

**EFFECT OF TAXPAYER SENSITIZATION CHANNELS ON VOLUNTARY  
COMPLIANCE IN RESIDENTIAL INCOME TAX AMONG REGISTERED  
LANDLORDS IN EMBU TOWN, KENYA**

**BY**

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## DECLARATION

### Declaration by Candidate

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### Declaration by the Supervisors

This research project has been submitted with my approval as the university supervisor.

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## **DEDICATION**

I wish to dedicate this project to my family for the enormous support they have accorded me throughout the course.

## **ACKNOWLEDGEMENT**

First and foremost, I sincerely thank The Almighty God giving me victory all through the course. Secondly, I wish to thank my family, for providing the necessary support. My most sincere appreciation to Dr. Doris Gitonga PhD and Dr. Ambrose Kemboi PhD for guiding me every step of the way. Last but not least, every other person who contributed either directly or indirectly towards making the project possible. May God Bless you all.

## ABSTRACT

The research broadly aimed at establishing the effect of taxpayer sensitization channels on voluntary compliance in residential income tax among registered landlords in Embu Town. The specific objectives were to establish the effect of taxpayer sensitization through tax seminars on voluntary income tax compliance in residential income tax, the effect of taxpayer sensitization through media services on voluntary compliance in residential income and lastly to determine the effect of taxpayer sensitization through mobile services on voluntary income tax compliance in residential income tax. The problem that the researcher set out to solve was that, compared to Embu, the towns in its neighborhood which have witnessed almost the same level of economic growth as Embu, have similar annual targets and are interestingly comparatively smaller in size appear to be doing better than Embu in terms of residential income tax performance from 2016 - 2020. The researcher adopted a causal research design to determine how taxpayer sensitization through tax seminars, media services and mobile services affect performance of residential income tax in Embu town. The researcher used primary data collected from 120 questionnaires randomly distributed to taxpayers belonging to the sampling frame of registered landlords within Embu town. The Economic Deterrence Theory, Equal Sacrifice Theory and Financial Literacy Theory guided the study. From the findings of the multiple regression analysis, the study established that holding other factors constant, a unit increase in Tax Seminars would lead to a 0.271 unit increase in Voluntary Tax Compliance in Residential Income tax among registered landlords in Embu town as shown by ( $\beta_1=0.271$ ,  $p=0.002<0.05$ ). The study also established that holding other factors constant, a unit increase in Media Services would lead to a 0.335 unit increase in Voluntary Tax Compliance in Residential Income among registered landlords in Embu town as shown by ( $\beta_2=0.335$ ,  $p=0.000<0.05$ ). The study further established that a unit increase in Mobile Services would lead to a 0.242 unit increase in Voluntary Tax Compliance in Residential Income among registered landlords in Embu town as shown by ( $\beta_3=0.242$ ,  $p=0.013<0.05$ ). The study concluded that taxpayer sensitization has a significant and positive effect on voluntary tax compliance in residential income tax among registered landlords in Embu Town. The study recommended that to ensure even more enhanced voluntary tax compliance, KRA should heavily invest in taxpayer sensitization through media services where the audience reached at once is highest. The study also recommended that KRA should consider setting up more satellite stations geared towards bringing taxpayer services closer to the people. Given that all the three predictor variables explain 54.7% of all changes in voluntary compliance in Residential Income tax among registered landlords in Embu town, Kenya and that 45.3% of all changes were explained by other factors not included in the study, other studies should be conducted to determine, the effect of tax clinics on voluntary income tax compliance among registered landlords in Embu Town.

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**ABBREVIATIONS AND ACRONYMS**

<b>CSR</b>	Corporate Social Responsibility
<b>KRA</b>	Kenya Revenue Authority
<b>MRI</b>	Monthly Rental Income
<b>PIN</b>	Personal Identification Number
<b>SARS</b>	South African Revenue Service
<b>TIN</b>	Taxpayer Identification number
<b>TPA</b>	Tax Procedure Act (2015)
<b>URA</b>	Uganda Revenue Authority
<b>VAT</b>	Value Added Tax

## OPERATIONALIZATION OF KEY TERMS

**Media Services** as taxpayer sensitization channel entails disseminating tax information through radio, television, internet, social media, billboards, newspapers to taxpayers about new law or changes in the existing one(s) and also taxpayers' rights and obligations. The channel's effectiveness can be measured through indicators such as; frequency of tax talks, its timing, the type of medium used, presenter's proficiency in tax law.

**Mobile Services** as taxpayer sensitization channel involves use of trucks fully equipped with computers, printers and internet connectivity from where the tax message is broadcasted. It is the equivalent of '*Ushuru Mashinani*' (loosely translated as tax at the grassroots). The following are indicators used in measuring the channel's effectiveness; regularity/frequency of mobile services, facilitators' proficiency in local dialect, straightforwardness of tax law and availability of iTax system.

**Tax Seminars** is a channel whose setting is similar to that of a typical classroom where a tutor conducts the taxpayers through new tax laws or changes in existing ones and where appropriate, solving practical examples. The following indicators can be used to measure tax seminars' effectiveness; frequency of tax seminars, simplicity of tax law, taxpayer's educational level, availability of iTax system.

**Taxpayer Sensitization** refers to programs by the Tax Authority geared towards sensitizing or educating existing and potential taxpayers about their rights and obligations and legal requirements. It can be said to be a

means of educating the masses about the whole process of taxation, when, how and why they should pay taxes.

**Voluntary Tax Compliance** means timely submission of truthful tax returns in the manner and form prescribed by the Commissioner. Voluntary tax compliance can be measured using the following indicators; making correct tax declarations, making correct payments within stipulated dates/time frame, maintaining requisite records and providing such records to the Tax Authority as and when required.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.0 Overview**

This chapter presents the background of the study, African point of view and Kenyan perspective of taxpayer sensitization, the problem statement, research objectives, research hypotheses, significance and finally the scope of the study.

#### **1.1 Background of the Study**

In life, it is commonly held and believed that nobody can escape paying and also that nobody can get away from death. However, according to Richardson, G. (2016), history has established that people naturally do not like paying taxes, and they will do anything to reduce their tax liabilities, for example, by interpreting rules to their own advantage. The key reason for this outlook is that the taxpayer does not always recognize that he receives any benefits from parting with his hard earned money argues Kira, A (2017). Most citizens, however, realize that state expenditure for the purpose of creating or maintaining national infrastructure, and other services provided by the government is a necessity but, they object to having to finance 'unnecessary' state expenditure argues Mukama, et al (2017). In this regard, all and sundry have their own perceptive of what is superfluous. Questions about compliance to tax are as old as taxes themselves and will remain an area of unearthing as long as taxes exist according to Kirchler, et al (2008). There is almost no civilization that did not tax. Six thousand years ago, history begun with records on clay stones in Sumer, with the inscription, "There were the collectors" (Adams, 1993). "Historically speaking taxpayers have always shown unwillingness to pay taxes; taxpayers believe that what is contributed as is by and large wasted away and the social responsibilities the government is expected to discharge get neglected adds Olowookere, J. (2013). The government's tainted image because of its failure to execute some perceived much needed functions is an immense

deterrent for paying taxes. A key worry that has been raised by taxpayers for not willingly complying with tax laws is that governments are not answerable to the collected taxes notes Onu, D. (2016). It is only through taxpayer sensitization forums that KRA disseminates tax laws and provisions to already existing and potential taxpayers about their obligations and rights. It is in this kind of setting that tax agencies make it known to tax-paying publics the stringent measures reserved for any taxpayer who fails to honour their obligations notes Azubike, J. (2009).

## **1.2 African Perspective of Taxpayer Education**

According to Fjeldstad & Heggstad, (2012), Lubua, E. (2014) tax seminars are the most widely used means that tax agencies use to disseminate tax laws and provisions. This way, these agencies facilitate taxpayers in navigating the tax systems through a more long-established classroom approach. In South Africa, for instance, the first quarter of every year, the Revenue Service offers free of charge sensitization sessions for small entrepreneurs. In Uganda, the authority organizes mobile services that are principally conferences for particular clusters of taxpayers. This is mainly intended to make sure that registered taxpayers understand their rights and obligations as well. In Rwanda, taxpayer service department organizes all year-round training sessions for newly registered taxpayers to enable them find the way through the tax system and abide by the law according to Nalishebo, S. and Halwampa, A. (2014).

According to a research paper by Giulia, M. & Fabrizio, S. (2018), revenue agencies in diverse countries in Africa have come up with structures to support knowledge among the young taxpayers, and to set in motion potential or future taxpayers to be amenable in tax matters. According to the paper, beginning 2011, in Burundi conferences have been held to enhance tax understanding of taxpayers, together with similar annual occasions on taxpayer identification number (TIN) cataloguing. Commencing year

2010, in Mozambique the core reason of the annual campaign ‘Together We Make Mozambique’ has been geared towards ensuring that the tax-paying masses are exposed to tax matters, mainly aiming at the small scale businessmen and women and urging them to register for a unique tax identification number. In Senegal, innumerable activities are scheduled on campaign days targeting mainly the informal economy, conferences, information desks where citizens are at liberty to engage with tax officers adverts in national dailies and radio and television publications carry the same message of getting the public to be tax compliant. In Ghana nationalistic crusades are held in native groups in partnership with church based establishments, indigenous radio stations and public information desks at the constituency level. Jointly with these, countrywide campaign referred to ‘Our , Tax, Our Future’ has been started reads the source book prepared by OECD (2015).

Just as it happens in Kenya, according to Mukama, D. and Santoro, F. (2017), the most outstanding attribute of these occasions is to bring on board the Commander in Chief of the Armed Forces, political leaders and senior government officials in the country to underline the significance connected to tax compliance. For example, in Rwanda and Senegal the commander in chief of the armed forces that is the sitting president often graces the occasions, or may choose to be represented by another senior government official. Taxpayers’ input to the nation’s growth are recognized during such ceremonies, with unique prizes for the country’s most amenable taxpayers and those whose contribution to the nation’s growth is highest notes Tanui, P. (2016). The idea of giving back to the tax-paying masses cuts across almost every African country regardless of the period such events take place. Such events are also geared towards strengthening social norms on tax compliance.

According to OECD (2015) reports, Burundi managed an increase of seven thousand new entrants adding into the list of registered taxpayers during the taxpayer registration number drive conducted in 2011-2012. Mozambique managed a five times increase to two million registrations beginning 1999 – 2012 accredited to the ‘Together We Make Mozambique’ drive. Sensitization in schools is a strategy employed in different countries to promote tax awareness amongst the youth and to prop up future generations to be amenable taxpayers. This is geared towards building a solid culture of tax compliance. In Africa, Kenya, Mauritius, Rwanda and Tanzania have established tax clubs in schools that promote discussions on tax amongst students in secondary schools.

According to Sonobe et al (2010) tax edutainment refers to re-branding of tax as a pleasant matter and employs the media to reach out and engage the general public. It includes ingenuities that bring tax sensitization into people’s households and assume a more stress-free and non-militant approach to advance its up-take according to McKenzie, D. & Weber, M. (2009). According to this journal, the imaginary facet of these programs where episodes are borrowed from real life and presented in a common and amusing manner geared towards making tax matters more comprehensible to the broad-spectrum audience who often have poor, sometimes distorted or insufficient familiarity on the topic. Tax edutainment is well developed in the African continent for example a Nigerian television series concert ‘Binding Duty’ has been watched by eighty million people according to OECD source book (2015).

### **1.3 Kenyan Perspective**

October of every year is branded as the taxpayers’ month in KRA and it is during this month when most taxpayer sensitization sessions across the nation are conducted. The month is set aside to celebrate taxpayers’ input to nation’s development. To do this, a

number of events are organized but with the same message cutting across - thanking the tax-paying masses for their contribution in building the nation and reaching out to the unreached. The events include mobile services, and corporate social responsibility activities. The climax of the month is marked at the Kenyatta International Conference Centre where top taxpayers (in terms of compliance and taxes paid) in various sectors are awarded in a ceremony presided over by the incumbent president of the Republic of Kenya.

Taxpayer sensitization is mainly geared towards informing existing and potential taxpayers about their obligations as well as rights in regard to new tax law or changes in the existing one(s). It takes various forms such as tax seminars. This entails inviting existing or newly recruited taxpayers in various sectors into either the nearest KRA offices or hotels for towns far from the organization's physical addresses. The setting is exactly like that of a typical classroom. The room from where the sensitization takes place is equipped with white boards or flip charts and markers and the lead tutor takes the taxpayers through what the law says about the sector and what their obligations are. By way of the lead tutor solving practical examples, the taxpayers are taken through how to compute their right share of taxes. Once the demonstration is over, the floor is open to questions which the taxpayer sensitization team responds to. The same procedure holds when there are new tax laws or changes in existing ones. The objective here is that by the end of such sessions the participants are able to correctly fill their tax returns and pay the correct share of tax. For far flung towns, where it would not be cost effective to invite taxpayers over to the organization's physical address, the taxpayer sensitization team gathers the participants in the nearest hotel or community hall and the above steps are followed. Other than the lectures and in effort to ensure that the taxpayer has reference materials the organization also provides

fliers/pamphlets/booklets on diverse tax laws which are issued at the end of the lecture sessions.

KRA also conducts taxpayer sensitization through media - through radio and television. These two are the most efficient means of communication that KRA employs to disseminate tax information to a large audience at once. Other means include dissemination of tax information through the internet, social media, billboards, and through print media. Taxpayer sensitization through television entails hosting television programmes in order to educate taxpayers about their rights and obligations in regard to new tax law or changes in the existing one(s). Due to its wide coverage, this is viewed as one of the most cost effective means of outreach to taxpayers. Through radio, messages about new or changes in the existing tax law are aired on FM stations across the nation. To do this, KRA assigns technical officers who are competent and can fluently speak the various local dialects to disseminate tax information. This means of outreach is meant to ensure that even the 'not so educated taxpayers' who have access to radio, are taken care of in the quest for getting everyone complying with laws and hopefully getting them to comply with the tax laws. During such forums, new and existing taxpayers are invited to call or text in their questions/concerns and the host (technical officer) reacts to them.

Through newspapers, taxpayer sensitization takes the form of advertisements on the local dailies. For instance in case of changes in the law about rental income, the organization will buy space on the local most circulated dailies on which all pertinent guidelines to taxpayers are provided, clearly indicating effective date and prescribing the manner in which such tax should be paid, for example through which banks and by what date etc. taxpayer sensitization also happens through billboards for example when Kenya Revenue Authority introduced the MRI, large billboards at strategic places for instance along major high ways and roundabouts across the nation carried an advert

showing a loaf of bread from which a tenth of the loaf had been sliced off and the 9/10<sup>th</sup> left intact. Meaning that from the year 2016 investors in real estate who chose to switch to the simplified monthly rental income regime were going forward, required to pay 10% of their gross rental income to KRA. (It is important to mention here that it was a choice that taxpayers had to make between the new and the old regime where one was allowed to net off any expenses incurred directly attributable to generating the rental income being reported in any given year of income. For this to happen one was required to write to the Commissioner Domestic Taxes for approval else, those who failed to seek the approval to be filing annually were automatically assumed to have agreed to the terms and conditions of the new monthly rental income tax regime).

Taxpayer sensitization through Internet & Social Media: given the technological world that we now live in, taxpayer sensitization function in conjunction with Marketing & Communications Division in KRA also post a lot of information on social media all meant to educate taxpayers in various sectors about new or changes in the existing tax laws.

Unlike other forms of taxpayer sensitization explained above and which take place all year round, taxpayer sensitization through mobile services strictly happens during the taxpayers' month ie October of every year. Taxpayer sensitization takes place from mobile trucks fitted with working tools i.e. computers, printers and internet connectivity. The trucks are mounted with sound systems, power generators deejay equipment and microphones. During such events, the Marketing and Communications officers team up with the technical team to sensitize taxpayers. While the team from Marketing and Communications does the front office bit, the technical team does the sensitization, registration/recruitment bit. From such trucks, taxpayers' questions are answered, system challenges are addressed while those that cannot be sorted on the spot are escalated as appropriate. The advantage here is that the organization provides

services from the neighborhood just as a way of thanking the taxpayer for the continued partnership with the authority and compliance with tax laws.

With all these it is hoped that taxpayers in every sector are well informed and that there is no reason or justification that one can plead ignorance and this is ultimately meant to ensure that both natural and artificial persons pay their right share of taxes.

#### **1.4 Statement of the Problem**

Compared to Embu, the towns in its neighborhood which have witnessed almost the same level of economic growth, have similar annual targets and are interestingly comparatively smaller in size appear to be doing better than Embu in terms of residential income tax performance from 2016 - 2020. In the financial year 2016/2017 Embu's performance was at 54%, year 2017/2018 at 49%, year 2018/2019 at 52% and 2019/2020 at 55%). As shown in the table below:

**Table 1.1: Annual Rental Income Tax Performance - Embu Town**

<b>Financial year</b>	<b>Total Rental Income Tax Collected (Ksh.)</b>	<b>Target (Ksh.)</b>	<b>% Performance</b>
2016/2017	30,226,687	55,975,347	54%
2017/2018	31,542,108	64,371,649	49%
2018/2019	38,494,246	74,027,396	52%
2019/2020	46,822,328	85,131,505	55%

In the financial year 2016/2017 by contrast Meru performed at 66%, and at 70% in the subsequent financial year. In the financial year 2018/2019 the town performed at 79% and at 85% in the financial year 2019/2020. Nyeri town on the other hand performed at 62% in the financial year 2016/2017 and at 67% in the subsequent financial year. In the financial year 2018/2019 the town performed at 73% and in the financial year 2019/2020 it performed at 80%. In the financial year 2016/2017, Kerugoya town performed at 67% and in the subsequent year, the town performed at 71%. In the financial year 2018/2019 the town performed at 75% and in the financial year 2019/2020 the town performed at 82%. In the financial year 2016/2017, Thika town

performed at 65% and in the subsequent year the town performed at 68%. In the financial year 2018/2019 the town performed at 76% while in the financial year 2019/2020, the town performed at 88%. (See appendix 1 for the four towns' rental income tax tabulation for the years 2016 - 2020). The researcher therefore intends to unearth the reason for this poor performance as contrasted above and thus advise KRA on remedial measures to institute in order to address the disparity and so enhance revenue collection among registered landlords in Embu town.

It must be noted here that it is through taxpayer sensitization that taxpayers are taken through how and when to pay their taxes, how to correctly file their returns make correct tax declarations and pay the correct amount of tax. Additionally, as important as taxpayer sensitization is especially in Africa where most businesses would rightly be classified as small or medium sized, it has been established that the topic has been under-researched according to Giulia, M. & Santoro, F. (2018). The researcher found that, in Kenya, the few scholars who had researched on the topic based their studies on different geographical areas, explored different independent variables interestingly returned conflicting verdicts on its effect on voluntary tax compliance. This therefore means that information is lacking on the effect of taxpayer sensitization on voluntary residential income tax compliance.

## **1.5 Objectives of the Study**

### **1.5.1 The General Objective**

The general objective is to determine the effect of taxpayer sensitization channels on voluntary compliance in residential income tax among registered landlords in Embu town.

### **1.5.2 Specific Objectives**

- i. To determine the effect of Tax Seminars on voluntary compliance in residential income tax among registered landlords in Embu town.
- ii. To determine the effect of Media Services on voluntary compliance in residential income tax among registered landlords in Embu town.
- iii. To determine the effect of Mobile Services on voluntary compliance in residential income tax among registered landlords in Embu town.

### **1.6 Research Hypotheses**

To help the researcher get answers to the research questions, the following hypotheses were key:

**H<sub>01</sub>** Tax seminars have no significant effect on voluntary compliance in residential income tax among registered landlords in Embu town.

**H<sub>02</sub>** Media services have no significant effect on voluntary compliance in residential income tax among registered landlords in Embu town.

**H<sub>03</sub>**: Mobile services have no significant effect on voluntary compliance in residential income tax among registered landlords in Embu town.

### **1.7 Significance of the Study**

#### **1.7.1 Benefits to Kenya Revenue Authority**

From the year 2016, there has been an unprecedented growth in real estate in major towns in Kenya, Embu being one of them. This has naturally pushed KRA's expectation of rental income tax to new levels. The continued growth in the sector has made it necessary to maintain a more aggressive and targeted taxpayer sensitizations all year round. Whether the aggressive taxpayer sensitization has in reality brought about realization of the anticipated level of compliance in residential income tax among

registered landlords in Embu Town, Kenya, would be of great importance to the KRA. The study will therefore benefit KRA by pointing out the most cost-effective means of educating the tax-paying masses, the most preferred approach to taxpayer sensitization. It will also establish whether there is need for any resource re-allocation to taxpayer sensitization to probably generate more revenue and enhance taxpayer compliance and ultimately reduce compliance cost for both KRA and the taxpayers.

### **1.7.2 Benefits to the Treasury**

To finance taxpayer sensitization activities KRA has been spending millions of taxpayers' money. Over and above, there is also the hefty cost that KRA incurs on salaries to the staff who conduct the exercise and the cost of tools and equipment to get the work done. It is important to point out The Treasury fully funds all KRA's operations and therefore it is a key tax justifiably keen on receiving a commensurate return on its investment in terms of enhanced revenue with every passing year not to mention growth in absolute numbers of recruited taxpayers. The findings of study help in policy formulation in future.

### **1.7.3 Benefits to the Tax Paying Publics**

At the point of collecting primary data, the taxpayers' (in this case landlords') opinions will be incorporated in the findings. These opinions will without doubt be shared with KRA and it is hoped that such their views will shape how the organization conducts future taxpayer sensitization activities taking into account that KRA is in an era of trust and facilitation.

## **1.8 Scope of the Study**

The research considered opinions obtained through questionnaires from registered landlords within Embu Town. The researcher also took keen interest on rental income tax performance for the period 2016 – 2020 the period immediately after the new

simplified monthly rental income (MRI) took effect. This provided the trend from the period landlords in Kenya were by law allowed to choose between filing their rental income tax annually or the simplified monthly rental income. Though rental income tax is a distinct source of income, it is to be noted that some landlords opted to stick with the old regime of reporting their rental income. Such landlords report their rental income along with their other incomes and it is therefore technically challenging to mine rental income tax from the various sources of income and possibly see a trend with utmost precision. Embu has enjoyed an increase in growth of residential houses arising from the Embu University and many other tertiary institutions within the town. The town has also witnessed unprecedented growth in the number of residential houses as a result of devolved functions to the counties with which came the amplified need for housing.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

This chapter discusses what various researchers have said about the topic of taxpayer sensitization, it covers the various theories relevant to the study. It covers review of concepts, theoretical review, empirical review, conceptual framework and finally critique of reviewed literature.

#### **2.1 Review of Concepts**

Taxpayer sensitization according to Gitaru, K. (2017), is a mode of educating potential and already existing taxpayers about the process of taxation and the reasons they should pay. It is aimed at particularly educating newly registered taxpayers on their rights and obligations in tax matters to bring about awareness so as to enhance voluntary compliance with tax laws. It is also aimed at enlarging the tax base by recruitment of taxpayers through sensitization. Taxpayer sensitization helps taxpayers meet their tax obligations. In Kenya, it mainly takes the form of, tax seminars, media services and mobile services.

A good number of studies have tried to develop both theoretical and empirical models in a bid to understand how taxpayer sensitization can solve recurring budget deficits experienced mostly by developing countries in the face of reduction in donor funding in the nineties and prior years; which was the case especially in Kenyan according to Aiko, R. and Logan, C. (2014). Additionally, a number of studies have examined different empirical and theoretical aspects of taxpayer sensitization which culminated in fast adoption modern approaches to taxpayer sensitization by a number of developing countries adds Onu, D. (2016).

### **2.1.1 Definition of Voluntary Compliance**

Voluntary tax compliance can simply be defined as timely submission of tax returns in the manner and form prescribed by the Commissioner, making correct declarations, making correct payments within stipulated dates/time frame, maintaining requisite records and providing such records to the authority as and when required. To be termed compliant, landlords who opt to declare their rental income on a monthly basis are by law required to file their returns by the 20<sup>th</sup> day of the following month. For instance, monthly rental income tax return for January should be filed on or by the 20<sup>th</sup> day of February at the latest to avoid penalties and interest. Landlords who file their returns annually are required to file such returns on or by 30<sup>th</sup> of June of the following year at the latest. Additionally, such returns must be truthful and the tax declared must be paid within the given timelines to avoid accrued interest.

Further, according to the TPA (2015), to be deemed compliant a taxpayer is required to maintain tax records in either of the official languages and in such a manner as to enable his liability to be readily ascertained and retain such tax records for a period of five years from the end of the reporting period to which it relates or such shorter period as may be specified by law. The unit of currency in books of accounts, returns, records shall be in Kenya shillings. In a case where a landlord is required to provide records, he must do so in the required format and in the manner and by the time specified or attend at the time and place specified for the purpose of giving evidence in respect to any matter relating to residential income liability reads the Act.

### **2.1.2 Taxpayer Sensitization**

According to Ali et al (2013), like any developing country finds itself at a critical stage on its path towards sustainable development, struggling to relieve poverty, reduce inequalities, deliver public services and build the infrastructure for inclusive growth.

For many, developing countries, the global recession has slowed down the pace of growth, reducing the availability of funds for development according to Rodriguez, D. & Theilen, B. (2018). Kenyan government has been striving more than ever to mobilize greater revenue domestically. For this to happen, the government is increasingly reaching out to inform and engage today's and future taxpayers according to Misra, R. (2004). The goal is to foster an overall "culture of compliance" based on taxpayers' rights and responsibilities concurs Stemrod et al (2001). In this way, citizens see paying taxes as an integral aspect of their relationship with their government according to Semboja, J. (2001), (a position echoed by a research paper put together by OECD (2015). In this context, taxpayer sensitization becomes the bridge linking administration and the citizen Chetty, R. & Saez, E. (2013). All over the world, innovative techniques are springing up for building this culture of compliance. For any government to raise enough taxes to meet its development needs, it is necessary for such a government to have 'educated taxpayers' (in tax matters) concludes Lubua, E. (2014).

### **2.1.3 Tax Seminars**

Tax Seminars is a channel of sensitizing taxpayers about their rights and obligations in regard to new tax law or changes in the existing one(s). It entails inviting newly recruited taxpayers in various sectors into either the nearest KRA offices or community halls or hotels for taxpayers far from the organization's physical addresses. The setting is exactly as that of a typical classroom. For example, the room where the sensitization takes place is equipped with white boards or flip charts and markers and the lead tutor takes the taxpayers through what the tax law says about the sector and what their obligations are. In a case where the taxpayers need to be sensitized on how to compute their taxes, the lead tutor proceeds to solve practical examples. Once the demonstration

is over, the floor is open to questions which the taxpayer sensitization team responds to.

The objective of such sessions is that by the end the participants are able to file their tax returns and pay their correct share of taxes. For far-flung towns, where it would not be cost effective to invite taxpayers to the office, the taxpayer sensitization team gathers the participants in the nearest hotel or a community hall and the above said steps are followed. Other than the lectures and in effort to ensure that the taxpayer are equipped with reference materials, the organization also provides fliers/pamphlets/booklets which provide step by step guide on diverse tax laws which are issued at the end of the lecture sessions.

#### **2.1.4 Media Services**

KRA also conducts taxpayer sensitization through media - through radio and television, where the addressees is largest. These two are therefore the broadest means of communicating tax information that KRA employs to a large audience at a go. Other means include dissemination through the internet, social media, billboards, newspapers. In some instances the tax authority does reminders through media for instances submission of income tax individual returns which are due by 30<sup>th</sup> day of June every year. The idea here is to cushion individuals from attendant late filing penalties and interest should one forget to file their returns by the due date. Taxpayer sensitization through television entails hosting television programs in order to educate taxpayers about their tax obligations in regard to new tax law or changes in the existing one(s). Due to its wide coverage, this is viewed as one of the most cost effective means of outreach to taxpayers. Through radio, some particular new messages about new or changes in the existing law are aired on FM stations across the nation. To do this, KRA assigns technical officer who can fluently speak the various local dialects to disseminate

tax information to the audience. This means of outreach is meant to ensure that even the 'not so educated taxpayers' who have access to radio, are taken care of in the quest of getting everyone complying with laws and hopefully getting them to comply with the tax laws. During such forums, new and existing taxpayers are invited to call or text in their questions/concerns and the host (technical officer) reacts to them. Through newspapers, taxpayer sensitization takes the form of advertisements on the local dailies. For instance in case of changes in the law about rental income, the organization will buy space on the local most circulated dailies on which all pertinent guidelines to taxpayers are provided, clearly indicating effective date and prescribing the manner in which such should be paid, e.g. through which banks and by what date etc.

Taxpayer sensitization also happens through billboards for example when the organization introduced the MRI, large billboards at strategic places for instance along major high ways and roundabouts across the nation carried an advert showing a loaf of bread from which a tenth of the loaf had been sliced off and the 9/10<sup>th</sup> left intact. Meaning that from the year 2016 the investors in real estate who chose to switch to the simplified monthly rental income regime were going forward required to pay 10% of their gross rental income to KRA. (It is important to mention here that it was a choice these taxpayers had to make between the new and the old regime where one was allowed to net off any expenses incurred directly attributable to the rental business in question. For this to happen one was required to write to the Commissioner Domestic taxes for approval. In the absence of the formal communication to the Commissioner investors in real estate were automatically assumed to have agreed to the terms and conditions of the new monthly rental income regime). Taxpayer sensitization through Internet & Social Media: given the technological world that we now live in, taxpayer sensitization function in conjunction with Marketing & Communications Division in

KRA also post a lot of tax information on social media all meant to sensitize taxpayers in various sectors about new or changes in the existing tax laws.

### **2.1.5 Mobile services**

Taxpayer sensitization through mobile services mainly happen in key towns throughout the country during the taxpayers' month. This happens through use of trucks that are fully equipped with computers, printers and internet connectivity. The trucks are mounted with sound systems, power generators, deejay equipment and microphones. Officers from Marketing and Communication Division do the front office bit while the team from Domestic Taxes Department play the technical role of sensitizing, recruiting and registering taxpayers for different obligations. Other than the targeted key towns, the teams make stop overs in other small towns with perceived revenue potential. The idea is to ensure existing and would-be taxpayers are sensitized on their obligations as well as rights. It is worth noting that such mobile services often than not end up not going by the initial timetable in instances where taxpayers from towns not included in the original schedule 'interrupt' such schedules by demanding to be sensitized on tax matters.

## **2.2 Theoretical Framework**

There are several theories which have been expounded to explain tax compliance. The three theories explained here the theory of equal sacrifice, economic deterrence theory and financial literacy theory.

### **2.2.1 Economic Deterrence Theory (Main Theory) and Relevance**

Economic Deterrence theory is a theory under criminology and was developed by Becker (1968). This theory is based on the concept that, if the consequence of committing a crime outweighs the benefit of the crime itself, the individual will be deterred from committing the crime. This is founded on the idea that all individuals are

aware of the difference between right and wrong and the consequences associated with wrong or criminal behaviours. Proponents of deterrence theory believe that people choose to obey or violate the law after calculating the gains and consequences of their actions (Erricksen K. & Gallan F. (1996). Economic Deterrence model, one of the economic based models was developed by Allingham, L. & Sandmo, N. (1972) who extended the expected utility model of criminal activity originated by Becker, F. (1968) to the arena. This model incorporates the concept of an economically rational taxpayer who will evade taxation as long as the pay-off from evading is greater than the expected cost of being caught.

Though it is argued that a rational taxpayer will evade taxation as long as the pay-off from evading is greater than the expected cost of being caught, taxpayer sensitization forums provide a perfect opportunity to demonstrate to such taxpayers that KRA looks at taxpayers not as servants but as equal partners in developing the nation. Especially in the era we are now in, KRA has rebranded itself in an effort to show the public that the organization does not exist to ‘police’ taxpayers but to facilitate them in paying their correct share of taxes; a position Feld, L. and Frey B. (2018) appear to concur with. It is in taxpayer sensitization forums that the stringent measures reserved only for taxpayers who ‘can’t pay, won’t pay’ are made known to the taxpayers.

### **2.2.2 Equal Sacrifice Theory and Relevance**

J. S. Mill (1870), a classical economist is the proponent of this theory. According to the equal-distribution theory also known as equal sacrifice or proportionate theory income and wealth should be taxed at a fixed percentage i.e. people who earn more should ideally pay more taxes. The theory was designed to satisfy the idea of justice in taxation. The economist was of the opinion that if taxes are levied in proportion to the incomes of the individuals, it will extract equal sacrifice. Thus equal sacrifice can

be measured as (i) each taxpayer surrenders the same absolute degree of utility that he obtains from his income or (ii) each sacrifices the same proportion of utility he obtains from his income or (iii) each gives up the same utility for the last unit of income; respectively. Modern economists however differ with this view. They assert that when income increases, the marginal utility of income decreases. The equality of sacrifice can only be achieved if the persons with high incomes are taxed at higher rates and those with low income at lower rates. They favour progressive systems according to Isbel, T. (2017).

It is only through taxpayer sensitization that the tax-paying masses are educated on sacrifices that all Kenyans need to make in order to develop the country. It is in such settings that information about how taxpayers who are more economically endowed are supposed to contribute more in terms of taxes than those who are not. Some of the approaches that KRA uses in taxpayer sensitization forums include the graduated rates of taxation for individuals to demonstrate that those who earn more should ideally pay more. It also illustrates how other organizations are taxed – the bottom-line geared towards educating the tax-paying and potential ones that the sacrifices made must be commensurate to the level of income received and no more than this.

### **2.2.3 Financial Literacy Theory and Relevance**

This theory posits that the behaviour of people with a high level of financial literacy depend on the prevalence of intuition and cognition. According to Glaser and Walther, (2014) dual process theories have been applied to several fields for instance reasoning and social cognition. The theory covers the investor's understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities to make informed choices to know where to go for help and to take effective actions to improve their financial well-being according to Hassan, T. and

Anood, K. (2009). According to Guiso, T. & Jappelli, M. (2008) financially literate investors create competitive pressures on financial institutions to offer more appropriately priced and transparent services by comparing options, asking the right questions and negotiating more effectively. These authors add that financial literacy helps to inculcate individuals with the financial knowledge necessary to create household budgets, initiate savings plans and make strategic investment decisions. Application of that knowledge helps investors to meet their financial obligations through wise planning and resource allocation so as to derive maximum utility (Alm, J. et al (2010).

KRA has in the recent past re-branded itself to match other tax authorities such as South African Revenue Service. Reports from within the organization's circles indicate that plans are afoot to change the name from Kenya Revenue Authority to Kenya Revenue Service. This will be a big milestone in that the organization will there-from be seen to have shifted from the 'militant stance' of transacting business to one existing for the sole reason to facilitate her 'development partners' and together growing revenue to the anticipated greater heights in future. One of the baby steps already taken is incorporating views from stake-holders such as audit firms and financial institutions who have been seen to be pushing for transparency, and asking the right questions for example during the budget process. This is mainly geared towards shaping policy in the land.

## **2.3 Empirical Review of Literature**

### **2.3.1 Tax Seminars and Voluntary Compliance**

Mukama et al (2017) in a study communicating to improve taxpayers' compliance levels found that tax seminars was highly favoured and thus believed to enhance compliance levels of taxpayers. The fact that it is conducted exactly as a classroom

setting complete with fliers, pamphlets, flip charts/in some instances chalk boards with markers for demonstration makes it easy for taxpayers to understand what is being taught observes Palil, M. (2010), Moore & Prichard, R. (2017), Onu D. (2016). In instances where questions still linger after such seminars, taxpayers are encouraged to visit the nearest agency's tax station for assistance. (It is to be noted here that KRA has been very aggressive in setting up satellite stations in almost every other town in an effort to bring services closer to the people). Though this method is quite effective in putting the message across and also creates a strong bond between tax agencies and the tax-paying masses, the sessions are rushed due to time/financial constraints and therefore not all concerns/questions are comprehensively addressed in a single tax seminar. Another challenge with this approach is that of taxpayers who lack the basic book-keeping skills may not quite be able to prepare their own books but have to engage the services of qualified auditors or accountants to prepare their books of accounts.

### **2.3.2 Media Services and Voluntary Compliance**

Majority of reviewed literature suggest taxpayer sensitization through media is the most cost-effective means of disseminating tax information. Though it is quite costly compared to other channels, tax authorities must fully embrace it and be prepared to pay the price in order to enhance compliance, notes OECD (2015). For instance whenever there are new tax laws, agencies must in a timely manner disseminate the information to the tax-paying publics if they are expected to comply. This takes the form of advertisements on radio, television, newspapers, billboards and in the day and age we now live in, social media which happens to have a mind boggling following according to Palil, M. (2010). For the desired effect to be realized, it must be repeated enough times for the masses to understand and comply. Though the audience is vast, the cost implication is not small but it must be incurred anyway notes McKenzie, D. and Weber, M. (2009). Majority of the studies noted that taxpayer sensitization through

newspapers, television channels, FM channels are favoured by older age groups, while the youth favour taxpayer sensitization through social media argues Pere, J. (2019).

### **2.3.3 Mobile Services and Voluntary Compliance**

According to Ejakait, M. (2011) in a study entitled the effect of taxpayer sensitization on compliance in the manufacturing sector, the approach, affords the targeted audience adequate time to ask all sorts of questions that any taxpayer would have as there are no costs incurred (by the taxpayer) like in other forms of taxpayer sensitization- a position Pere, J. (2019), Olowookere, J. et al (2013) and Drexler et al (2014) concur with. This method of taxpayer sensitization demonstrates how committed the tax authority is to the already existing tax-paying and would be taxpayers by ‘returning the favour’ at least every October of the year; visits and stop overs geared towards getting to understand taxpayers’ concerns, challenges, sorting out those that can be sorted on the spot and escalating those that need to be escalated. It is to be noted that for quick wins, this mode of taxpayer sensitization allocates more time and energy to densely populated towns with high tax potential.

### **2.4 Critique of Reviewed Literature**

As stated elsewhere in this paper, the topic of taxpayer sensitization has been under-researched especially in Kenya. The few scholars who delved into the subject have done a great job in underscoring the critical role taxpayer sensitization plays in getting the message across to potential and existing tax-paying masses. It is prudent to point out how, the researcher who explored The Effectiveness of taxpayer Sensitization as a Revenue Collection Strategy in KRA started his literature review by presenting the background reforms that brought about taxpayer sensitization in Kenya. According to this study, it is not strong enforcement that is key to successful revenue administration; on the contrary, the researcher argues that taxpayer sensitization ensures improved revenue performance, consistency, reduced compliance costs for both the government

and the taxpayers. It is important to however point out that the researcher dedicated several pages of the literature review narrating the foundation of taxpayer sensitization in Kenya. Though the background of taxpayer sensitization was perhaps intended to help future scholars understand that taxpayer sensitization did not just begin without some form of basis, it should be noted that the idea of tax reforms has been over-emphasized considering that tax reforms was not the topic under study. In the researcher's opinion, two paragraphs about tax reforms should have sufficed.

Another scholar on the Effect of taxpayer Sensitization on Compliance in the Manufacturing Sector (2011) dedicated a significant part of literature review to staff training and performance contracting. Though the research sounded quite instructive, it appears misplaced since the researcher failed to demonstrate how staff training and performance contracting relate to the subject under study. The study on the Effect of taxpayer Sensitization on PAYE Compliance (2013) should have been expanded the various methods of conducting taxpayer sensitization to fully bring out the methodology to a person who has no idea about what taxpayer sensitization is all about.

A researcher who studied the Effect of taxpayer Sensitization on Compliance in the Manufacturing Sector appear to have devoted the study to the linkage between taxpayers' educational levels and their ability to comply with tax laws and not what is known to be taxpayer education within KRA circles. The parameters discussed in the study are far from what taxpayer sensitization entails. Though the researcher who studied the Effect of taxpayer Sensitization on PAYE Compliance produced quite a masterpiece he devoted a significant number of pages of literature review to the concept of strategy implementation. Again, after reading through the literature review there was no relationship between strategy implementation and the topic in question. Finally, the researcher found isolated instances of duplicated content by the various scholars.

## 2.5 Research Gaps

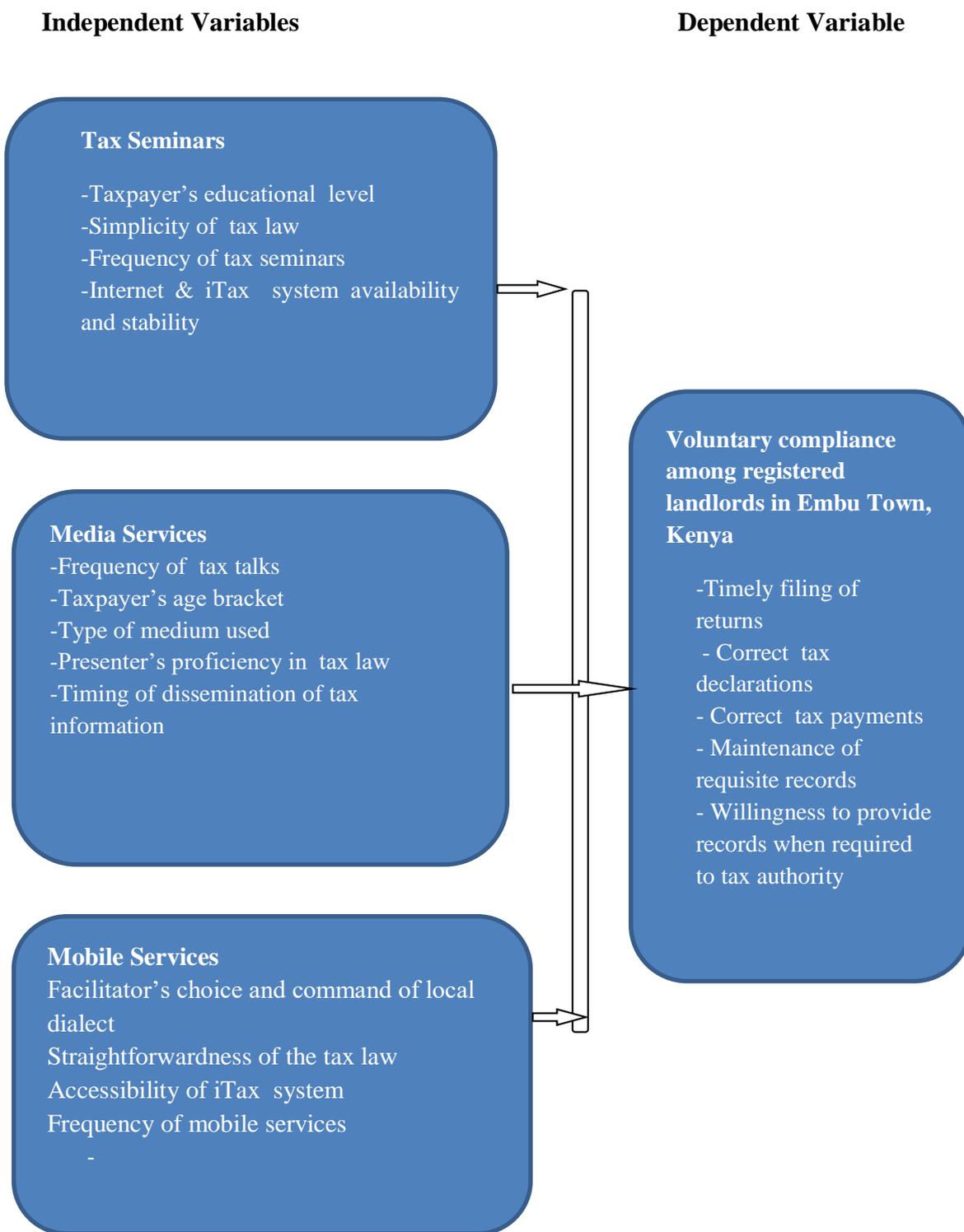
**Table 2.1: Research Gaps**

	<b>Researcher</b>	<b>Research Topic</b>	<b>Year</b>	<b>Recommendation for Further Study</b>
1.	Semboja J.	Effect of taxpayer Education on Compliance in the Manufacturing Sector in Dar es Salam – Tanzania	2001	Effect of Taxpayer Education on SME's & Individual taxpayers in Dar es Salam – Tanzania
2.	Palil M.	Effect of Taxpayer Education on PAYE Compliance in Malaysia	2010	Relationship between taxpayers' Attitudes and Compliance
3.	Mukanda J.	Effect of Taxpayer Sensitization on VAT Compliance Levels	2019	Impact of Economic Conditions on Compliance
4.	Misra R.	Impact of Taxpayer Sensitization on Compliance in South Africa	2004	Effects of Taxpayer Education on PAYE performance levels among medium sized taxpayers
5.	Fasina H	Effect of Taxpayer Sensitization on Excise Manufacturers in Lagos – Nigeria	2013	Effect of Taxpayer Literacy Levels on Compliance
6.	Nalishebo S.	Impact of Taxpayer Education on Turn Over Tax Compliance in Zambia	2017	Effect of Taxpayer Education on Residential Income
7.	Gitaru K.	The Effect of Taxpayer Education on Compliance in Kenya	2017	Determinants of Compliance in Medium Sized Companies in Kenya
8.	Oyugi N.	The Effectiveness of Taxpayer Education as a Revenue Collection Strategy in KRA	2008	Effectiveness of Reforms on Compliance
9.	Pere J.	Impact of Taxpayer Sensitization on Compliance among small scale businesses in Rongai – Kajiado County	2019	Impact of Taxpayer Sensitization on Total VAT Revenue in Kenya

## **2.6 Conceptual Framework**

According to Mugenda & Mugenda, (2003) a conceptual framework is a concise description of phenomenon under study accompanied by a graphical or visual depiction of the major variables of the study. The literature led the researcher to develop variables into dependent and independent variables in respect to the research topic; the effect of tax seminars, media services and mobile services on voluntary compliance in residential income tax among registered landlords in Embu Town Kenya. The dependent variable was voluntary compliance in residential income tax among registered landlords in Embu Town Kenya while the independent variables were tax seminars, media services and mobile services as illustrated on figure 2.1 overleaf;

## 2.7 The Conceptual Framework



**Figure 2.1 Conceptual Framework**

Source: Researcher (2021)

## **2.8 Researcher's Opinion about Taxpayer Sensitization**

Taxpayer sensitization is the only means of disseminating tax information if KRA hopes to have tax compliant taxpayers. These forums afford the authority an opportunity to provide awareness about tax laws, dates and deadlines by which certain taxes should be filed and paid, educates them on their rights as well as obligations. It equips taxpayers with the ability to navigate the process of filing/declaring taxes and it reduces compliance costs for both the taxpayer and the tax authority. It can therefore be confidently said that it strengthens relationships between the authority and taxpayers – existing and potential. Without taxpayer sensitization, governments are stuck with an 'ignorant citizenry' as far as tax matters go, not to mention that the badly needed revenue would permanently remain a dream. This would in effect impede national development. This therefore demonstrates how fundamental taxpayer sensitization is to any nation considering that the function not only educates, but also recruits and 'incubates' taxpayers to guarantee compliance even in future. The anticipated return can only be realized when we have compliant publics. Taxpayer sensitization should naturally speaking, translate into growth in absolute numbers of recruited taxpayers and improved revenue performance given that taxpayer sensitization is mainly geared towards equipping taxpayers with tax information to enhance compliance. Importantly, it has increasingly become clear that knowledge is a key determinant of compliance (Palil, 2010; Richardson (2006). It is therefore the duty of the government to come up with strategies and methods of simplifying procedures and requirements to make it as easy to comply for tax- paying publics. This can only be done through taxpayer sensitization.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.0 Introduction**

The chapter discusses the method used to carry out the research and how the research problem was solved. The chapter includes the research design, population of study and sampling design and sample size, data collection method used, research procedures and data analysis method.

#### **3.1 Research Design**

According to Grooves et al (2011), research design is a blue print for the collection, measurement and analysis of data. It is also defined as a technique that ensures that evidence obtained enables answering the initial questions as unambiguously as possible. The researcher adopted a causal research design to determine how taxpayer sensitization through tax seminars, media services and mobile services affect performance of residential income tax in Embu town using primary data collected from 120 questionnaires randomly issued to, and completed by taxpayers belonging to the sampling frame of registered landlords within Embu town. The three channels mentioned here are the means through which KRA sensitizes existing and potential taxpayers mainly with the aim of bringing about understanding and compliance with tax matters in that the taxpayers not only file correct returns within the stipulated time lines as by law required but also pay the correct amount of taxes (Moore & Prichard (2017).

#### **3.2 Target Population**

Maxwell, (2012) defines a population is an entire group of individuals, events or objects having common observable characteristics. It is a basis from which a sample or subjects for the study is drawn. The researcher's population of interest was the landlords within

Embu Town. To evaluate the effect of taxpayer sensitization channels on compliance in residential income the study considered primary data from questionnaires from 120 registered landlords from Embu town. It must be noted that Embu town boasts more than this number of landlords but it was felt that the number was sufficient to make the right inferences.

### **3.3 Sampling Technique**

According to Mugenda O. and Mugenda A. (2003) A. a sampling technique is a process of selecting subjects to be included in the study of the representative of the target population. The researcher adopted a random sampling technique from the sample frame of the 250 registered landlords within Embu town.

#### **3.3.1 Sample Size**

The sample size of a survey most typically refers to the number of units that are chosen from the data gathered. However, a sample size can be defined in various ways. There is the designated sample size, which is the number of sample units selected for contact or data collection. There is also the final sample size, which is the number of completed interviews or units for which data are actually collected Drexler, F. et al (2014). The final sample size may be much smaller than the designated sample size if there is considerable non-response, ineligibility, or both. Not all the units in the designated sample may need to be processed if productivity in completing interviews is much higher than anticipated to achieve the final sample size. A sample size is a subset or part of the target population Feldman J. (2016).

For this study, a sample size of (n) of 145 landlords was selected, arrived at using Yamane's formula (Yamane, 1967).

$$n = \frac{N}{1 + Ne^2}$$

Where

$n$  = sample size

$N$  = total population (250)

$e$  = margin of error (0.05), meaning a confidence level of 95%

Thus:

$$n = \frac{250}{1 + (250 \times 0.05^2)}$$

$$n = 145$$

### **3.4 Data Collection Tools**

Closed ended structured questionnaires were used to collect primary data administered on a five point Likert scale ranging from 1 – 5. According to Kiess and Bloomquist (2008) the Likert type format is a powerful statistical tool in hypothesis testing since it gives equal interval data.

### **3.5 Pre-Testing of Data Collection Instruments**

#### **3.5.1 Reliability**

Reliability refers to the repeatability of findings - if the study were to be done a second time, the results should be the same. If more than one person is observing a given behaviour or some event, all observers should agree on what is being recorded in order to claim that the data are reliable Singh, V. (2008). Statistical package for social scientists (SPSS) was used to carry out reliability of the research instrument by use of Cronbach's Alpha. According to Tavakol, V. & Dennick, L.(2011), Cronbach alpha is the basic formula for determining reliability based on internal consistency. Cronbach alpha is used to find out how directly correlated a set of items are as a cluster. It is normally used in multiple Likert queries in a questionnaire used to determine reliability of the scale. Acceptance value of 0.70 was used as the cut-off of the reliability for the study – i.e. any value lower than this was considered unacceptable.

The following Cronbach's alpha standardized formula was employed:

$$\alpha = \frac{N \cdot \bar{c}}{\bar{v} + (N - 1) \cdot \bar{c}}$$

Where N is equal to the number of items, c-bar is the average inter-item covariance among the items and v-bar equals the average variance.

### **3.5.2 Validity**

Ascertaining questionnaire validity will be the main objective of carrying out the pilot test. The study adopted content validity which is the extent to which a measuring instrument provides adequate coverage of the topic under study according to Gillham, L. (2008).

### **3.5.3 Pilot Testing**

Bugge, C. et al (2013) defines pilot testing as feasibility studies designed to ask questions about the 'do-ability' of the study. They agreed that pilot trials are a smaller version of the main trial which aims at testing aspects of the study design and processes for implementation of a large main trail in future. In this case, the researcher first establishes the existence, availability, and the willingness to participate as respondents of at least 10% of the 145 – (15 in total) of landlords in the outskirts of Embu town. These did not form part of the respondents of the population under study. The data obtained was then subjected to quantitative analytical techniques. Questions not well phrased were adjusted accordingly.

## **3.6 Data Analysis and Presentation**

### **3.6.1 Organization of Data**

Three key themes were drawn from the specific objectives of the study that captures the effects of taxpayer sensitization on residential income tax compliance among registered landlords in Embu town, Kenya.

### 3.6.2 Coding and Data Analysis

The organized data was coded and differentiated into three parts ie. tax seminars, media services and mobile services. Each part was labeled by use of a code to include a short phrase that suggests how the associated data segments inform the research objectives. The coded data was keyed into an SPSS. Descriptive statistics was generated using the package to describe the respondents' opinions on the effects of taxpayer sensitization channels on residential income tax compliance among registered landlords in Embu town. The results were presented in form of graphs, charts and tables.

To investigate the relationship between the independent and dependent variables a multiple regressions analysis was conducted on cross section data. The regression model showing the model estimators, the standard errors of the estimators, the t- test of significance (t – values) for the estimators, the probability values (p- values) the correlation coefficients and the goodness of fit or coefficient of determination. The results of the multiple regression analysis were summarized in a model summary table, analysis of variance (ANOVA) table and coefficient table.

### 3.6.3 Analytical Model

A multiple regression analysis was conducted to show how the predictor variables explains a statistically significant amount of variance in the outcome variable after accounting for all variables. The computed regression model was:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where

Y = Voluntary Residential Income tax Compliance

Where  $\beta_0$  = constant

$\beta_1 - \beta_3$  = Regression Coefficients

$X_1$  = Tax Seminars

$X_2$  = Media Services

$X_3$  = Mobile services

$\varepsilon$  = error term or disturbance term of the regression model normally distributed about the mean of 0.

### 3.6.4 Assumptions

The following were the researcher's assumptions of the multiple regression;

- (i) Homoscedasticity: the variance of the error term was assumed to be constant – i.e. noise” or random disturbance in the relationship between the independent variables and the dependent variable would remain constant. According to Surinder K. (2014), homoscedasticity describes a situation in which the dependent variable is the same across all values of the independent variables. Heteroscedasticity is present when the size of the error term differs across values of an independent variable. The impact of violating the assumption of homoscedasticity is a matter of degrees, increasing as heteroscedasticity increases.
- (ii) Normality: the error term would follow a normal distribution with a mean of zero. In order to make valid inferences from any regression, the residuals of the regression should follow a normal distribution. The residuals are simply the error terms, or the differences between the observed value of the dependent variable and the predicted value according to Studenmund A. (2012).
- (iii) Linearity: linear relationship between the dependent variable and the independent variables:  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \mu$ . This means the predictor variables in the regression have a straight-line relationship with the outcome variable.
- (iv) Zero multi-collinearity:  $\text{corr}(X_1, X_2) = 0$ : no correlations among the independent variables ( $X_1, X_2, X_3$ )
- (v) Zero correlation between the independent variable and the error term. According to Saul M. (2018) zero correlation exists when there is no relationship between two variables. Zero correlation suggests that the correlation statistic did not indicate a relationship between the two variables. It

is important to note that this does not mean that there is no relationship at all. It simply means that there is no linear relationship. A relationship is an arithmetical dimension of the association amid two variables. Likely associations range between +1 and -1. A naught relationship shows that there is no association amid the variables. An association of -1 shows a perfect negative relationship denoting that as one variable goes up, the other goes down. An association of +1 means a perfect positive correlation, meaning that both variables move in the same direction concurrently.

- (vi) No outliers in the data. An outlier is an observation that is far removed from a mass of data or lies an abnormal distance from other values in a random sample from a population according to Engineering Statistics Handbook (2013). This allows the analyst to decide what will be considered abnormal. Before abnormal observations can be singled out, it is necessary to characterize normal observations.
- (vii) The expected value or the mean of the error term was assumed to be zero

### 3.7 Measurement of Variables

**Table 3.1: Measurement of Variables**

<b>Variable</b>	<b>Variable Type</b>	<b>Indicators</b>	<b>Analytical Tool used</b>
Voluntary Compliance	Dependent	-Correct tax declarations -Timely filing of tax returns -Correct tax payments -Maintenance of requisite tax records -Willingness to provide tax records as and when required	-Descriptive statistics -Inferential statistics (correlation analysis) -Multiple regression
Tax Seminars	Independent	Taxpayer's educational level Simplicity of tax law Frequency of tax seminars	-Descriptive statistics -Inferential statistics (correlation analysis) -Multiple regression
Media Services	Independent	Frequency of tax talks Presenter's proficiency in tax matters Medium type Taxpayer's age bracket Timing of tax information dissemination	-Descriptive statistics -Inferential statistics (correlation analysis) -Multiple regression
Mobile services	Independent	Facilitator's choice and command of local dialect Straightforwardness of tax law Accessibility of iTax system Frequency of mobile services	-Descriptive statistics -Inferential statistics (correlation analysis) -Multiple regression

### **3.8 Ethical Considerations**

Permission to carry out the research was sought from the relevant authorities before data was collected. The researcher safeguarded privacy of the data provided by the respondents. The participants remained anonymous, their dignity, privacy and interests respected and protected. In carrying out the research respondents were allowed to choose whether or not to participate. Respondents were informed of the purpose, methodology, benefits, risk and timelines of the research. The researcher ensured that respondents understood what was required of them and how this relates to their own situation as registered land lords in Embu town. All sources of knowledge, data, concepts and methodology in previous studies on this subject were appropriately and fully recognized in all outputs.

## CHAPTER FOUR

### DATA ANALYSIS, PRESENTATION AND INTERPRETATION

#### 4.0 Introduction

In this chapter the key issues relates to data presentation, analysis and interpretation are discussed. The descriptive statistics show the response analysis in terms of frequencies and percentages. The inferential statistical analysis gives the results of correlation and multiple regression analysis and the estimated models. The results of the study are presented in the context of the objectives and hypotheses of the study.

#### 4.1 Response Analysis

A total of 145 questionnaires were distributed out of which 120 respondents completed and returned attaining a response rate of 83%. This response rate was deemed sufficient for making the necessary inferences. According to Magenta, E. (2003), a response rate of 70% and above is considered excellent, 60% is considered good while 50% is considered adequate. The response analysis is summarized in table 4.1 below:

**Table 4.1: Response Analysis**

<b>Response</b>	<b>Frequency</b>	<b>Percentage</b>
Returned	120	83
Unreturned	25	17
<b>Total</b>	<b>145</b>	<b>100</b>

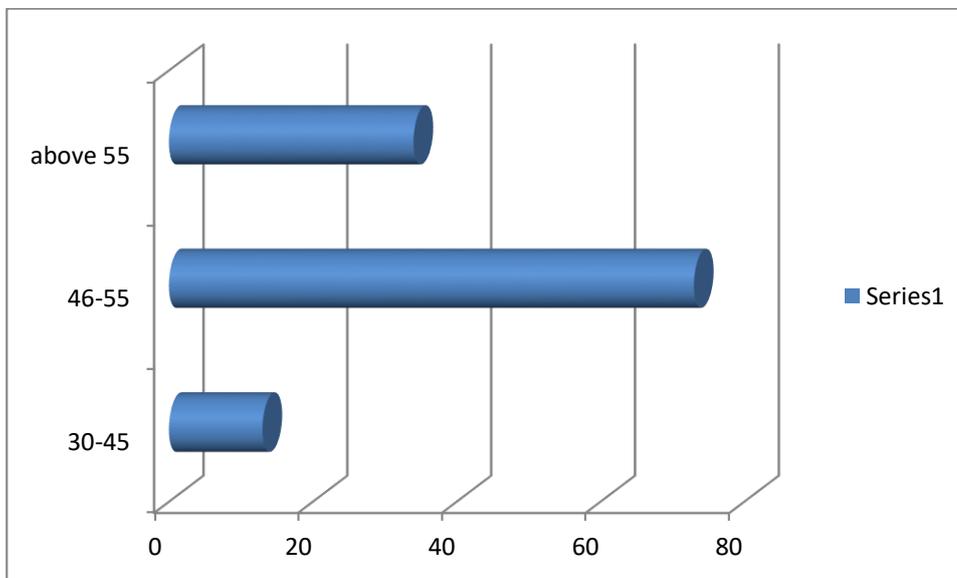
*Source: Research Data (2021)*

#### 4.2 Demographic Information

Demographic information was sought to aid the researcher better understand the characteristics of the respondents' age bracket, educational level, how long each had been landlord and also how many units each owned. The results were presented as shown overleaf;

#### 4.2.1 Distribution of Respondents' Age Brackets

The study sought to find out the distribution of respondents' age brackets and the findings are as represented in the figure beneath.



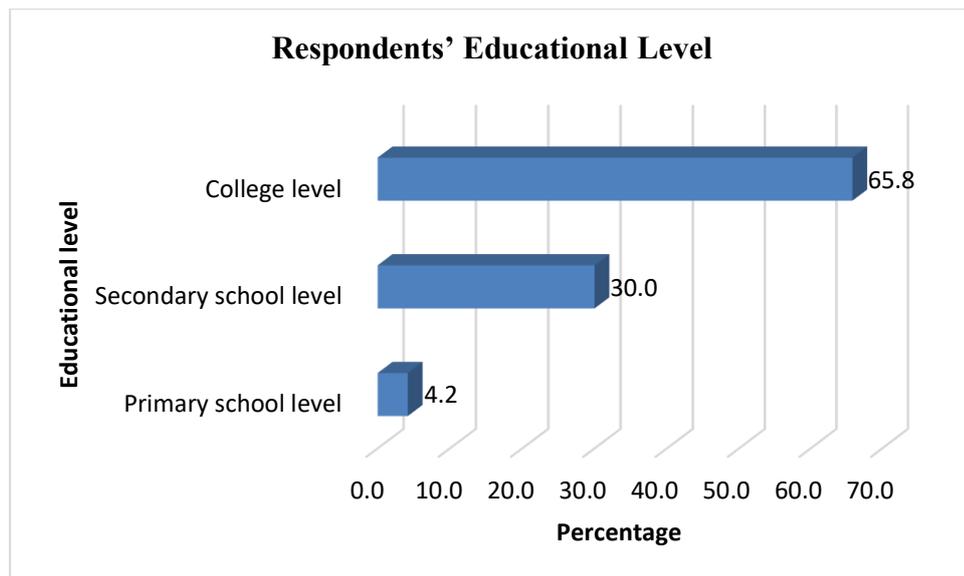
**Figure 4.1 Distribution of Respondents' Age Brackets**

*Source: Research Data (2021)*

The results of the study revealed that majority of the respondents 73(60.8%) were aged between 46-55 years, 34(28.3%) were above 55 years while 13 (10.8%) were aged between 30-45 years. This indicates that majority of the respondents were experienced landlords who could be relied upon to give reliable information.

#### 4.2.2 Distribution of Respondents' Educational Level

The study sought to find out the distribution of respondents' educational levels. The findings are shown overleaf - Figure 4.2.



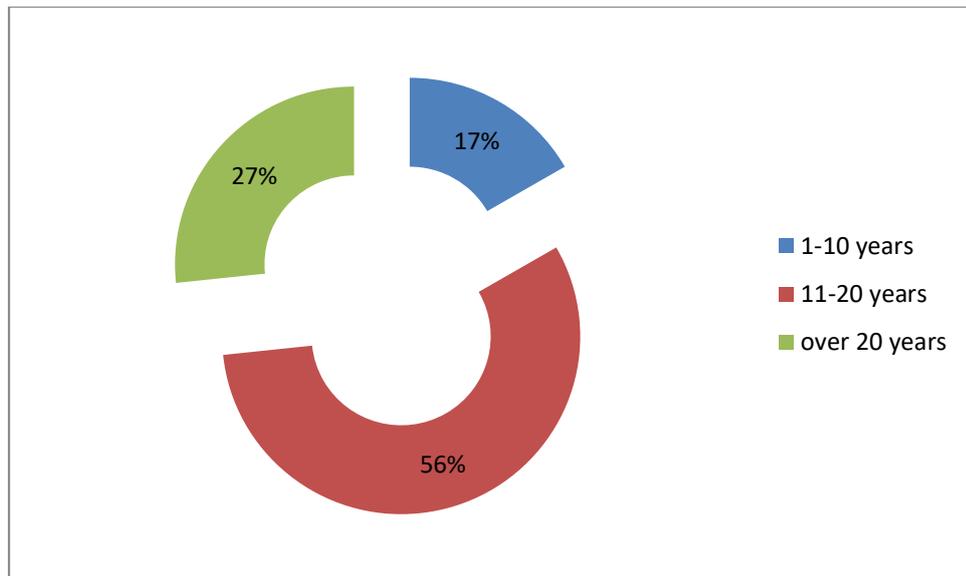
**Figure 4.2: Distribution of Respondents' Educational Level**

*Source: Research Data (2021)*

From the findings, majority of the respondents 49(65.8%) had college educational level, 36(30%) had secondary educational level while 5(4.2%) had primary educational level. Based on the educational level, the respondents were considered informed enough to give reliable information to be used in the study.

#### **4.2.3 Distribution of Respondents' Time Period as Landlord**

The study sought to establish the respondents' time period as a landlord. The findings are shown on figure 4.3 overleaf.



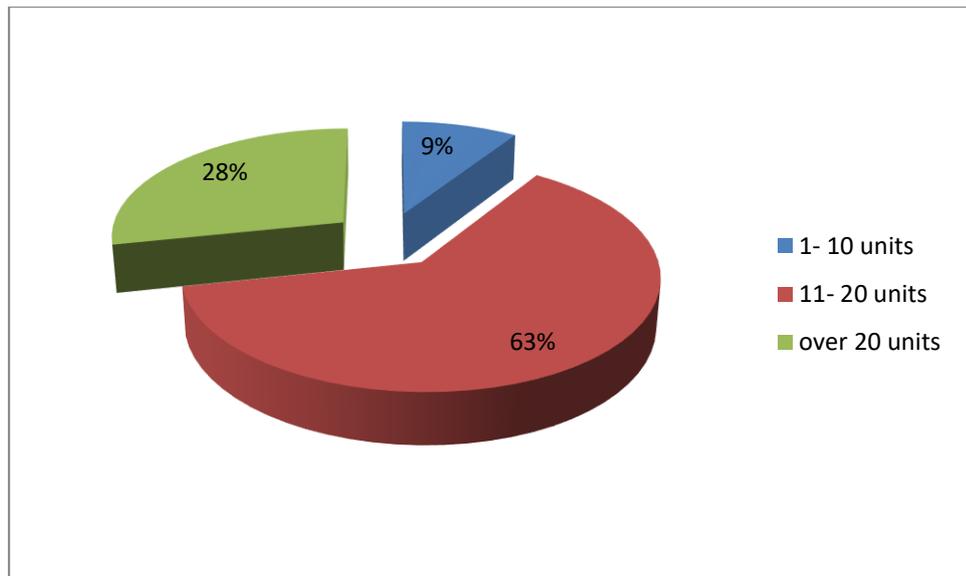
**Figure 4.3 Distribution of respondents' time period as landlord**

*Source: Research Data (2021)*

The results of the study revealed that majority of the respondents 68(56.7%) have been landlords between 11-20 years, 32(26.7%) have been landlords for over 20 years while 20 (16.7%) have been landlords between 1-10 years. This indicates that majority of the respondents were knowledgeable landlords well suited to give dependable information.

#### **4.2.4 Number of Units Owned by Respondents**

The study also sought to find out the number of units each respondent owned. The findings are shown on figure 4.4 overleaf.



**Figure 4.3: Distribution of Number of Units Owned**

*Source: Research Data (2021)*

The results of the study revealed that majority of the respondents 75(62.5%) owned between 11-20 units, 34(28.3%) owned over 20 units while 11 (9.2%) owned between 1-10 units.

#### **4.3 Descriptive Statistics**

The study employed descriptive statistics to determine the frequencies and percentages of the responses based on the parameters of the study.

**Table 4.2: Tax Seminars**

Statements		1	2	3	4	5	Total
1 Taxpayer's educational level has a favourable effect on correct tax declaration.	<b>f</b>	4	14	19	33	50	120
	<b>%</b>	3.3	11.7	15.8	27.5	41.7	100.0
2 Simplicity of tax law positively affects timely filing of returns.	<b>F</b>	6	16	18	54	26	120
	<b>%</b>	5.0	13.3	15.0	45.0	21.7	100.0
3 Frequency of tax seminars has a favourable effect on correct tax payments.	<b>F</b>	10	16	20	45	29	120
	<b>%</b>	8.3	13.3	16.7	37.5	24.2	100.0
4 Simplicity of tax law has a positive effect on correct declaration.	<b>F</b>	7	18	22	44	29	120
	<b>%</b>	5.8	15.0	18.3	36.7	24.2	100.0
5 Taxpayer's educational level positively affects ability to make correct tax payment.	<b>F</b>	8	18	28	34	32	120
	<b>%</b>	6.7	15.0	23.3	28.3	26.7	100.0
6 Frequent tax seminars has a favourable effect on timely filing of returns.	<b>F</b>	10	10	30	23	47	120
	<b>%</b>	8.3	8.3	25.0	19.2	39.2	100.0
7 iTax system availability has a favourable effect on timely filing of tax returns.	<b>F</b>	7	14	21	37	41	120
	<b>%</b>	5.8	11.7	17.5	30.8	34.2	100.0

*Source: Research Data (2021)*

The findings on table 4.2 revealed that majority of the respondents agreed that taxpayer's educational level has a favourable effect on correct tax declaration as revealed by the frequency and percentage 50(41.7%). Most participants agreed that simplicity of tax law positively affects timely filing of tax returns as shown by 54(45.0%). Most participants also agreed that frequency of tax seminars has a favourable effect on correct tax payments as shown by 45(37.5%). Majority of the respondents agreed that simplicity of tax law has a positive effect on correct tax declaration as shown by 44(36.7%). The study also established that majority of the respondents agreed that taxpayer's educational level positively affects his ability to make correct tax payment as shown by 34(28.3%). Likewise majority of the

respondents agreed that frequent tax seminars has a favourable effect on timely filing of tax returns as shown by 47(39.2%). Majority of the respondents also agreed that iTax system availability has a favourable effect on timely filing of returns as shown by 37(30.8%). The findings indicated the Tax Seminars has a positive effect on voluntary Compliance in Residential Income tax among registered landlords in Embu town.

**Table 4.3: Media Services**

<b>Statements</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Total</b>
Regular tax talks have a positive effect on correct tax declaration.	<b>F</b>	8	16	20	51	25	120
	<b>%</b>	6.7	13.3	16.7	42.5	20.8	100.0
The timing of tax talks has a positive effect on correct tax payment.	<b>F</b>	8	15	20	44	33	120
	<b>%</b>	6.7	12.5	16.7	36.7	27.5	100.0
The type of medium used has a positive effect on timely filing of tax returns.	<b>F</b>	10	15	15	37	43	120
	<b>%</b>	8.3	12.5	12.5	30.8	35.8	100.0
Presenter's proficiency in tax law has a positive impact on correct tax declaration.	<b>F</b>	14	15	18	37	36	120
	<b>%</b>	11.7	12.5	15.0	30.8	30.0	100.0
Timing of dissemination of tax law has a favourable effect on timely filing of tax returns.	<b>F</b>	10	15	15	35	45	120
	<b>%</b>	8.3	12.5	12.5	29.2	37.5	100.0
Taxpayer's age has a positive effect on timely correct tax declaration.	<b>F</b>	13	18	25	34	30	120
	<b>%</b>	10.8	15.0	20.8	28.3	25.0	100.0
The type of medium used positively impacts correct tax payment.	<b>F</b>	15	10	20	42	33	120
	<b>%</b>	12.5	8.3	16.7	35.0	27.5	100.0

*Source: Research Data (2021)*

Based on the findings on table 4.3, majority of the respondents agreed that regular tax talks has a positive effect on correct tax declaration as shown by 51(42.5%). Majority of the respondents agreed that the timing of tax talks has a positive effect on correct tax payment as shown by 44(36.7%). Majority of the respondents agreed that the type of medium used has a positive effect on timely filing of tax returns as shown by 43

(35.8%). Most of the respondents also agreed that presenter's proficiency in tax law has a positive effect on correct tax declaration as shown by 37(30.8%). Majority of the respondents agreed that timing of dissemination of tax law has a favourable effect on timely filing of tax returns as shown by 45 (37.5%). Majority of the respondents agreed that taxpayer's age has a positive effect on timely correct tax declaration as shown by 34 (28.3%). Most of the respondents also agreed that the type of medium used positively impacts correct tax payment as shown by 42(35.0%). The findings indicated Media Services positively influences voluntary compliance in Residential Income tax among registered landlords in Embu town.

**Table 4.4: Mobile Services**

Statements		1	2	3	4	5	Total
Regularity of mobile services has a positive effect of timely filing of tax returns	<i>f</i>	14	9	16	43	38	120
	<i>%</i>	11.7	7.5	13.3	35.8	31.7	100.0
Availability of iTax system has a favourable effect on correct and timely filing of tax returns	<i>f</i>	6	12	22	45	35	120
	<i>%</i>	5.0	10.0	18.3	37.5	29.2	100.0
Simplicity of tax law has a favourable effect on correct tax declaration	<i>f</i>	17	8	24	32	39	120
	<i>%</i>	14.2	6.7	20.0	26.7	32.5	100.0
Facilitator's command of local dialect has a favourable effect on correct tax declaration.	<i>f</i>	15	12	13	43	37	120
	<i>%</i>	12.5	10.0	10.8	35.8	30.8	100.0
Continuous mobile services positively impacts timely filing of tax returns.	<i>f</i>	13	17	20	30	40	120
	<i>%</i>	10.8	14.2	16.7	25	33.3	100.0
Facilitator's proficiency in local language positively affects tax payments' correctness.	<i>f</i>	16	12	18	46	28	120
	<i>%</i>	13.3	10.0	15.0	38.3	23.3	100.0

*Source: Research Data (2021)*

From the findings on table 4.4, most of the respondents agreed that regularity of mobile services has a positive effect of timely filing of tax returns as shown by 43(35.8 %).

Majority of the respondents agreed that availability of iTax system has a favourable effect on correct and timely filing of tax returns as shown by 45(37.5%). Majority of the respondents agreed that simplicity of tax law has a favourable effect on correct tax declaration as shown by 39(32.5%). Most of the respondents also agreed that facilitator's command of local dialect has a favourable effect on correct tax declaration as shown by 43(35.8%). Most of the respondents also agreed that frequent mobile services positively impacts timely filing of tax returns as shown by 40(33.3%). Most of the respondents also agreed that facilitator's proficiency in local language positively affects tax payments' correctness as shown by 46(38.3%). The findings indicated that Mobile Services positively impacts voluntary compliance in Residential Income tax among registered landlords in Embu town.

**Table 4.5: Voluntary Compliance in Residential Income tax among registered landlords in Embu Town**

<b>Statements</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Total</b>
Timely filing of tax returns	<b>f</b>	17	8	13	35	47	120
	<b>%</b>	14.2	6.7	10.8	29.2	39.2	100.0
Correct tax declarations	<b>f</b>	5	7	24	49	35	120
	<b>%</b>	4.2	5.8	20.0	40.8	29.2	100.0
Correct tax payments	<b>f</b>	6	14	20	41	39	120
	<b>%</b>	5.0	11.7	16.7	34.2	32.5	100.0
Maintenance of requisite tax records	<b>f</b>	5	12	24	34	45	120
	<b>%</b>	4.2	10.0	20.0	28.3	37.5	100.0
Willingness to provide tax records when required.	<b>f</b>	8	15	20	44	33	120
	<b>%</b>	6.7	12.5	16.7	36.7	27.5	100.0

*Source: Research Data (2021)*

From the results of the descriptive statistics on table 4.5, 39.2% of the respondents strongly agreed that timely filing of tax returns is an indicator of compliance among registered landlords in Embu Town, Kenya, 29% agreed that timely filing of returns is an indicator of compliance among registered landlords in Embu Town. Kenya. 10.8% of the respondents were neutral, 6.7% disagreed while 14.2% strongly disagreed with

the statement that timely filing of tax returns is an indicator of compliance among registered landlords in Embu Town , Kenya. From the study, 40.8% of the respondents agreed that correct tax declarations is an indicator of compliance among registered landlords in Embu Town , Kenya while 29.2% strongly agreed with the statement. 20% were neutral, 5.8 disagreed while 4.2% strongly disagreed with the statement.

From the study, majority (34.2%) agreed while 32.5% strongly agreed to the assertion that correct tax payment is an indicator of compliance among registered landlords in Embu Town, Kenya, 16.7% were neutral, 11.7% disagreed while 5% strongly disagreed with the statement. 37.5% strongly agreed while 28.3% agreed with the statement that maintenance of requisite records is an indicator of compliance among registered landlords in Embu Town, Kenya,. 20% were neutral, 10% disagreed while 4.2% strongly disagreed with the statement. 36.7% agreed while 27.5 strongly agreed with the statement that willingness to provide tax records when required is an indicator of compliance among registered landlords in Embu Town, Kenya,. 16.7% were neutral, 12.5% disagreed and 6.7% strongly disagreed with the statement.

#### **4.4 Validity Tests**

Reliability is the degree to which the measure of a construct is consistent or dependable. Reliability of the research instrument was tested using the population which was not part of the target population. Cronbach Alpha was used to test the reliability of the items in the questionnaire. According to Cooper & Schindler (2008), the acceptable range for Cronbach Alpha test is 0.70 and above. The findings of the Cronbach's validity test are shown on table 4.6

**Table 4.6 Pilot Testing & Validity**

<b>Scale</b>	<b>Cronbach's Alpha</b>	<b>Number of items</b>
Tax Seminars	0.868	7
Media Services	0.845	7
Mobile Services	0.844	6
Voluntary Compliance in Residential Income among registered landlords in Embu town, Kenya	0.855	5

*Source: Research Data (2021)*

The findings on Table 4.6 revealed that all the constructs in the questionnaire were found to be reliable as their Cronbach alpha coefficient were above 0.70. (Please refer to the appendix 3 for Item-Total Statistics).

#### **4.4.1 Inferential Statistical Analysis**

The study employed Pearson Correlation and Multiple regression analysis in relation to inferential statistical analysis to establish the relationship between the dependent and the independent variables of the study.

#### **4.4.2 Tests for Assumptions of Multiple regression Analysis**

Before inferential statistical analysis was conducted, the researcher conducted diagnostic tests to ensure that the assumptions of multiple regression analysis were not violated. These diagnostic tests included normality, linearity, multicollinearity and heteroscedasticity test.

#### **4.4.3 Normality Test**

Most parametric tests are based on the assumption that the data follows a normal distribution. The normal distribution peaks in the middle and is symmetrical about the mean. Data does not need to be perfectly normally distributed for the tests to be reliable. Kolmogorov-Smirnov and Shapiro-Wilk test was performed to determine whether the

assumptions of a normal distribution of the data were violated. The results are presented in table 4.7.

**Table 4.7 Normality Test – Kolmogorov-Smirnov and Shapiro-Wilk**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Unstandardized Residual	.089	120	.052	.979	120	.059
Standardized Residual	.089	120	.052	.979	120	.059

a. Lilliefors Significance Correction  
 Source: *Research Data (2021)*

Table 4.7 shows the result of the distribution of the standardized and unstandardized residuals of the study using Kolmogorov-Smirnov and Shapiro-Wilk test. Data is taken to be normally distributed using Kolmogorov-Smirnov and Shapiro-Wilk test when the probability (p-value) is greater than 0.05. As such when the p-value is less than 0.05, data is considered not to be normally distributed. The results of the normality tests confirmed the assumption on normality was not violated as the p-value for the standardized and unstandardized residuals were above 0.05.

#### 4.4.4 Linearity Test.

Analysis of Variance (ANOVA) F statistics was used to determine whether there is a linear relationship between the dependent and independent variables. The findings are presented in table 4.8.

**Table 4.8 Linearity Test- ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.022	3	11.007	48.817	.000 <sup>b</sup>
	Residual	26.156	116	.225		
	Total	59.179	119			

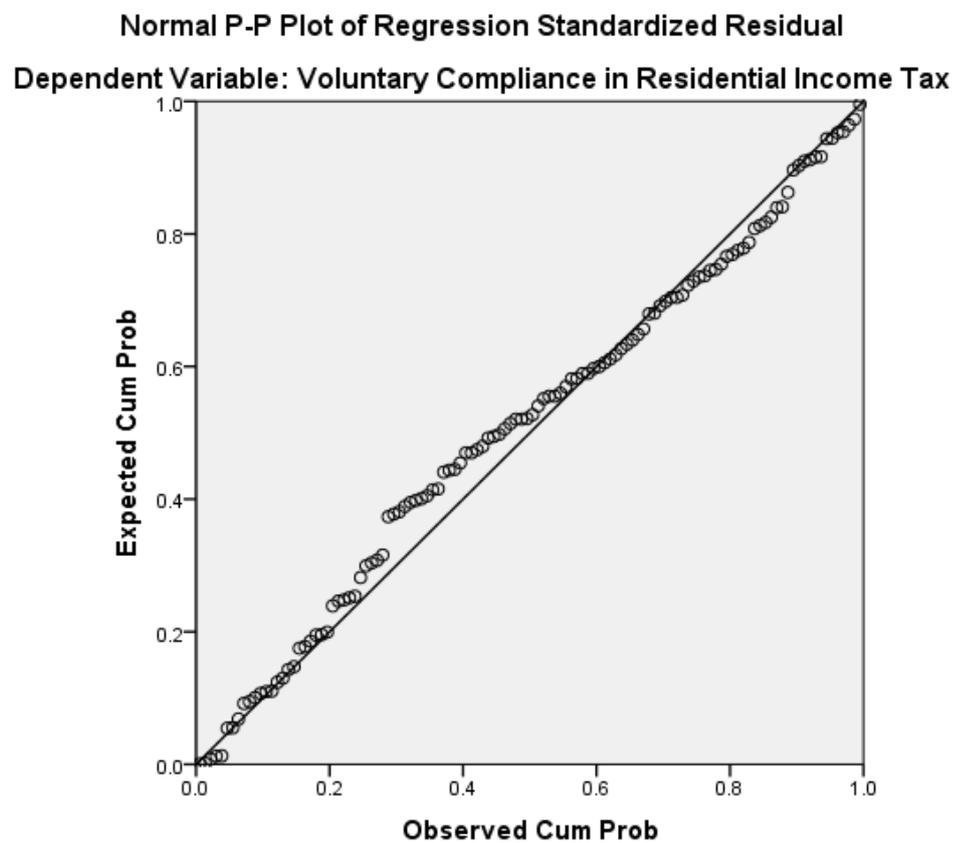
a. Dependent Variable: Voluntary Compliance in Residential Income among registered landlords in Embu town, Kenya

b. Predictors: (Constant), Mobile Services, Tax Seminars, Media Services

Source: *Research Data (2021)*

The study found that the model was a good fit based on  $F_{(3, 116)} = 48.817$ ,  $p = 0.000 < 0.05$  and there was a linear relationship between the dependent and independent variables. Therefore, this implies that all the three predictor variables are good in explaining Voluntary Compliance in Residential Income among registered landlords in Embu town, Kenya.

Linearity was also tested using the normal P-P plot. The findings are presented in figure 4.5 below;



**Figure 4.5 Linearity Test.**

*Source: Research Data (2021)*

The results on figure 4.5 mean that predicted values spread along the line of the best fit. This implies that there existed a linear relationship between the dependent variable and the independent variables.

#### 4.4.5 Multicollinearity Test

Multicollinearity is said to occur when there is high correlation among the predictor variables. Barnor, F. (2014) opined that multicollinearity increases standard errors thereby making the results of a study biased. Multicollinearity was tested using the Variance Inflation Factor (VIF) whereby The VIF values of greater than 10 would indicate the presence of multicollinearity. The findings are presented in table 4.9.

**Table 4.9 Multicollinearity- Variance Inflation Factor (VIF)**

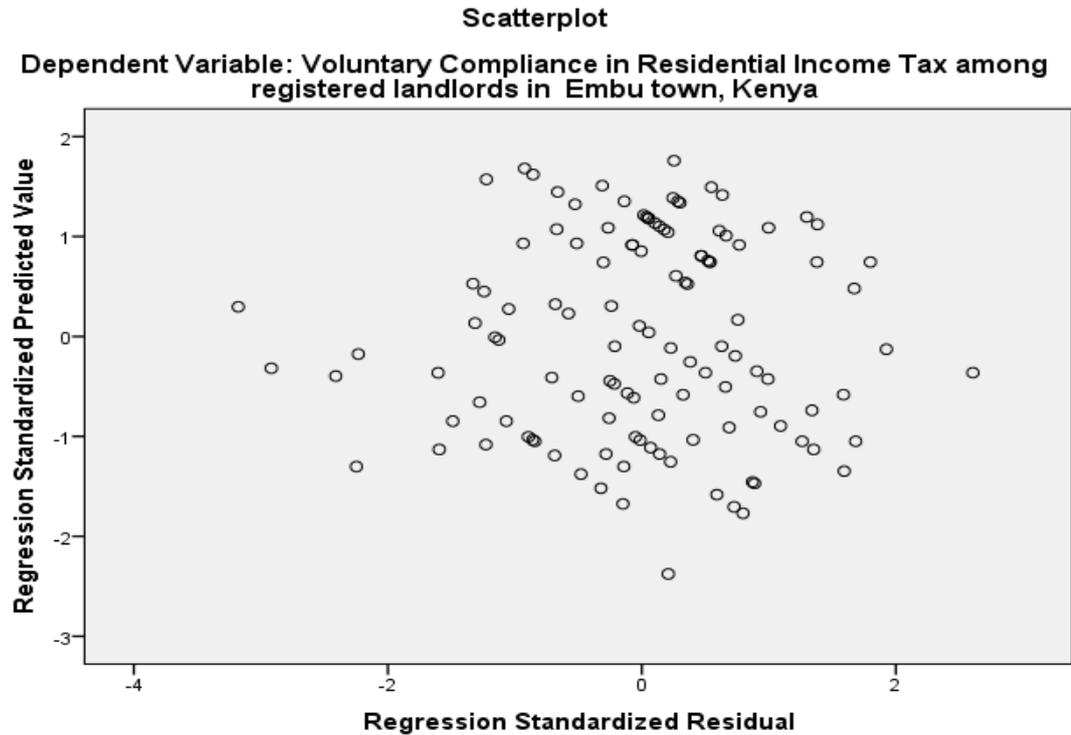
Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Tax Seminars	.537	1.864
	Media Services	.437	2.286
	Mobile Services	.415	2.411

*Source: Research Data (2021)*

The results on table 4.9 indicated that that there was no threat of multicollinearity since the VIF values were between 1 and 10

#### 4.4.6 Homoscedasticity Test

Homoscedasticity test is used to test whether the variance of the residuals from a model are constant. If the variances are not constant then there is a problem of Heteroscedasticity. Homoscedasticity was tested using scatter plots as shown on figure 4.6 overleaf.



**Figure 4.6 Homoscedasticity Test – Scatter Plot**

*Source: Research Data (2021)*

By visualizing the scatter plot, it was noted that standardized residual values have the same dispersion around the regression line meaning they have equal spread eliminating the problem of Heteroscedasticity.

#### **4.4.7 Bivariate Pearson Correlation Analysis**

Pearson correlation analysis was conducted to determine the relationship between the dependent variable Voluntary Compliance in Residential Income among registered landlords in Embu town, Kenya and the independent variables Tax Seminars, Media Services and Mobile Services.

**Table 4.10: Bivariate Pearson Correlation Analysis**

		<b>Voluntary Compliance in Residential Income among registered landlords in Embu town, Kenya</b>	<b>Tax Seminars</b>	<b>Media Services</b>	<b>Mobile Services</b>
Voluntary Compliance in Residential Income among registered landlords in Embu town, Kenya	Pearson Correlation Sig. (2-tailed) N	1   120			
Tax Seminars	Pearson Correlation Sig. (2-tailed) N	.634** .000 120	1  120		
Media Services	Pearson Correlation Sig. (2-tailed) N	.678** .000 120	.618** .000 120	1  120	
Mobile Services	Pearson Correlation Sig. (2-tailed) N	.659** .000 120	.644** .000 120	.723** .000 120	1  120

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

Source: Research Data (2021)

Table 4.10 reveals that all the three independent variables and dependent variables have a positive and significant association at 1% significance level. There was a strong positive and significant association between Tax Seminars and Voluntary Compliance in Residential Income among registered landlords in Embu town, Kenya as shown by ( $r = 0.634$ ) at 1% significance level. The findings also revealed a strong positive

association between Media Services and Voluntary Compliance in Residential Income among registered landlords in Embu town, Kenya as shown by ( $r = 0.678$ ) at 1% significant level. The results also revealed a strong significant association between Mobile Services and Voluntary Compliance in Residential Income among registered landlords in Embu town as shown by ( $r = 0.659$ ) at 1% significance level. The findings therefore implied that Tax Seminars, Media Services and Mobile Services have a significant influence on Voluntary Compliance in Residential Income tax among registered landlords in Embu town, Kenya.

#### 4.5 Regression Analysis

Having ensured that the assumptions of the multiple regression analysis were not violated, the study employed multiple regression analysis to determine the relationship between the Outcome variable Voluntary Compliance in Residential Income among registered landlords in Embu town, Kenya and the predictor variables Tax Seminars, Media Services and Mobile Services. The findings were presented using model summary, Analysis of Variance (ANOVA) and Coefficients as follows;

**Table 4.11 Model Summary**

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.747 <sup>a</sup>	.558	.547	.47485

a. Predictors: (Constant), Mobile Services, Tax Seminars, Media Services

b. Dependent Variable: Voluntary Compliance in Residential Income among registered landlords in Embu town, Kenya

*Source: Research Data (2021)*

The findings on table 4.11, indicate that the coefficient of correlation denoted R was 0.747. This implies that there exists a strong association between the independent variables and the dependent variable of the study. The computed coefficient of determination denoted R squared of 0.558 that was adjusted to 0.547 was interpreted to mean that all the three predictor variables explain 54.7% of all changes in Voluntary

Compliance in Residential Income among registered landlords in Embu town, Kenya. As such, 45.3% of all changes in Voluntary Compliance in Residential Income among registered landlords in Embu town were explained by other factors not included in the study.

**Table 4.12: Analysis of Variance (ANOVA)**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	33.022	3	11.007	48.817	.000 <sup>b</sup>
	Residual	26.156	116	.225		
	Total	59.179	119			

a. Dependent Variable: Voluntary Compliance in Residential Income among registered landlords in Embu town, Kenya

b. Predictors: (Constant), Mobile Services, Tax Seminars, Media Services

Source: Research Data (2021)

The study found out that the model was a good fit based on  $F_{(3, 116)} = 48.817$ ,  $p=0.000 < 0.05$  and there was a linear relationship between the dependent and independent variables. Therefore, this implies that all the three predictor variables are a good fit in explaining Voluntary Compliance in Residential Income among registered landlords in Embu town, Kenya.

**Table 4.13: Multiple Regression Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.584	.267		2.186	.031
	Tax Seminars	.289	.090	.271	3.211	.002
	Media Services	.344	.096	.335	3.593	.000
	Mobile Services	.247	.098	.242	2.524	.013

a. Dependent Variable: Voluntary Compliance in Residential Income among registered landlords in Embu town, Kenya

Source: Research Data (2021)

The findings on table 4.13 established that when Tax Seminars, Media Services and Mobile Services are zero, Voluntary Compliance in Residential Income tax among registered landlords in Embu town will be 0.584

The study also established that holding other factors constant, a unit increase in Tax Seminars would lead to a 0.271 unit increase in Voluntary Compliance in Residential Income among registered landlords in Embu town as shown by ( $\beta_1=0.271$ ,  $p=0.002<0.05$ ). The study also established that holding other factors constant, a unit increase in Media Services would lead to a 0.335 unit increase in Voluntary Compliance in Residential Income among registered landlords in Embu town as shown by ( $\beta_2=0.335$ ,  $p=0.000<0.05$ ). The study further established that holding other factors constant, a unit increase in Mobile Services would lead to a 0.242 unit increase in Voluntary Compliance in Residential Income among registered landlords in Embu town as shown by ( $\beta_3=0.242$ ,  $p=0.013<0.05$ ).

#### **4.6 Optimal Regression Model**

The optimal regression model drawn from the coefficients results was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

$$Y = 0.584 + 0.271 X_1 + 0.335 X_2 + 0.242 X_3 + \varepsilon$$

Where:

Y = Voluntary Compliance in Residential Income tax among registered landlords in Embu town, Kenya

$$\beta_0 = 0.584, \beta_1 = 0.271, \beta_2 = 0.335, \beta_3 = 0.242$$

X<sub>1</sub> = Tax Seminars

X<sub>2</sub> = Media Services

X<sub>3</sub> = Mobile services

$\varepsilon$  = Error Term

#### 4.7 Hypotheses Testing

**H<sub>01</sub>** Tax seminars has no significant effect on voluntary compliance in residential income tax among registered landlords in Embu town.

**H<sub>02</sub>** Media services has no significant effect on voluntary compliance in residential income tax among registered landlords in Embu town.

**H<sub>03</sub>**: Mobile services has no significant effect on voluntary compliance in residential income tax among registered landlords in Embu town.

The first null Hypotheses of the study H<sub>01</sub> was, Tax seminars has no significant effect on voluntary compliance in residential income among registered landlords in Embu town. The alternative hypothesis H<sub>1</sub> was, Tax seminars has a significant effect on voluntary compliance in residential income among registered landlords in Embu town.

In testing this hypothesis, a multiple regression analysis was done to establish the relationship between Tax seminars and voluntary compliance in residential income among registered landlords in Embu town. Based on the probability values (p-values) ( $\beta_1=0.271$ ,  $p=0.002<0.05$ ) the study rejected the first null hypothesis H<sub>01</sub> and accepted the alternative H<sub>1</sub> that Tax seminars has a significant effect on voluntary compliance in residential income among registered landlords in Embu town.

The second null Hypotheses of the study H<sub>02</sub> was, Media services has no significant effect on voluntary compliance in residential income among registered landlords in Embu town. The alternative hypothesis (H<sub>2</sub>) was, Media services has significant effect on voluntary compliance in residential income among registered landlords in Embu town.

In testing this hypothesis, a multiple regression analysis was done to establish the relationship between Media services and voluntary compliance in residential income

tax among registered landlords in Embu town. Based on the probability values (p-values) ( $\beta_2=0.335$ ,  $p=0.000<0.05$ ), the study rejected the second null hypothesis  $H_{02}$  and accepted the alternative  $H_2$  that Media services has a significant effect on voluntary compliance in residential income among registered landlords in Embu town.

The third null Hypotheses of the study  $H_{03}$  was, Mobile services has no significant effect on voluntary compliance in residential income among registered landlords in Embu town.. The alternative hypothesis  $H_3$  was, Mobile services has a significant effect on voluntary compliance in residential income among registered landlords in Embu town.

In testing this hypothesis, a multiple regression analysis was done to establish the relationship between Mobile services and voluntary compliance in residential income among registered landlords in Embu town.. Based on the probability values (p-values) ( $\beta_3=0.242$ ,  $p=0.013<0.05$ ), the study rejected the third null hypothesis  $H_{03}$  and accepted the alternative  $H_3$  that Mobile services has no significant effect on voluntary compliance in residential income among registered landlords in Embu town.

## CHAPTER FIVE

### SUMMARY, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.0 Introduction

This chapter presents the summary of findings. These were presented systematically based on the specific objectives of the study. Thereafter, the conclusions as well as the recommendations of the study are presented based on the findings. The chapter concludes by presenting suggestions for further studies.

#### 5.1 Discussion of the Findings

This sub-section discusses key findings of the study. The results of the Pearson Correlation analysis established that there was a strong positive and significant association between Tax Seminars and Voluntary Compliance in Residential Income among registered landlords in Embu town, Kenya as shown by ( $r = 0.634$ ) at 1% significance level. The findings also revealed a strong positive association between Media Services and Voluntary Compliance in Residential Income among registered landlords in Embu town, Kenya as shown by ( $r = 0.678$ ) at 1% significance level. The findings further revealed a strong significant association between Mobile Services and Voluntary Compliance in Residential Income among registered landlords in Embu town as shown by ( $r = 0.659$ ) at 1% significance level. The findings were Tax Seminars, Media Services and Mobile Services have a significant influence on Voluntary Compliance in Residential Income Tax among registered landlords in Embu town, Kenya.

The model summary results of the multiple regression analysis revealed a coefficient of determination of 0.558 which was adjusted to 0.547 which was interpreted to mean that all the three predictor variables explain 54.7 % of all changes in Voluntary Compliance in Residential Income tax among registered landlords in Embu town, Kenya.

With respect to the coefficients of the multiple regression analysis, the study also established that holding other factors constant, a unit increase in Tax Seminars would lead to a 0.271 unit increase in Voluntary Compliance in Residential Income tax among registered landlords in Embu town as shown by ( $\beta_1=0.271$ ,  $p=0.002<0.05$ ). The study also established that holding other factors constant, a unit increase in Media Services would lead to a 0.335 unit increase in Voluntary Compliance in Residential Income among registered landlords in Embu town as shown by ( $\beta_2=0.335$ ,  $p=0.000<0.05$ ). The study further established that holding other factors constant, a unit increase in Mobile Services would lead to a 0.242 unit increase in Voluntary Compliance in Residential Income tax among registered landlords in Embu town as shown by ( $\beta_3=0.242$ ,  $p=0.013<0.05$ ).

## **5.2 Summary of Findings**

### **5.2.1 Tax Seminars on Voluntary Compliance in Registered Landlords - Embu Town**

The first objective of the study was to determine the effect of Tax Seminars on Voluntary Compliance in Residential Income tax among registered landlords in Embu town. The results of the Pearson Correlation analysis established that there was a strong positive and significant association between Tax Seminars and Voluntary Compliance in Residential Income tax among registered landlords in Embu town, Kenya as shown by ( $r=0.634$ ) at 1% significance level.

With respect to the coefficients of the multiple regression analysis, the study also established that holding other factors constant, a unit increase in Tax Seminars would lead to a 0.271 unit increase in Voluntary Compliance in Residential Income among registered landlords in Embu town as shown by ( $\beta_1=0.271$ ,  $p=0.002<0.05$ ). The finding was supported by the study rejecting the first null hypothesis and accepting the

alternative based on the computed probability and test of significance values. The fact that tax seminars are conducted exactly as a classroom setting complete with fliers, pamphlets, flip charts/in some instances chalk boards with markers for demonstration makes it easy for taxpayers to understand what is being taught. In instances where questions still linger after such seminars, taxpayers are encouraged to visit the nearest KRA station. The channel is quite effective in putting the message across and also creates a strong bond between the tax agency and the tax-paying masses. Tax seminars is a unique channel of educating the masses and its place cannot be taken by any other for the reasons stated above. Additionally, this channel is quite effective in terms of exposing existing taxpayers and potential ones to the practical aspect of how to compute their correct share of taxes regardless of the tax head. It also exposes them to the practical aspect of how a tax return looks like and how it is supposed to be filed. This approach may not be possible with the other two approaches ie. media services and mobile services. In this regard therefore the researcher's opinion is that more satellite stations should be established in order to bring the taxpayer education function and every other services provided by KRA closer to the tax-paying masses.

### **5.2.1 Media Services on Voluntary Compliance in Registered Landlords - Embu Town**

The second objective of this study was to determine the effect of Media Services on Voluntary Compliance in Residential Income tax among registered landlords in Embu town. The results of the Pearson Correlation analysis revealed a strong positive association between Media Services and Voluntary Compliance in Residential Income tax among registered landlords in Embu town, Kenya as shown by ( $r = 0.678$ ) at 1% significance level. With respect to the coefficients of the multiple regression analysis, the study also established that holding other factors constant, a unit increase in Media Services would lead to a 0.335 unit increase in Voluntary Compliance in Residential

Income tax among registered landlords in Embu town as shown by ( $\beta_2=0.335$ ,  $p=0.000<0.05$ ). The finding was supported by the study rejecting the first null hypothesis and accepting the alternative based on the computed probability and test of significance values. The channel is the most effective of the three courtesy of its ability to reach millions of people at a go. Though it costs the government quite a hefty sum of money to sensitize through print media, social media, television, radio (and mostly the FM stations) across the nation, it is worth noting that according to the Taxpayer's Charter, a taxpayer has a right to tax information. This is the channel to use if the government hopes to reduce compliance costs for both the taxpayers and the agency. It should be noted that media services as a channel stands in its own league as the kind of tax information spread through media is less technical than the kind of tax information imparted through tax seminars. In the researcher's opinion this channel effectively complements tax seminars.

### **5.2.3 Mobile Services on Voluntary Compliance in Registered Landlords - Embu Town**

The third objective was to determine the effect of Mobile services on Voluntary Compliance in Residential Income tax among registered landlords in Embu town, Kenya. The results of the Pearson Correlation analysis revealed a strong significant association between Mobile Services and Voluntary Compliance in Residential Income among registered landlords in Embu town as shown by ( $r =0.659$ ) at 1% significance level. The coefficients of the multiple regression analysis established that a unit increase in Mobile Services would lead to a 0.242 unit increase in Voluntary Compliance in Residential Income among registered landlords in Embu town as shown by ( $\beta_3=0.242$ ,  $p=0.013<0.05$ ). The finding was supported by the study rejecting the first null hypothesis and accepting the alternative based on the computed probability and test of significance values. This method of taxpayer sensitization demonstrates how

committed the tax authority is to the already existing tax-paying masses and potential taxpayers by 'returning the favour' at least every October of the year. Visits and stop overs are geared towards getting to understand taxpayers' concerns, challenges. The advantages of this channel of taxpayer sensitization is that pressing taxpayers' concerns are addressed on the spot as the bus is fully equipped with internet and the iTax system is also enabled. The channel creates a bond between the tax agency and the tax-paying publics as it is structured in such a manner that it is seen as a time when the agency is out to 'return the favour' from the neighborhood and just like tax seminars above, it is quite effective. Again this channel also complements the above two.

### **5.3 Conclusions**

From the findings, the study concluded that Tax Seminars, Media Services and Mobile services have a significant and positive effect on Voluntary Compliance in Residential Income tax among registered landlords in Embu town.

### **5.4 Recommendations**

Given the invaluable role that taxpayer sensitization plays in getting taxpayers to understand the why, the when and the how to pay their right share of taxes, it must be understood that taxpayers must be taken through what their rights and obligations are as far as tax matters go. This therefore means that the government must be prepared to, on a yearly basis allocate sufficient funds to this cause to ensure that Kenya boasts of knowledgeable taxpayers (in tax matters) who have no reason evade paying their taxes. Each of the three channels of taxpayer sensitization discussed in this research paper is unique in its own way. The role played by tax seminars is unique from that played by media services and it is also distinct from the role played by mobile services. This implies that the three channels play complementary roles. This therefore means that there is need for the tax message to continue to be broadcasted using the three channels

so as to get every existing and potential taxpayer to know their rights and obligations and possibly ensure taxpayers pay their correct share of taxes. As the taxpayers become more equipped in tax knowledge, rights and also obligations and become more compliant, naturally speaking they would expect to see proper application of the taxes paid intimated one respondent.

### **5.5 Suggestions for Future Studies**

Given that all the three predictor variables explain 54.7% of all changes in voluntary compliance in Residential Income tax among registered landlords in Embu town, Kenya and that 45.3% of all changes were explained by other factors not included in the study, other studies should be conducted to determine, the effect of Tax Clinics on voluntary compliance among registered taxpayers in Value Added Tax.

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## APPENDICES

### Appendix 1: Annual Rental Income Tax Performance

#### Annual Rental Income Tax Performance – Meru Town

<b>Financial Year</b>	<b>Target in (Ksh.)</b>	<b>Amount Collected (Ksh)</b>	<b>Performance in %</b>
2016/2017	54,903,574	36,698,387	66%
2017/2018	63,948,268	44,968,247	70%
2018/2019	73,790,693	58,297,679	79%
2019/2020	82,466,369	70,096,414	85%

#### Annual Rental Income Tax Performance Nyeri Town

<b>Financial Year</b>	<b>Target in (Ksh.)</b>	<b>Amount Collected (Ksh)</b>	<b>Performance in %</b>
2016/2017	52,395,855	32,395,558	62%
2017/2018	62,957,456	42,783,600	67%
2018/2019	72,899,792	53,900,783	73%
2019/2020	84,477,590	67,582,072	80%

#### Annual Rental Income Tax Performance - Kerugoya Town

<b>Financial Year</b>	<b>Target in (Ksh.)</b>	<b>Amount Collected (Ksh.)</b>	<b>Performance in %</b>
2016/2017	51,965,232	34,816,705	67%
2017/2018	54,837,382	38,934,541	71%
2018/2019	57,389,456	43,042,092	75%
2019/2020	61,393,485	50,342,658	82%

**Annual Rental Income Tax Performance – Thika Town**

<b>Financial Year</b>	<b>Target in (Ksh.)</b>	<b>Amount Collected (Ksh.)</b>	<b>Performance in %</b>
2016/2017	57,759,549	37,292,483	65%
2017/2018	66,892,487	45,676,587	68%
2018/2019	76,280,982	56,387,286	76%
2019/2020	87,423,849	72,480,943	88%

## Appendix 2: Questionnaire

### PART A

1. Name: (optional) .....
2. Age (A) 30- 45 years (B) 46 – 55 years (C) above 55 years (*please tick one*)
3. Educational level (A) primary school level (B) secondary school level (C) college level (*please tick one*)
4. Number of years as a landlord (A) 1- 10 years (B) 11-20 years (C) over 20 years (*please tick one*)
5. Total number of units/houses owned (A) 1- 10 units (B) 11 – 20 units (C) 20 and above (*please tick one*)

Please use the point scale below to indicate the extent to which you agree or disagree with the following statements by ticking one of the five boxes where 1 means you strongly disagree and 5 means your strongly agree as indicated beneath:

1	2	3	4	5			
<b>Strongly disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly agree</b>			
			1	2	3	4	5
<b>PART B: TAX SEMINARS</b>							
Given that the effectiveness of taxpayer sensitization is based upon the capabilities of both the taxpayer and to some significant extent that of facilitator, please indicate the extent to which you agree with the following statements;							
1.	Taxpayer’s educational level has a favourable effect on correct tax declaration.						
2.	Simplicity of tax law positively affects timely filing of tax returns.						

3.	Frequency of tax seminars has a favourable effect on correct tax payments.					
4.	Simplicity of tax law has a positive effect on correct tax declaration.					
5.	Taxpayer's educational level positively affects ability to make correct tax payment.					
6.	Frequent tax seminars has a favourable effect on timely filing of tax returns.					
7.	iTax system availability has a favourable effect on timely filing of tax returns.					
<b>PART C: MEDIA SERVICES</b>						
8.	Regular tax talks have a positive effect on correct tax declaration.					
9.	The timing of tax talks has a positive effect on correct tax payment.					
10.	The type of medium used has a positive effect on timely filing of returns.					
11.	Presenter's proficiency in tax law has a positive impact on correct tax declaration.					
12.	Timing of dissemination of tax law has a favourable effect on timely filing of tax returns.					
13.	Taxpayer's age bracket has a positive effect on timely correct declaration.					
14.	The type of medium used positively impacts correct tax payment.					

<b>PART D: MOBILE SERVICES</b>						
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
15.	Regularity of mobile services has a positive effect of timely filing of tax returns					
16.	Availability of iTax system has a favourable effect on correct timely filing of tax returns					
17.	Simplicity of tax law has a favourable effect on correct tax declaration					
18.	Facilitator's command of local dialect has a favourable effect on correct tax declaration.					
19.	Continuous mobile services positively impacts timely filing of tax returns.					
20.	Facilitator's proficiency in local dialect positively affects tax payments' correctness.					
<b>PART E: COMPLIANCE</b>						
To what extent do you agree that the following are indicators of voluntary compliance among registered landlords in Embu town;						
21.	Timely filing of tax returns					
22.	Correct tax declarations					
23.	Correct tax payments					
24.	Maintenance of requisite tax records					
25.	Willingness to provide tax records when required.					

### Appendix 3: Reliability Test

#### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Age	112.2744	296.899	.172	.890
Educational Level	112.3160	300.273	.031	.892
Number of years as Landlord	112.8327	300.578	.009	.892
Total number of houses owned	112.7410	297.909	.147	.890
taxpayer's educational level has a favourable effect on correct declaration.	111.1494	286.043	.384	.888
Simplicity of law positively affects timely filing of returns.	111.2827	3.581	.437	.887
Frequency of tax seminars has a favourable effect on correct payments.	111.3744	278.560	.515	.885
Simplicity of law has a positive effect on correct declaration.	111.3494	286.843	.325	.889
taxpayer's educational level positively affects ability to make correct payment.	111.3994	282.071	.430	.887
Frequent tax seminars has a favourable effect on timely filing of returns.	111.4077	281.098	.490	.886
i system availability has a favourable effect on timely filing of returns.	111.1744	284.784	.367	.888
Regular talks have a positive effect on correct declaration.	111.3577	295.629	.106	.893
The timing of talks has a positive effect on correct payment.	111.2744	280.062	.491	.885
The type of medium used has a positive effect on timely filing of returns.	111.2494	281.652	.423	.887
Presenter's proficiency in law has a positive impact on correct declaration.	111.3827	273.547	.580	.883
Timing of dissemination of law has a favourable effect on timely filing of returns.	111.2660	280.203	.463	.886
taxpayer's age has a positive effect on timely correct declaration.	111.5160	280.711	.429	.887
The type of medium used positively impacts correct payment.	111.3660	281.401	.410	.887
Regularity of mobile services has a positive effect of timely filing of returns	111.2494	282.648	.383	.888

Availability of i system has a favourable effect on correct timely filing of returns	111.1744	280.995	.500	.885
Simplicity of law has a favourable effect on correct declaration	111.4244	287.108	.272	.890
Facilitator's command of local dialect has a favourable effect on correct declaration.	111.3077	279.428	.443	.887
Continuous mobile services positively impacts timely filing of returns.	111.4577	281.058	.422	.887
Facilitator's proficiency in local language positively affects payments' correctness.	111.4494	280.511	.430	.887
Timely filing of returns	111.2077	277.619	.460	.886
Correct declarations	111.0827	282.280	.509	.885
Correct payments	111.1577	284.447	.390	.888
Maintenance of requisite records	111.1744	285.639	.386	.888
Willingness to provide records when required.	111.2744	280.062	.491	.885
Tax Seminars	111.3053	282.354	.828	.883
Media Services	111.3446	280.761	.867	.882
Mobile Services	111.3438	280.764	.864	.882
Voluntary Compliance in Residential Income	111.1794	281.090	.830	.883

**Appendix 4: Research License**

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