpayer education programs conducted by KRA? Yes ☐

No ☐

2. From which of the following taxpayer education programs did you obtain tax information

Please Tick your appropriate Choice

School projects & outreach	
Radio & television talk shows	
Tax clinics, seminars & campaigns	
Educational materials	
Stakeholder training & forums	
Tax support centres	

3. Which of these KRA trainings have you gone through?

Please Tick your appropriate Choice

Electronic Registration	
Electronic Filling	
Generating a Payment Registration Number Slip	
Mobile Payment Mode	
Electronic Amendment	
Electronic Applications e.g. Tax Compliance Certificate	

Section D: Tax Knowledge

1. Do you have a KRA PIN number?   Yes ☐   No ☐

2. If registered in 2013 and before, have you migrated to the iTax system? Yes ☐

No ☐

3. What is your tax obligation(s)?   Presumptive tax (formerly Turnover tax) ☐

Income tax Individual (IT) ☐   Value added tax (VAT) ☐

Pay as you earn (PAYE) ☐   Corporation tax (CT) ☐   Withholding tax (WHT)

☐

4. Do you know about the Taxpayers' Service Charter that lists your rights as a

taxpayer?

Yes ☐   No ☐

5. Are you able to use the iTax system?   Yes ☐   No ☐

6. Do you know the tax laws governing tax collection in Kenya? Yes ☐   No ☐

Please Tick your appropriate Choice

	Strongly disagree 1	Disagree 2	Not Certain 3	Agree 4	Strongly agree 5
I know how to declare income on iTax System					
I know how to compute taxable income and tax liability					
I know my rights as a taxpayer					
I know my obligations as a taxpayer					
I a m conversant with the tax rate(s) for my tax obligation(s)					
I a m conversant with the due date(s) for my tax obligation(s)					
I a m conversant with the penalty(ies) for late or non-filing					
I have basic understanding of tax law					
Taxpayer knowledge has enlightened the public on the need to pay taxes					
j. Taxpayer knowledge has enabled tax payers file their returns easily					

Section E: Use of Technology

1. Are you e-registered as a taxpayer? Yes ☐   No ☐

2. Please indicate whether or not you are able to do each of the following through

KRA's iTax system

Please Tick your appropriate Choice

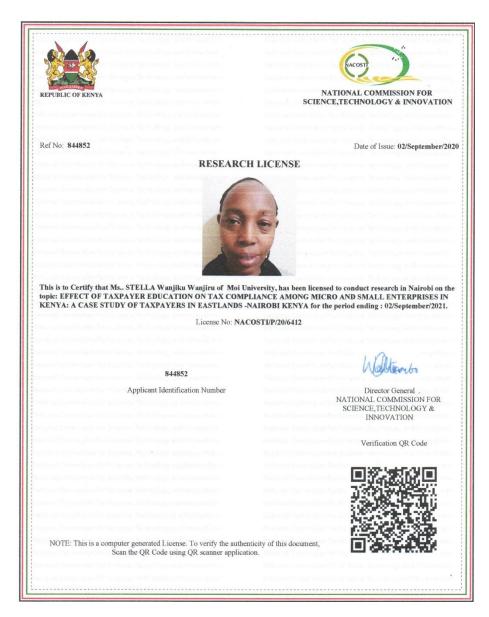|	YES	NO
Electronic Filing		
Generating a Payment Registration Number Slip		
Make payment using a mobile phone		
Electronic Amendment		
Electronic Applications e.g. Tax Compliance Certificate		
Are you able to readily access KRA's iTax system		

	Strongly disagree 1	Disagree 2	Not Certain 3	Agree 4	Strongly agree 5
iTax system is swift					
iTax system is safe					
iTax system is secure					

Section F: Taxpayer Profile

Please Tick your appropriate Choice

	Strongly disagree 1	Disagree 2	Not Certain 3	Agree 4	Strongly agree 5
a. Taxpayer sensitization has played a vital role in changing the attitudes of taxpayers					
b. Kenya's tax laws are easy to understand and apply					
c. Failure to pay taxes by fellow traders influences my decision to pay tax					
d. Tax rates in Kenya are too high					
e. Tax collectors are dishonest					

Appendix III: Research Permit

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is Guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014

CONDITIONS

1. The License is valid for the proposed research, location and specified period
2. The License any rights thereunder are non-transferable
3. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research
4. Excavation, filming and collection of specimens are subject to further necessary clearence from relevant Government Agencies
5. The License does not give authority to tranfer research materials
6. NACOSTI may monitor and evaluate the licensed research project
7. The Licensee shall submit one hard copy and upload a soft copy of their final report (thesis) within one of completion of the research
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice