

UNIVERSITY OF CAPE COAST

TAX COMPLIANCE BEHAVIOUR AMONG SELF-EMPLOYED  
PERSONS IN THE CAPE COAST METROPOLIS

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## ABSTRACT

This study examined the influence of non-economic factors such as socio-economic factors and psychological components which have the tendency of influencing tax compliance.

The study was based on the Fisher tax compliance model. A partial modification of the model was done by incorporating an important tax compliance determinant – “Tax Knowledge”. The effect of perceived tax fairness, tax knowledge, and tax complexity in tax compliance decisions among a sample of 350 self-employed persons in Cape Coast metropolis was explored. Descriptive correlational design was adopted in the study.

The data was analysed by multiple regression, ANOVA and Chi square methods which were undertaken with SPSS software. The findings revealed that simultaneously, perceived tax fairness, tax knowledge and tax complexity influence taxpayers’ compliance decisions. While the partial test showed that both tax fairness and tax knowledge affect the tax compliance among SMEs taxpayers in Cape Coast while the tax complexity/ structure did not give any significant effect on tax compliance.

The results of the study suggest that tax knowledge is a key factor which determines tax compliance levels of the self employed especially in the self assessment system. It is, therefore, recommended that tax education programmes be designed for the self employed to help improve on their tax knowledge.

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## **DEDICATION**

To my parents, Chris Kog Feruta-Benee, Mary Feruta and my loving and caring  
siblings, Dorothy, Bertha, Jessica, Gillian and Daniel Feruta.

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## LIST OF ACRONYMS

DTRD	Domestic Tax Revenue Division
GEDC	Ghana Enterprise Development Commission
GLSS	Ghana Living Standard Survey
GNI	Gross National Income
GRA	Ghana Revenue Authority
GSS	Ghana Statistical Service
IRS	Internal Revenue Service
LTU	Large Taxpayers Unit
NBSSI	National board for Small Scale Industries
PAYE	Pay As You Earn
SBE	Small and Business Enterprises
SME	Small and Medium Enterprises
TCOMP	Tax complexity
TCOMP <sub>i</sub>	Tax compliance
TFAIR	Tax fairness
TIN	Tax Identification Number
TKNOW	Tax knowledge
UK	United Kingdom
USA	United States of America
SHS	Senior High School
CCMA	Cape Coast Metropolitan Area
IRA	Internal Revenue Act
RGD	Registrar General Department

SSNIT	Social Security and National Insurance Trust
FA	Factor Analysis
OLS	Ordinary Least Squares
CCM	Cape Coast Metropolis
KMO	Kaiser-Meyer-Olkin
VIF	Variance Inflation Factor

## CHAPTER ONE

### INTRODUCTION

#### **Background of the study**

Tax compliance has long been an issue for governments throughout the world and there is a large and rich research literature in this field. Whichever specific aspect a research focuses on regarding the level of and reasons for individuals, companies and other entities to avoid or meet their legal tax obligations, the overall objective is effectively the same, namely to shed light on government and tax authority policies in raising revenue in order to finance government expenditure. This is because a basis for good government and a key to the wealth of a nation is tax (Mohd, 2013).

Historically, within the broad field of tax compliance, the weight of research has been based on economic deterrence models using the economic factors in the tax structure, such as tax audits and penalties, to deter tax evasion. However, this focus has faced various criticisms particularly from researchers and tax administrators who understood the importance of both economic and non-economic factors in shaping taxpayers' attitudes (Mohd, 2013).

Studies on tax compliance have been carried out since the 1960's. It has been studied thoroughly by academics, professionals and government agencies especially in the United States and other western countries (Ayub, 1994).

Research on tax compliance can be done in various fields such as accountancy, economics, criminal law, psychology, and sociology (Fisher, Mark & Wartick, 1992). Economic interdependence and trade liberalisation treaties

among nations have intensified in the twenty-first century (Prichard & Bentum, 2009). This phenomenon results in global competition among business organisations. Firms have increasingly sought ways to compete in order to survive and maintain market share. Businesses continue to compete on cost and a successful business is the one that best minimises its cost.

One area where most businesses are resorting to in the cost cut drive is taxation (Murphy, 2004). Tax represents cost of doing business and the basic underlying principle of every business transaction is to minimise cost and maximise after tax value. In Ghana, companies have resorted to the use of skilful measures in postponing, avoiding and evading tax payment. These measures are in line with their cost cutting and tax minimisation policies. This has resulted in a reduction in the amount of revenue the government derives from tax.

The government involvement in promoting national development has well been established in the public finance literature. It is often said that a country cannot experience any meaningful growth “without positive stimulus from intelligent governments” (Otiaku, 1992). This suggests that government’s role in public sector development is crucial to a country’s progress.

Governments derive their major revenue from the compulsory levy imposed on the citizens of a country. As Otiaku (1992) puts it “Taxation has become one of the key sources of domestic revenue. It is the major fiscal tool not only in mobilising the much needed public revenue but also for directing investment flow and other desirable socio-economic behaviour”. Generally,

income taxes are important sources of government revenue to all nations, especially developing countries.

Voluntary tax compliance of taxpayers is essential in mobilising needed revenue for government development programmes or expenditures. The failure to follow the tax provisions suggests that a taxpayer may be committing an act of non-compliance (Kirchler, 2009). One can then rationally conclude that since taxation is a very crucial tool in revenue mobilisation for the government, taxpayers must subject themselves to tax laws to discharge their tax paying obligations creditably.

The United States of America (USA) tax system differs from the systems of most (if not all) other countries in that it is a voluntary system, which means that USA taxpayers determine the amount of income reported and deductions taken on their own tax returns. As a result, the success of the federal individual income tax system is dependent on voluntary taxpayer compliance. This system of taxation in the USA is referred to as the “self-assessment system” (SAS) taxation.

The second major system of taxation practiced in other parts of the world is the “British approach”. Under this system, tax authorities have the sole responsibility of determining an individual’s tax liability except those of employees. This is the Pay As You Earn (PAYE). It is also evident that a tax that costs one dollar to collect in America, costs twice to collect in the United Kingdom (UK).

The tax administration system in Ghana combines both the SAS and the British approach. The Internal Revenue Service (IRS) set up Large Taxpayers



Unit (LTU) in 2003 to see to the collection of taxes from this group who contribute significantly to the total revenue of this country. The people under the LTU are allowed to adopt the SAS. Corporate bodies and self-business constitute the LTU. Individual taxpayers are allowed to adopt the British approach. In Ghana, they constitute a significant portion of the tax payer group. They are also the “difficult to tax” group of taxpayers because of the high cost associated with their assessment for tax and the fact that they do not have any permanent location address. This seems to be the reason why noncompliance level in the country is very high among taxpayers (Azah, 2005).

### **Statement of the problem**

Rakner (2002) stressed the importance of revenue as the lifeblood of the state and that taxation is the primary mechanism of revenue generation. He further emphasised that taxation is considered the most economically efficient way of transferring resources from the private to the public sectors. However, Bird (1984) shows that more than half of the potential tax revenues in most developing countries tend to remain uncollected. He further attributed uncollected tax revenue to the large size of the informal sector, dominated by the self-employed. Flynn (2003) also noted that revenue loss from non-compliance by individual taxpayers, particularly the self-employed were estimated to range from \$93.20 billion to \$95.30 billion for the tax year 1992 in the USA. Ghana Revenue Authority (GRA), recognising the high level of income tax non-compliance among the self-employed, has devised various unconventional means of taxation.

These are the standard assessment, identifiable groupings and, most recently, the tax stamp over the years to rope into the tax net as many self-employed persons as possible.

Song and Yarbrough (1978) demonstrate that in Ghana non-compliance by the self-employed is a major factor accounting for tax authorities receiving less than what the law allows. An effective income tax enforcement strategy is therefore warranted but the available studies in the field of taxation have mainly centered on the problems of tax administration (Otioku, 1988), public perception of tax evasion (Song & Yarbrough, 1978) and managing small size taxpayers (Terkper, 2003).

Behaviour of taxpayers is seen as one of the factors identified by the IRS that determines taxpayer compliance in the USA. Since the introduction of prospect theory in 1979, studies, either using it to explain taxpayer behaviour or testing it in a tax context, have shown mixed results (Schepanski & Shearer, 1995; Schisler, 1996; Copeland & Cuccia, 2002).

An extensive review of literature has revealed that studies on tax compliance behaviour of taxpayers in the Ghanaian taxation system are few. The weight of these few research works have been based on economic deterrence models. This implies the use of economic factors in the tax structure, such as tax audits and penalties, to deter tax evasion. However, this focus has faced various criticisms particularly from researchers and tax administrators who understood the importance of both economic and non-economic factors in shaping taxpayers' attitudes (Mohd, 2013). For instance, the studies of Baba and Asante (2012) have

concentrated largely on the use of sanctions and punitive measures to ensure compliance.

The taxpayer compliance attitude is however not solely dependent on the use of economic deterrence model only but other factors such as perception of tax fairness, level of education, tax knowledge and tax complexity among others. Jackson and Milliron (1986) listed 14 main factors that have influenced tax compliance as discussed by various researchers. These factors are age, gender, education, income, occupation or status, peers' or other taxpayers' influence and ethics. The rest are legal sanction, complexity, and relationship with taxation authority, income sources, perceived fairness of the tax system, possibility of being audited and tax rate.

Various researchers have listed factors that influenced tax compliance such as demographic, income, compliance cost and tax agents, in addition to moral or ethical factors (Singh, 2003a; Kasipillai, Aripin & Amran, 2003). Alm, Sanchez and De Juan (1995) argued that explaining tax compliance “requires recognising of-crime the myriad of factors that motivate individual behaviour, factors that go beyond the standard economics- approach to include theories of behaviour and other social sciences”. Rather than relying heavily on the narrow economic approach to encourage tax compliance, it is better to explore other approaches to understand non-economic factors that might influence taxpayers' behaviours (James, Murphy & Reinhart, 2005). For instance, a social psychological approach is more appropriate to explore the willingness of taxpayers to comply with tax laws. In short, the deterrence model does not explain

the reasons why many people willingly comply with tax laws. Friedland, Thibaut and Walker (1973) argued that the notion of general deterrence was too simplistic and acknowledged the theory of inequity in their later research, as a relevant factor in influencing people to comply with sets of laws.

Culture differences among taxpayers in different regions of Ghana can have a potential influence on their behaviour and level of compliance. Overall, empirical studies have reported that differences in tax compliance across countries are as a result of differences in ethnicity and culture.

In a cross-country study, Chan, Troutman and O'Bryan (2000) explored the effect of differences in ethnic background between USA and Hong Kong in the context of taxpayer compliance behaviour. The study noted significant differences between USA taxpayers and Hong Kong taxpayers in respect of moral development and attitude towards the tax system, and, in sum, USA taxpayers were more compliant than Hong Kong taxpayers. A study of taxpayers' behaviour in a different region apart from Greater Accra is therefore necessary to offer a better understanding of taxpayers in Ghana.

### **Objectives of the study**

The general objective of the study is to ascertain reasons for tax compliance among the taxpayers in the informal sector. The specific objectives the study intends to achieve are to:

- i. Examine the relationship between socio-demographic characteristics of self-employed and tax compliance.

- ii. Examine the typology of tax compliance among the self- employed.
- iii. Examine the determinants of income tax compliance among the self- employed.
- iv. Analyse how factors influencing tax compliance vary across socio- demography of self-employed persons.

### **Research questions**

Based on the objectives set, the following research questions were posed:

- i. How do demographic characteristics affect income tax compliance?
- ii. How do the self-employed approach their taxpaying responsibilities in the context of their economic activity and social relationships?
- iii. What are the factors that influence income tax compliance among the self- employed?
- iv. How do the determinants of income tax compliance vary across the socio- demography of the self-employed?

### **Hypotheses**

The hypotheses are presented below in the null form

H<sub>1</sub>: Education does not improve tax knowledge of individual taxpayers

H<sub>2</sub>: Tax Knowledge does not influence tax compliance among the self-employed.

H<sub>3</sub>: There is no association between tax fairness and tax compliance of the self - employed.

H<sub>4</sub>: Tax complexity does not influence tax compliance of the self-employed.

### **Significance of the study**

This study examines the taxpayer compliance behaviour in the context of the Ghanaian system of taxation. The significance of this study is that the findings can be used by policy makers in order to make a sound policy in relation to providing tax education as a means of reducing tax noncompliance attitude of taxpayers. A study of this type is essential both for the development of tax enforcement strategies and to build an inductively derived conceptual foundation for future research. The former is relevant to the taxing authorities in mobilising the much-needed revenue for its developmental projects. Since the GRA is responsible for developing these strategies for public revenue generation, this study provided some strategies for decision-making.

The academia is also a beneficiary of this study by relying on the inductively derived conceptual foundation of this study for further research into taxpayer compliance behaviour.

This study contributes to the existing literature by unveiling the major theories explaining taxpayer behaviour. It also contributes to our understanding of the system of taxation in Ghana by looking at the tax laws, the enforcement process, tax administration and tax reforms. The study also makes recommendations which will ensure voluntary compliance.

### **Organisation of the study**

The first Chapter gave a background of the system of taxation in Ghana, the challenges and its importance to the economy of Ghana. The main aim of this chapter was to lay the foundation and provide the building blocks for conducting the research. The rest of this study was organised as follows: Chapter two reviewed the related literature under two themes; the theoretical framework and the conceptual framework relating to tax compliance. It also tried to provide empirical evidence of similar studies conducted in other parts of the world.

Chapter three discussed the methodology used to obtain the data, the research design employed and the sampling techniques used in the study. Chapter four analysed and discussed the results or findings. Lastly, the summary, conclusions and recommendations were covered in chapter five.

## CHAPTER TWO

### REVIEW OF RELATED LITERATURE

#### Introduction

The review of related literature brings together the theoretical studies and concepts that provide the background for the study. This chapter will cover the literature on tax compliance, definition of tax fairness, impact of perceptions of tax fairness towards tax compliance, dimensions of tax fairness, tax structure and demographic characteristics such as gender, age, educational level and marital status and its impact on tax compliance. Furthermore, literature on the causes of non-compliance as promulgated by Kidder and Craig (1989) is reviewed. Theories that attempt to explain taxpayer behaviour when faced with a compliance decision are discussed.

#### **Definition of Small and Medium Enterprises (SMEs), the Informal sector and Self-employed.**

The definition and criteria of Small and Medium Enterprises (SMEs) vary in each country. In principle, the definition and criteria of SMEs are based on the following aspects: (1) the amount of labour, (2) income, (3) the amount of assets.

The proposed formula is based not only on the revenues of a company, but also takes into account the country-specific economic context in which the SME operates. By this formula, for example, an SME in Ghana would be defined as having annual turnover of between \$23,700 and \$2,370,000. In Thailand, however, whose Gross National Income (GNI) per capita is five times that of



Ghana, SMEs would be those companies with revenues ranging from \$84,400 to \$8,440,000. In all economies, they constitute the vast majority of business establishments. They are usually responsible for the majority of jobs created and account for two thirds of the turnover of the private sector (Abor & Quartey, 2010).

According to Tonge (2001), the diversity of SMEs sector necessitates the modification of its definition according to the particular geographic, sectoral or other contexts in which the small firms are being considered. In adherence to the suggestion by Tonge as posited earlier, and for the purpose of this study, the following working definition is proposed:

SME is defined as an entity which employs from 4 and up to 30 employees.

#### *Tax obligations of SMEs*

The information policy of taxation for cooperatives and SMEs explains the tax obligations for Cooperatives and SMEs. These are signing up to get a Tax Identification Number (TIN) and establish themselves as taxable entrepreneur; SMEs are further required to deposit and report income tax of people, personal and other tax; they are to perform value-added tax collection, deposit and report it (if designated as taxable entrepreneurs).

*The informal sector*

A number of attempts made by different researchers and national authorities to define the concept have resulted in diverse definitions. Some varied definitions are presented as follows:

- (a) “All economic activities that contribute to the officially calculated Gross National Product (GNP) but currently unregistered” (Feige, 1989).
- (b) “Market-based production of goods and services, whether legal or illegal, that escape detection in the official estimates of the GDP”(Smith,1994).
- (c) Fleming, Roman and Farrell (2000) that stated “currently there are two approaches to defining informal sector activity: the definitional and behavioural”.

Informal sector is economic activity unrecorded in the official statistics such as the Gross Domestic Product (GDP) and or the national income accounts. Behavioural approach, on the other hand, maintains that “informal sector is based on whether or not activity complies with the established judicial, regulatory, and institutional framework” (Farrell et al, 2000).

In Ghana, the informal sector and the self-employed account for over 80% of the total employment (GLSS5, 2010). This means that any policy aimed at maximising tax collection should target the self-employed. However, developing the appropriate tax system that will effectively rope into the tax net as many self-employed people as possible is always difficult. Even if the appropriate tax policy is formulated, there has always been the difficulty on the part of tax administrators in reaching out to the self-employed which makes them highly non-compliant to tax regulations (Thuronyi, 2003). The self-employed, for that

matter, the informal sector is usually perceived as a difficult to tax group. Some factors contributing to this are predominance of cash transaction, low standard of record keeping and lack of voluntary compliance.

### *Self-employed*

Camel (2000) defines self-employed as persons working for themselves who may or may not employ other workers or members of the family, who help to run an enterprise without payment. Fairlie (2005) explains the self-employed as those individuals who identify themselves as working for themselves in business, professional practice or farming.

### **Definition of key terms**

#### *Attitudes/ behaviour*

Ajzen (1991) defines an attitude as a disposition to respond favourably to an object, person, institution or event. According to Kirchler (2009) definitions to attitude refers to cognitive, affective and conative or behavioural facets. He explains cognitive responses to be expressions of beliefs about characteristics or attributes of an event or situation, for example: the belief that taxes are useful for the provision of public goods and services, or, that taxes are spent on wasted projects.

He further explains affective responses as feelings towards the attitude object, for example feelings related to taxes as a loss of earnings or evaluation of taxes as a means for income redistribution. Conative or behavioural responses are

explained as intentions and actions with respect to the attitude object for example responses to loopholes in the tax law. This study will rely to a very large extent on conative or behavioural facets of attitudes.

### *Attitudes toward taxes*

Attitudes represent the positive and negative evaluations that an individual holds of objects. It is assumed that attitudes encourage individuals to act according to them. Thus, a taxpayer with positive attitudes toward tax evasion is expected to be less compliant than a taxpayer with negative attitudes. Attitudes towards tax evasion are often found to be quite positive (Kirchler, Hoelzl, & Wahl, 2008). Several empirical studies reveal a statistically significant link between attitudes and self-reported behaviour (Chan et al., 2000). Equally, studies have established relationship between attitudes of taxpayers and compliance. The study of Oriviska and Hudson (2002) examined the attitudes to tax evasion and reported that evasion is condoned by large number of people who are particularly benefiting from it.

Nevertheless, because the link is weak in most of the studies, that is, attitudes cannot be fully perceived as a convincing proxy for behaviour, results have to be cautiously interpreted (Kirchler, 2009). The attitudes are important for both the power and the trust dimension. On the one hand, favourable attitudes will contribute to trust in authorities and consequently will enhance voluntary tax compliance. Attitudes towards the authorities will be relevant for the interpretation of the use of power as benevolent or malicious. Tax attitudes in

general also depend on the perceived use of the money collected and therefore are connected to knowledge (Kirchler *et al.*, 2008).

### **Understanding taxpayer attitudes and behaviour**

The increasing need by researchers to get an insight or better understanding of taxpayers' attitudes have led to the development of models of taxpayer behaviour. The decision of whether to pay taxes or not revolves around five models namely: social influence, economic deterrence, fiscal exchange, comparative treatment and political accountability (Kirchler *et al.*, 2008). These models are explained below.

#### **Social influence model**

On the social level, norms are usually defined as prevalence or acceptance of tax evasion among a reference group (Wenzel, 2003). Besides attitudes, norms are important determinants of tax compliance. Behavioural intentions are determined also by subjective norms (Ajzen, 1991). Norms are behavioural standards on three different levels: the individual level, the social level and the national level (Kirchler *et al.*, 2008). In the social influence model, compliance behaviour and attitudes towards the tax system is thought to be affected by the behaviour and social norms of an individual's reference group (Snively, 1990). It is reasonable to assume that human behaviour in the area of taxation is influenced by social interactions much in the same way as other forms of behaviour. Theoretical research on herd behaviour in economic situations has observed the

influence of peers, reference groups such as relatives, neighbours and friends on compliance behaviour and attitudes towards the tax system.

### **Economic deterrence**

Alm, Jackson and Mckee (1992) recognised that this model largely relied on the use of fear, force and duress to ensure compliance. They point that, this approach was developed based on the economics of crime model to optimise the public and private policies in fighting illegal behaviour since threats of punishment are expected to encourage lawful behaviour. It implies from the foregoing discussion that, *ceteris paribus*, if detection is likely and penalties are severe, few people will evade taxes. For instance, empirical data from western countries reveal that taxpayers pay much more tax than what could be accounted for even by the highest feasible levels of auditing, penalties and risk-aversion. The question therefore has switched from “why do people not evade taxes” to “why do people pay?” (Alm *et al.*, 1992).

### **Fiscal exchange**

Fiscal exchange model posits that individuals pay taxes with the hope of benefiting from the provision of social infrastructure by the government. It suggests that the presence of government expenditures may motivate compliance and that governments can increase compliance by providing goods that citizens demand in a more efficient and accessible manner (Tilly, 1992; Moore, 2004). Individuals may pay taxes because they value the goods provided by the

government, recognising that their payments are necessary both to help finance the goods and services and to get others to contribute (Fjeldstad and Semboja, 2001). The existence of positive benefits may increase the probability that taxpayers will comply voluntarily, without direct coercion.

### **Comparative treatment**

This model emanates from the equity theory. It is an extension of the fiscal exchange theory in which beyond the provision of social amenities from tax revenue, individual taxpayers try to compare the benefits they get with that of other taxpayers in different communities. Within the comparative treatment theory, we assume individuals who perceive that they and their group are fairly treated by the government are more likely to have a tax compliant attitude. This group is defined by wealth, education, age, religion, ethnicity, etc. (Kirchler *et al.*, 2008).

### **Political legitimacy**

This model examines the extent to which citizens, for that matter, taxpayers have confidence and trust in government and revenue authorities. According to the political legitimacy theory, tax compliance is influenced by the extent to which citizens trust their government (Kirchler *et al.*, 2008). From the theory, it can be expected that individuals who have trust in tax authorities are to be more tax compliant than those who do not have any trust in tax authorities.

## **Tax compliance**

James and Alley (2000) considers tax compliance in terms of the tax gap, which is the difference between “true” individual income tax liability and that finally collected on a voluntary basis or by enforcement action. Tax compliance means obeying tax laws. According to Singh (2003b), the definition of tax compliance is an action by a person filing his Income Tax Form (or usually referred as Returns), declaring all taxable income accurately, and disbursing the payable tax within the stipulated time without getting the tax authority to keep reminding or taking action against those noncompliance taxpayers.

From the economic point of view, tax compliance has been defined as compliance with reporting requirements, meaning that the taxpayer files and pays all required tax returns at the proper time and that the returns accurately report tax liability in accordance with the taxing system applicable at the time the return is filed (Devos, 2005). This definition holds an important extension from the previous definition by James and Alley (2000), which is the timing issue. Late tax payments cannot be considered as proper compliance as cash today is worth more than cash tomorrow. The rationale behind this notion is that whenever a government does not collect tax payments on time, it would be forced to either cut public expenditure or increase the amount it has to raise elsewhere (James & Alley, 2000). It is further asserted that although late payments of tax fit many of the ‘tax gap’ measures, they do not represent full compliance.

Several reasons have been identified to account for income tax non-compliance. Researchers such as Fischer, Wartick and Mark (1992) and Chau and



Leung (2009) found some of the reasons for non-compliance to include but not limited to complex tax system, peer influence, income levels and weak enforcement of tax laws.

The concept of compliance cannot always be clearly applied because circumstances for many individuals are inherently ambiguous (Schepanski & Shearer, 1995 as cited in Flynn, 2003). Reasons for noncompliance may extend beyond a deliberate attempt to understate tax liability. Deliberately understating tax liability constitutes tax evasion, which is illegal. Interpreting an ambiguous Code section, U.S. Treasury Regulation, or court opinion in a manner that reduces tax liability constitutes tax avoidance, which is legal. Although both tax evasion and tax avoidance are aggressive behaviours, this study will focus on tax avoidance behaviour.

For the purposes of this study, compliance is defined using the definition resulting from a multidisciplinary study on tax compliance commissioned by the IRS.

“Compliance with reporting requirements means that the taxpayer files all required tax returns at the proper time and that the returns accurately report tax liability in accordance with the Internal Revenue Code, regulations, and court decisions applicable at the time the return is filed” (Roth, Scholz & Witte, 1989: 2).

## **Noncompliance**

Noncompliance refers to not abiding by the tax laws. Based on the operational definition of tax compliance, “noncompliance can occur through failure to file a return, misreporting income, or misreporting allowable subtractions from taxable income or taxes due (that is, exemptions, deductions, adjustments, and tax credits)” (Roth et. al., 1989).

The types of noncompliance include the following: (i) the case of filing- this noncompliance refers to non-filing of returns to the tax authority which will lead to tax gap i.e. the amount of unpaid taxes due foregone. (ii) The non-payment compliance refers to untimely taxes paid. (iii). issue on noncompliance and tax underreporting. The taxpayer practises no reporting by way of evasion and also avoidance, both are same except that the latter is legal while the former is illegal. This area of noncompliance poses a serious problem to tax authority because these taxpayers escape tax and their burden is pushed to the other complying taxpayers. This is where the fair and equitable tax system is questionable.

Braithwaite (2003) argues both taxpayers’ attitudes towards the tax system and their tax paying behaviour together will have influence on the level of noncompliance. Therefore both have to be measured to understand overall levels of noncompliant behaviour. A major difficulty in analysing noncompliance is in its methods of measurement. For the period from 1971 to 1994, the size of Malaysian tax evasion was estimated at an average of 20 percent based on the cash transactions approach (Kasipillai, Baldry & Rao, 2000). The measurement of

tax evasion is based on the difference between the amount of cash used and the amount of cash expected to be used (Kasipillai et al., 2000).

#### *Tax evasion*

It refers to the illegal means of failing to pay legally due taxes. This is a crime punishable under the laws of Ghana. It refers to the use of various illegal means to reduce taxes. Tax evasion is illegal when it works outside the framework of tax laws and regulations by understating income or claiming ineligible deductions (Sandmo, 2005). Centuries ago, Plato observed that where there is an income tax, the just man will pay more and the unjust less on the same amount of income.

#### *Tax avoidance*

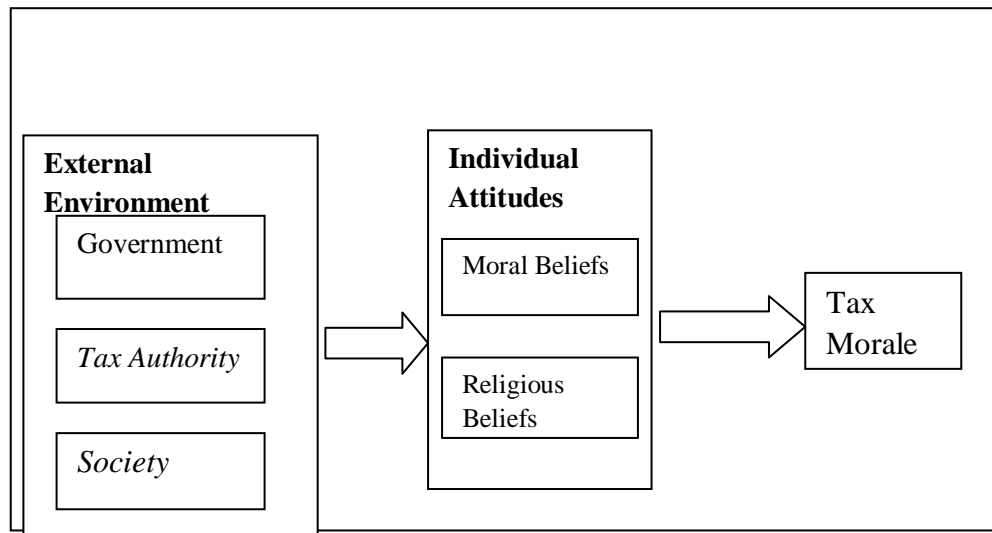
Tax avoidance is a legal means of reducing your tax obligation. This is achieved through careful planning supported by court decisions. Tax avoidance is associated with minimising tax liability within the legal limits of the tax laws and regulations (Sandmo, 2005) or understating tax liability due to misunderstandings caused by the complexity or ambiguity of the tax laws (Slemrod, 2007).

#### *Tax morale*

Tax morale is suggested by Frey (2003) to be a combination of extrinsic motivation that comes from the rewards and punishments imposed by the external environment and intrinsic motivation that comes from the inner values that guide

taxpayers' behaviours and decisions. It is this combination of extrinsic and intrinsic factors which motivates taxpayers to incline towards positive or negative attitudes regarding the question of accomplishment or neglect of their duties. Riahi-Belkaoui (2004) has suggested adding social and religious norms as determinants of tax compliance to complete the contingency theory of tax compliance, which deals not only with economic factors but also the institutional and moral factors of tax compliance.

Overall, tax morale is mostly influenced by these elements. The key ingredients for maximum voluntary compliance as argued by Ariff and Pope (2002) are acceptance by taxpayers and respect for the tax system. This model has been extended in recent work to include other factors such as ideology, tax knowledge and education as important factors in influencing individuals' attitudes (Yucedogru, Grainger & Lymer, 2012), as summarised in Figure 1.



**Figure 1: Main Influences in the Formation of Tax Morale**

Source: Adopted from Mohd (2013)

### *Tax*

It is a compulsory levy charged on goods and services. Tax is defined by Price Waterhouse Coopers (2008) as something that is paid to government (by businesses or individuals) to fund government expenditure excluding payments where there is a specific return to value (for example, rents and license fees).

### **Determinants or causes of tax compliance**

The factors that give rise to tax compliance are varied and differ from period to period. These factors need to be studied extensively over a period of time to enable tax authorities to better understand and appreciate the behaviour pattern of taxpayers. These factors are elucidated below.

### **Definition of Tax Fairness**

Over the period researchers have had difficulty in defining what a fair tax is. The inability to reach a consensus stems out of the following four inherent problems: it is multidimensional, it can be defined at the individual level or for society at large, fairness is intertwined with complexity and a lack of fairness may be perceived justification or a cause of noncompliance (Christensen, Weihrich & Gerbing, 1994).

Nicoleta (2011) identifies two main factors which account for tax compliance. He categorises these factors into economic and noneconomic factors. There are a number of factors which fall under the noneconomic factors among which is tax fairness. A good tax system should be fair to the people who are

required to pay it. This is in line with one of the canons of taxation which is equity. Jackson and Milliron (1986) have recognised to a very large extent the influence of perception of fairness on tax compliance behavior. The subjects of every state ought to contribute towards the support of government as nearly as possible in proportion to their respective abilities.

According to Spicer and Becker (1980), taxpayers tend to avoid paying the tax if they assume the tax system is unfair. Equity theory, distributive justice and procedural justice are vital instruments in examining and explaining tax fairness. Song and Yarbrough (1978) identified a positive relationship between unfair tax system and under reporting. Torgler (2001) recognised that a key factor influencing taxpayers' compliance behaviour is tax fairness. This is due to the phenomenal impact tax fairness has on tax burden.

Gerbing (1988), in trying to give an operational definition of what tax fairness actually is, came out with a five dimension survey instrument. The study was carried out in Texas with fifty-six (56) items and identified eight factors through Confirmatory Factor Analysis (CFA). However only five could be considered as fairness dimensions: (i) general fairness/distribution, (ii) exchange with government, (iii) attitude towards taxes of the wealthy, (iv) progressive versus flat tax rate and (v) self-interest.

### **Dimensions of tax fairness:**

#### *General fairness and distribution of the tax burden*

The distribution of the tax burden among a cross section of taxpayers and the overall fairness of the tax system is explained in this dimension. As such, people's opinion of the sharing of the tax burden is of a great concern. Is tax burden fairly distributed? Essentially, a taxpayer who considers a tax system to be unfair and illegitimate would be motivated to evade tax. According to Spicer and Becker (1980), a disadvantageous inequity increases evasion whilst an advantageous one decreases evasion. It can be observed that taxpayers who perceive the tax system as less equitable will find a way to avoid, evade or better still escape tax. Schisler (1995) recognised that the perception of taxpayers on equity was lower than tax preparers. He identified three reasons which are accounting for this compliance attitude of taxpayers; namely aggressiveness, equity perception and consensus. His findings revealed that taxpayers are aggressive in their tax situations. According to Wenzel (2002), Fairness refers to one's tax burden whereby one person's tax burden compared with a similar person or people (horizontal equity) or else it is tax burden of a group compared with that of another group or others (vertical equity).

#### *Exchange with the Government*

This dimension of tax fairness tries to compare the benefits or gains derived from government vis-a-vis the income taxes paid. It refers to the benefits received in return for the taxes paid to the government. A society that chooses to

offer resources funded by taxes which does not commensurate the amount of tax paid may lead to feelings of inequity (Peter & Dijke 2007). It is observed that the amount of tax paid or income declared by tax payers rises when they perceive some form of benefit provided by the government through the tax money that the individual paid. The extent of satisfaction the public has with the government in terms of provision of infrastructure will enhance tax compliant behaviour.

Positive actions by the state are expected to bring about positive attitudes and commitment of taxpayers to the tax system and ultimately tax compliance. Torgler (2003b) also recognised that taxpayers who perceive an unfair exchange from the government or who are not in agreement with the government's spending policies in return for tax payments, may feel distressed and report less income than those who consider equity in their transactions with the government.

Porcano and Price (1992) in trying to identify the link between the criteria used to evaluate a tax system and the perception of fairness about the tax provisions compared two groups i.e. tax preparers and taxpayers. He identified that taxpayers perceived the system to be unfair and their exchange with the government not fair. The tax preparers, on the other hand, perceived the system to be fairer. The exchange contract between taxpayer and the government was used as a measure of fairness by Porcano (1988). Using 18 variables that were predicted to affect tax evasion, Porcano (1988) found that exchange with government was the only variable that correlated with tax evasion. This study is also referred to as procedural justice.



Christensen et. al (1994) tested the five dimensions used or formulated by Gerbing (1988) and found an affirmative answer to the research question whether tax fairness can be measured by these five dimensions. Out of these five factors, three are framed within theory justifications.

#### *Preferred Tax Rate/ Structure*

This dimension gives an insight as to the tax rate structure that is favoured by taxpayers as against other alternatives. This is the progressive tax structure as against the flat/ proportional tax rate structure. Roberts, Hite and Bradley (1994) in studying the dimensions of preferred tax rate observed that, an increase in tax rate will increase compliance. However, a similar study by Kinsey and Grasmick (1993) saw results which were entirely different from the findings of Hite and Robert (1991). The progressive tax rate was seen as unfair and encourages the possibility of future tax cheating or evasion. The fairness of alternative tax rate structures can be analysed in three dimensions. The first perspective believes that all other things being equal, higher income taxpayers should have higher tax liabilities than lower income- income taxpayers.

There is the effect of tax rates on a given person's tax liability as his or her income increases or decreases. Taxpayers also try to make comparison of themselves with others in terms of tax rate or obligations. Reckers, Sanders and Roak (1994) have stated that there is a mild association between progressive tax rate and tax compliance i.e. mildly progressive tax rate will promote tax compliance. Alm, Jackson and Mckee (1992) also identified a link between tax

rate and compliance. They said compliance increases with lower tax rate because the “payoff” benefit is greater than when tax is larger.

*Self interest;*

Individuals usually try to compare their tax obligations with others. In doing so, an individual may perceive that the amount that he pays is generally too much as compared to others. The taxpayer is usually seen as a self-centred, utility maximising person who considers his interest as paramount in discharging his tax duties.

Self interest holds it that, individuals maximise their expected utility by reporting on that which equates or commensurate the benefits of a successful evasion against the consequences of detection. McGowan (2000) found that self-interest (considered as direct personal benefit) significantly affects taxpayers’ attitudes.

Wartick (1994) also found people, who were made worse off by a tax law change, perceive the system to be less fair compared to those who were not affected. Christensen et. al (1994) reported significance between self interest and tax cheating i.e. noncompliance. The taxpayer is usually not motivated to comply with an unfair tax system.

Hite and Roberts (1991) found that people with higher income believe progressive tax rates are more fair (vertical equity) or in other words, favour a lower tax rate. Self interest is not fairness but affects a taxpayer attitude and behaviour. Spicer and Becker (1980) used taxpayer’s tax rate and the tax rates of

other taxpayers' to operationalise tax fairness. The results were evasion increased (decrease) when the subjects were informed that their tax rate is higher than (less than) the tax rates of the others. These results also were not consistent because other studies by and Kaplan and Reckers (1985) found no relationship between tax rate and evasion.

#### *Attitude towards taxation of the wealthy*

This dimension tries to identify special provisions in the tax laws which offer preferential treatment or incentives to the wealthy taxpayers at the expense of others. It encourages wealthy taxpayers not to pay their fair share of income taxes. Gerbing (1988) in his survey of tax fairness discovered that in the USA, there are certain clear provisions in the tax laws that explicitly give some privileges to the wealthy in society.

In the Ghanaian setting however, there are no clear provisions in the Internal Revenue Act 2000 (Act 592) which grant such privileges. The laws are general and fair to all with the exception of certain non-taxable income such as reimbursement or discharge of a person's dental, medical or health insurance expenses where the benefit is available to all full-time employees on equal terms and severance pay.

#### **Tax system/structure**

It is evident in developing countries that the extent of tax compliance is on the decline. This is partly attributed to the underdeveloped nature of tax

system/structure (Chau & Leung 2009). The complexity of tax laws makes it extremely difficult for ordinary taxpayers to understand and compute their tax obligations. This issue of tax complexity has become a global concern. Tax laws are increasingly becoming complex that experts such as lawyers, accountants and tax officers have challenges in interpreting such legal provisions. Tax laws complexity leads to uncertainty in determining taxable income (Simone, Sansing and Seidman, 2012).

One of the canons of taxation, certainty, explains that taxpayers should be able to compute and fill their tax return forms with ease. The system for filing and payment of returns should be at the convenience of the taxpayer. This can be achieved through the use of forms which are easy to read and fill. The current introduction of electronic filing (e-filing) by some developed economies is informed by their pursuit of a very simple tax structure or system. Empirical evidence has revealed that complexity of tax system or perception of complexity of tax systems is associated with compliance. It is however not certain about the quantum of such an impact. Clotfelter (1983) found that complexity of the system had been associated with greater underreporting of tax. Richardson (2006) also identified a significant relationship between tax law complexity and tax evasion.

Slemrod (1989) found that the impact of complexity on compliance varies with individual taxpayer characteristics such as perceptions of fairness, opportunity to evade and education.

The complexities of tax laws usually emanate from high level abstraction in the written language combined with long and complex sentences. This has

made it increasingly difficult for taxpayers to understand the laws. New Zealand among other countries have endeavoured to simplify their tax laws but this has proved futile. Tax laws were in simplified English, but they still faced the same administrative and compliance problems as before the simplification (Kirchler, 2009).

### **Tax knowledge**

Tax knowledge is any information related to taxation that is used for act, making conclusion, and to develop certain strategies which lead to fulfil taxpayers' rights and obligations (Carolina & Simanjuntak, 2011). Kirchler (2009) also recognises the crucial role that psychological variables play in determining the tendency of taxpayers to comply or reduce one's tax liabilities. These are subjective tax knowledge, ethical norms, perceived fairness of tax systems and tax authorities and motivation to comply.

Tax knowledge is viewed as one of the important factors influencing individual's tax attitudes. Importance of this issue stems from the fact that tax law is generally considered as difficult, complicated and beyond one's depth. A good tax climate knowledge should contain at least one of the following (i) taxpayers understand or try to understand the provisions of the tax legislation, (ii) they also fill out the appropriate tax forms (iii) the correct amount of tax is computed, (iv) taxes are paid on time Kirchler (2009).

“Knowledge about tax law is assumed to be important for preference and attitudes towards taxation. There is little research that explicitly considers how

attitude towards taxation is influenced by specific knowledge of tax regulations” (Eriksen & Fallan, 1996: 387). Citizens are supposed to have tax information. Problems arise when the individuals who are affected by taxation policies are unaware of the current trends and they do not respond to it (Yan, Arokiasamy & Suat, 2010). A good understanding of the tax laws plays a pivotal role in voluntary compliance and subsequently the efficiency of tax administration (Otiaku, 1988). Since SAS requires a high level of tax knowledge, self completion among less knowledgeable taxpayers could lead to unintentional noncompliance behaviour and could increase tax gaps effects (Mohani, 2001; Riahi-Belkaoui, 2004). Increase awareness and knowledge on a tax initiative is essential to gain public acceptance and confidence (Saira, Zariyawati & Yoke-May, 2010).

Empirical evidence suggests that educating tax payers about the tax system (Song & Yarbrough, 1978 and Wartick, 1994), tax laws (Eriksen & Fallan, 1996, Palil & Mustapha, 2011) and informing them about negative effects of tax evasion (Holler, Kirchler, Leder & Mannetti 2008), sanctions and fines (Park & Hyun 2003) is a useful policy in order to increase trust in authorities, conveying to significantly more tax compliance. Harris (1989) divided tax knowledge into two aspects, namely, knowledge through common or formal education received as a matter of course and knowledge specifically directed at possible opportunities to evade tax. In the first case, the level of education received by taxpayers is an important factor that contributes to the general understanding about taxation especially regarding the laws and regulations of taxation (Eriksen & Fallan,

1996). This study contributes to this literature by investigating how tax knowledge about tax laws and public expenditure influence tax compliance.

### **Demographic variables and profile of self-employed persons**

Jackson and Milliron (1986) were the first to consider the impact of demographic factors on tax compliance by investigating the direct impact of demographic factors such as age, gender, education, income level, income source, marginal tax rate, fairness, complexity and revenue authority and tax morale. Fisher et al (1992) developed the work of Jackson and Milliron (1986) and introduced a model explaining the interconnection that exists between demographic variables and tax compliance. It can be observed from the Fisher model that demographic variables such as age, gender and education have an indirect influence on taxpayers' compliance through their impact on noncompliance opportunities, attitudes and perceptions. For the purposes of this study, the following taxpayer characteristics gender, age, marital status educational level, income level, religion and type of business are reviewed.

#### *Gender*

Conflicting results have been achieved by different research studies with regard to the influence that gender has on taxpayers in relation to tax compliance. Some studies found that females are more compliant than their male counterparts due to their traditional conforming roles and moral restraints while other research studies found that a higher proportion of tax evasion was undertaken by women

(Chau & Leung, 2009). A common finding among studies reviewed by Richardson and Sawyer (2001) and previously by Jackson and Milliron (1986) was that female taxpayers were more compliant than their male counterparts. In particular, a comprehensive study conducted by Oxley (1993) in New Zealand reported that women were more often compliers in comparison with men and less often tax evaders or tax avoiders. Torgler and Valev (2007) investigated whether gender matters in the conduct of illegal activities including tax noncompliance. They found that women are significantly less to agree that corruption and cheating on taxes can be justified.

Richardson and Sawyer (2001) however noted that the compliance gap between males and females appears to be narrowing with the emergence of a more independent, non-traditional generation of women. In a survey of American taxpayers, Hite (1997) focused on the interaction between gender and education. Female respondents with college degrees tended to be more tolerant of noncompliance than females without college degrees. Hasseldine (1999) stated there exists voluminous literature on gender differences but in tax compliance studies, little emphasis has been focused on gender and the reasons for the differences.

There are two major theories explaining gender differences in the compliance literature. These are the “realities theory” and the “opportunity theory”. According to the realities theory, gender differences can be attributed to different biological, psychological and experiential realities that lead to different approaches to issues and problems. In contrast, the opportunity argument lies



closer to traditional economics, suggesting that men and women do not necessarily have different motivations. Instead gender differences can be explained by different external constraints and opportunities faced by men and women.

### *Age*

Richardson (2006) reported that older taxpayers are more compliant than younger taxpayers. The younger are risk seeking and less sensitive to penalties. This assertion was confirmed by Chau and Leung (2009) who also found out that tax compliance is higher in older taxpayers and lower in younger taxpayers. However, there have been a significant number of studies that found no relationship (Porcano, 1988; Feinstein, 1991).

### *Marital Status*

Individual taxpayers who have spouses are found to be more compliant than unmarried taxpayers. This situation could partly be explained by the fact that women turn to be more tax compliant than men (Richardson and Sawyer, 2001). Married women are therefore able to influence their male counterparts to be tax compliant as well.

### *Educational level*

Education as a demographic variable refers to the taxpayers' ability to comprehend and comply or not comply with tax laws. Education has always been

an independent variable to examine the impact of general education like many other constructs that ultimately affect tax compliance behaviour. Research on Australian taxpayers found that taxpayers with tertiary education reported higher tax compliance while taxpayers without tertiary education reported lower levels of compliance (Chau & Leung, 2009).

Similarly, findings by Christensen et al.(1994) showed that tax education has proven significant to taxpayers that information and clarification on tax matters will help to judge the system as fair. According to Roberts (1994) and Wartick (1994) educating taxpayers on the tax system or presenting justification for certain tax provision enhances fairness perceptions which will ultimately influence tax compliance levels. The education level of taxpayers acts as a key function to determine the factor that affects Malaysians' tax compliance attitudes. An academic qualification was evident to be one of the significant determinants of noncompliant attitudes among individual taxpayers (Kasipillai & Abdul-Jabbar, 2006).

However, a majority of the respondents in other studies were considered to have relatively low tax knowledge despite having tertiary education qualifications (Loo & Ho, 2005) which was strongly supported by Palil and Lymer (2009). There are only a few studies that used education to mediate the compliance rate of taxpayers. One important discovery by Jackson & Milliron (1986) is that the impact can be in two ways: education will help the people to become more knowledgeable about the tax system and that will make them understand their obligations towards their country and government and appreciate the benefits

received from the government; but the other one would be they misuse the knowledge to become more aware of the tax loopholes and engage in tax evasion activities.

Kinsey and Grasmick (1993) have taken into account the general level of education of the taxpayers as an additional variable in ensuring compliance, but this indirect method is based on the assumption that knowledge about taxation increases with the length of education, independent of the educational content. There are many people with less formal education or even those do not have any qualification, who have better knowledge about taxation than those with higher education qualification. Such indirect measurements do not therefore give a completely satisfactory answer to the issue of whether there is a connection between specific tax knowledge and attitudes towards taxation.

Collins, Milliron and Toy (1992) found that tax knowledge and the level of education were negatively correlated with compliance behaviour. In addition, knowledge about tax law is assumed by Collins *et. al* (1992.) to be of importance for preferences and attitudes towards taxation. Although there was a contradiction between the results of Collins *et. al.* (1992) and Eriksen and Fallan (1996), the result of latter study indicated that a successful means of reducing tax evasion is to provide more tax knowledge to as many taxpayers as possible in order to improve their tax ethics and perceptions of fairness and equity. Their result also implied that there is a strong suggestion that tax law and tax knowledge should be included as a 'compulsory course in social science in the schools' (Eriksen and Fallan, 1996).

### **Noncompliance opportunity**

Income level and type of business and their effect on tax compliance are explained under this subheading.

Taxpayers' compliance can be affected directly or indirectly through non-compliance opportunity. Fisher et. al (1992) identified income level, source of income or occupation to affect taxpayer compliance directly whilst attitudes and perceptions affect taxpayers compliance indirectly. Noncompliance opportunity can affect taxpayer's compliance directly through their income level, source of income or occupation, and indirectly through their attitudes and perceptions. Previous studies have found that as income increases, tax evasion increases. However, some studies found that taxpayers in the lower income group intend to evade tax more compared to those that are in the higher income group. Income derived from self-employment and additional income sources not subjected to withholding taxes are more prone to tax evasion. Different occupations are also more prone to tax evasion (Chau & Leung, 2009).

In Ghana, individuals who engage or manage their own businesses (self-employment) usually maintain a low standard of record keeping. Low standard of record keeping makes it extremely difficult, if not impossible, for any proper assessment of income to be determined by tax authorities. Most SMEs are owned by individuals who intentionally maintain different records based on the needs or uses it would serve.

## **Theoretical review**

### **Expected utility theory**

This theory is believed to have emanated from the 18<sup>th</sup> century, when researchers at the time tried to explain perceived phenomena using the concept of rationality. Historically, the expected utility theory under the utility-maximising models of decision making was generally accepted as the normative model used to predict and explain an individual's behaviour when making a decision involving risk (Flynn, 2003). Bernoulli (1738) introduced the concept of utility to decision making theory by theorising that people maximise expected utility rather than expected monetary value. He posits that when an individual decides to purchase an item, it is usually the utility the person derives from the item that informs the decision and not the price or monetary value of the said item. Utility refers to the satisfaction an individual derives from the consumption of a product. Utility represents the power to satisfy the needs or wants of an individual. The item's price or monetary value is the same for everyone. However, utility is peculiar to an individual and is based on the individual's particular circumstances. For example, the concept of diminishing marginal utility suggests that an additional dollar means less to a rich man than to a poor man (Friedman & Savage, 1948).

Economists such as Friedman and Savage (1948) and Carroll (1989) consider utility theory to be a description of individual behaviour, an equilibrium toward which behaviour tends in the long run. However, psychologists treat utility

models as a standard or prescription of rational behaviour against which actual behaviour is compared.

According to Carroll (1989), the standard economic model of decision making specifies that decisions maximise expected utility. The expected utility of any decision alternative is assessed by identifying the possible consequences or outcomes, assigning a desirability or utility to each outcome and attaching likelihoods to uncertain outcomes. Each outcome is multiplied by its likelihood and the weighted or discounted outcomes are assumed to create the expected utility of that alternative. The alternative with the most favourable expected utility is then selected and implemented.

Von Neumann and Morgenstern (1944) observed expected utility models are concerned with choices among risky prospects. Expected utility theory states that a decision maker calculates the overall expected utility value of each prospects and chooses the alternative that maximises the mathematical expectation of the individual's gain or utility. Overall expected utility of a prospect is the sum of the utilities associated with all the possible outcomes, weighted by the probability that each outcome will occur. The model, originally stated by von Neumann and Morgenstern (1944) and re-stated by Schoemaker (1982), is:

$$E(u) = p_1u(x_1) + p_2u(x_2) + \dots + p_nu(x_n)$$

where:

$E(u)$  = Overall expected utility of the prospect

$p$  = Probability of occurrence (where  $\sum_{i=1}^n p_i = 1$ )

$u$  = Utility

$x$  = The outcome

$n$  = The number of outcomes or prospects

### **Critique of the expected utility theory**

In expected utility theory, utility is determined by multiplying an uncertain outcome by its probability of occurrence. However, determining the probability of occurrence is not an exact science. Kahneman and Tversky (1979) suggest that the value of an outcome is not only multiplied by its probability of occurrence, but also by a decision weight that is unique to each decision maker and subjectively inferred from choices between prospects.

Expected utility theory states that, assuming the expected values of the payoffs are equal, an individual who is risk-seeking will take a risk, while an individual who is risk-averse will avoid taking a risk. In a tax context, risk-seeking behaviour is demonstrated by being aggressive, either by taking an additional deduction or by underreporting income. According to prospect theory, an individual who has experienced a refund will be risk-averse, and act conservatively either by not taking the additional deduction or by not underreporting income (Flynn, 2003).

### **Utility-Like-Models**

Carroll (1989) introduced the expectancy theory as a descriptive model of decision making. Carroll notes that the formal utility theories offer axiomatic

mathematical justifications for their structure. However, these theories have some of the same components or structure as the formal models but lack the axiomatic basis.

### **Expectancy theory**

Expectancy theories propose, as does utility theory, that people seek their desired outcomes and weight these outcomes by their likelihood. For instance, the theory of reasoned action proposes that behaviour is determined by intentions to enact that behaviour which arises from two components: attitudes and norms. Attitude towards the behaviour is computed in utility-like fashion as the product of the likelihood that salient fashion referent others or groups think a person should enact the behaviour multiplied by the motivation to comply with their wishes, summoned over all relevant referent others (Cialidini, 1989). Relevant consequences and salient referent others are elicited from groups of respondents using consensus and common sense as criteria for identification. It must be noted that the particular mechanics of the questions and formulae are different from formal utility. However, the net result is that people choose behaviours that maximise the combination of expected personal and interpersonal consequences.

### **Reasoned action theory**

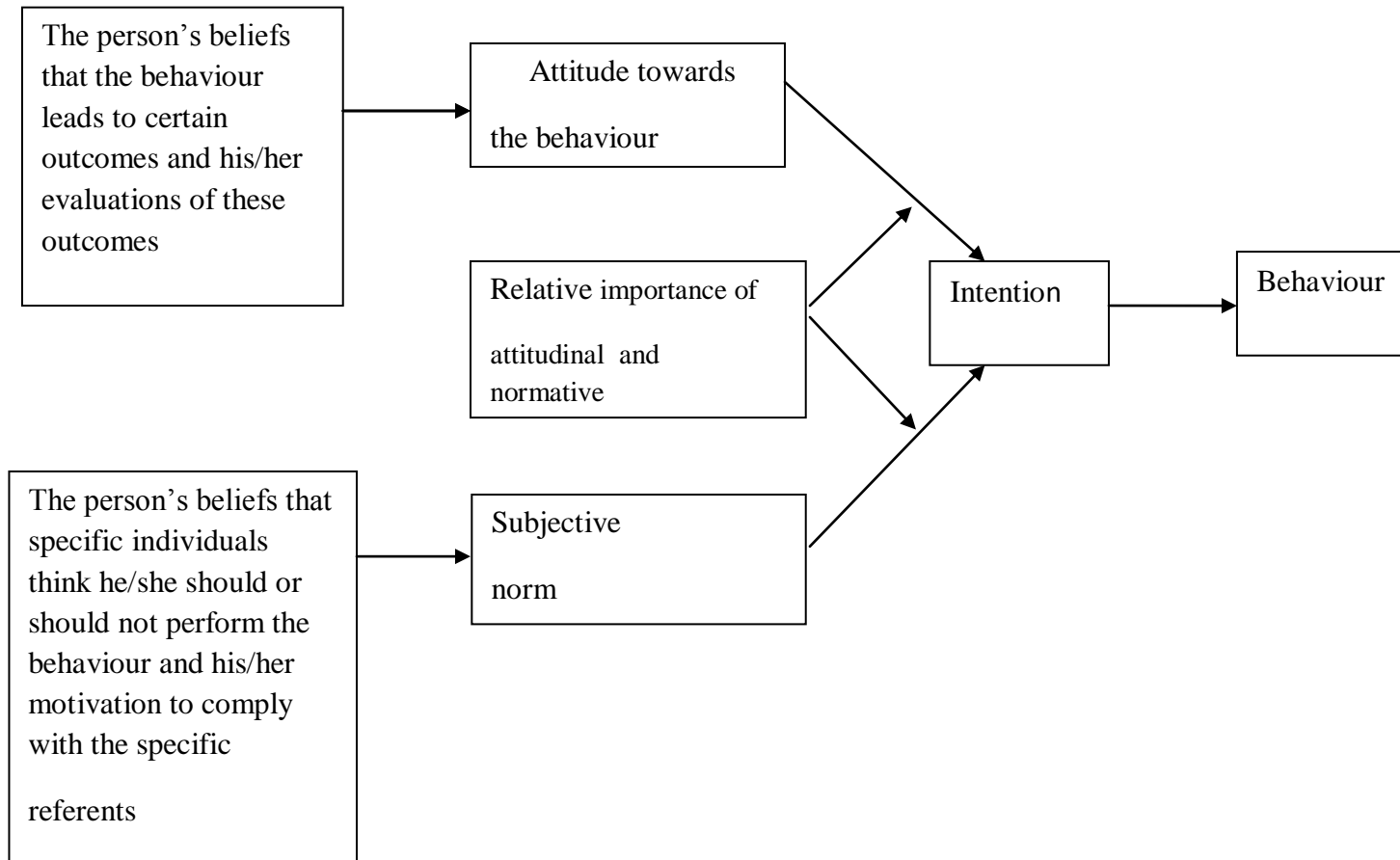
It postulates that behavioural intention is a key ingredient in determining an individual's behaviour. Behavioural intention is made from the culmination of



the individual's attitude towards the behaviour and of social influences, as shown in Figure 2.

The intentions of taxpayers to put up certain behaviours are based on their personal judgements as well as others' opinions. This is consistent with the suggestion of many sociologists that moral beliefs and peer influences are the two main factors that help taxpayers to decide whether to comply or not (Grasmick & Bursik 1990). The reasoned action theory can be used in analysing moral and social influences upon taxpayers' behaviour. For instance, Hanno and Violette (1996) used this theory and found out that the compliant taxpayers were more concerned about moral or civic obligations whereas the non-compliant taxpayers were more concerned about economic factors such as threat of audit from the tax authority and the financial output from their compliance decisions.

The extended tax compliance model incorporating economic, sociological and psychological factors which was introduced by Fischer et al. (1992), together with the reasoned action theory recognise that non-monetary and monetary factors may share the same weight or have a significant impact in shaping taxpayers' compliance decision-making. Furthermore, in the compliance decision process, taxpayers may also tend to rely on how they perceive others (Kaplan & Reckers, 1985) as presented in Figure 2.



**Figure 2. Factors Determining a Person's Behaviour**

Source: Adapted from Ajzen and Fishbein (1980:8)

Individuals were inclined to follow other people's thoughts, ideas and actions, simply defined as "conformity". There are a number of reasons for people to conform to their social environment such as to gain social acceptance or to avoid social rejection and to acquire useful information which leads to the right decision. Perceptions of others may have a profound positive or negative influence on a taxpayer. Once tax evasion becomes common, it becomes more acceptable for some taxpayers to evade tax (Sandmo, 2005). This may be a concern to governments.

### **Approaches to tax compliance**

James and Alley (2000) defined the meaning of compliance as a "continuum of definitions" from a narrow approach that focuses on the tax gap to a wider approach focusing on taxpayers' behaviour. This definition was extended from a traditional approach which initially only focused on economic deterrence factors. Then, it was blended with socio-economic and psychological factors to fully understand the unique behaviour of taxpayers. This blending of factors reflected the change in focus, from the concern that people will evade tax, to a focus on why many people willingly and voluntarily comply.

It is observed from empirical evidence and review of literature that the use of a single approach alone such as economic deterrence approach did not appear to adequately explain taxpayers' compliance behaviours. The fiscal psychological approach (Hasseldine & Bebbington, 1991) was suggested to provide a better picture by combining the two prior approaches. This approach not only focuses on

taxpayers' own behaviours and peer influences but also on the impact of government action and the effect of the tax authority's treatment on taxpayers' behaviour.

### **Economic deterrence approach**

This is the traditional means used by tax authorities to enforce compliance, which relies heavily on the use of audit rates, sanctions and fines to deter noncompliance. Basically, in this approach it is assumed that the tax compliance decision is made by a taxpayer under uncertain circumstances, strictly due to the fear of the possibility of being caught and penalised (Alm & McKee, 1998). Fear has been used by tax authorities as a means to force taxpayers to conform to tax laws given that a taxpayer is viewed as a "perfectly amoral, risk-neutral or risk averse, utility maximising individual who chooses to evade tax whenever the expected gain exceeded the cost" (Milliron & Toy, 1988).

There is a large body of theoretical and empirical evidence to support the view that higher audit probabilities and penalties encouraged compliance and higher tax rates discouraged compliance. The pioneering research in taxation by Allingham and Sandmo (1972) suggested that one way to ensure people pay their taxes was to use a deterrence policy, such as the use of threat of punishment which involved the probability of audit, the severity of penalty as well as an increasing tax rate.

This approach however has faced a lot of criticisms, as some researchers have observed that this method is rather too simplistic and not the outmost

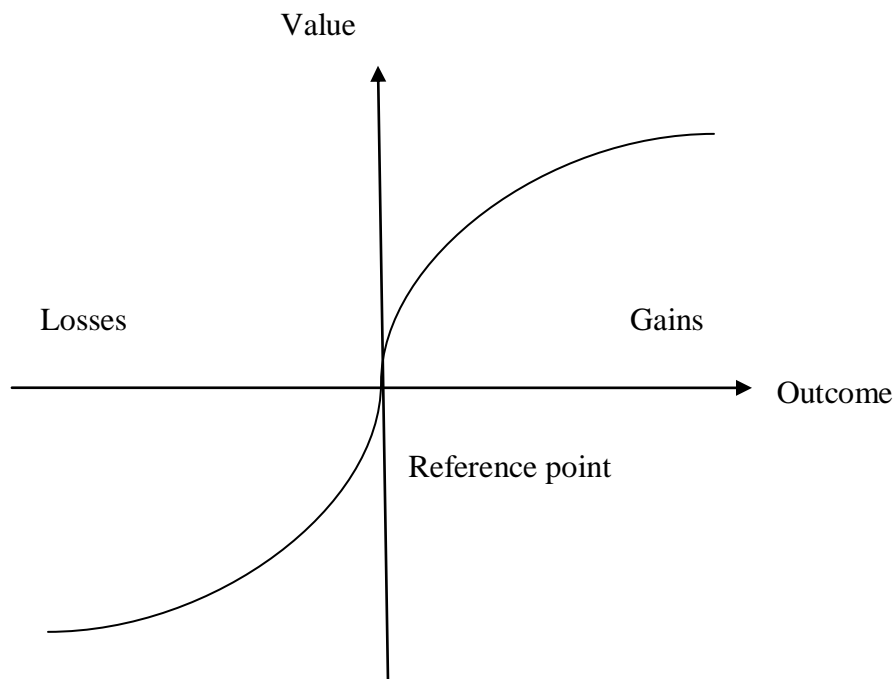
panacea to solving the problem of noncompliance. It is argued that even at zero percent audit rate, some taxpayers will still evade tax. Rather than relying heavily on the narrow economic approach to encourage tax compliance, it is better to explore other approaches to understand non-economic factors that might influence taxpayers' behaviours (James, Murphy & Reinhart, 2005). For example, a social psychological approach is more appropriate to explore the willingness of taxpayers to comply with tax laws. In short, the deterrence model does not explain the reasons why many people willingly comply with tax laws.

### **Social psychological approach**

This approach assumes that individuals are not simply independent, selfish and utility maximisers but they also interact with other human beings according to differing attitudes, beliefs, norms and roles (James & Alley, 2000). Friedland, Thibaut and Walker (1973) argued that the notion of general deterrence was too simplistic and acknowledged the theory of inequity in their latter research as a relevant factor in influencing people to comply with sets of laws. A number of social psychological approaches have been applied to tax compliance research such as the theory of inequity (Adams, 1965), prospect theory (Kahneman & Tversky, 1979) and reasoned action theory (Ajzen & Fishbein, 1980).

Prospect theory describes how people make their choices when risk is involved and how potential losses and gains are evaluated. The reference point in Figure 3 shows the uncertain situation faced by taxpayers in framing their compliance decision as gains or losses. If a loss is expected, taxpayers are

assumed to be risk seeking and if a gain is expected, taxpayers are assumed to be risk-averse. The applicability of this theory on tax decision-making processes has been acknowledged by a number of researchers such as Smith and Kinsey (1987). They argued that taxpayers were expected to comply with tax laws if a gain was anticipated through a tax refund, and those who expected to pay extra tax or incur a definite loss were predicted to evade tax. Generally, few studies in tax evasion research (Kirchler & Maciejovsky, 2001) have strongly supported this theory. The effect of a tax refund in determining the compliance decision is comparatively small, and losses are usually weighted more than gains (Smith & Kinsey, 1987).



**Figure 3: Hypothetical Value Function**

Source: Adapted from Kahneman and Tversky (1979: 279)

Experimental research revealed that uneven distribution of resources reduces an individual's tendency to comply, while among those who experienced equality or even share of resources have an increased tendency to comply. Taxpayers' perception of an unjust or unfair tax system may influence their behaviour pattern towards honouring their tax obligations. Some researchers have argued that the economic deterrence and social psychological approaches have overlooked some important elements which cannot be explained by economic and sociological approaches independently (Feld & Frey, 2002).

### **Fiscal psychological approach**

In the fiscal psychological approach, tax mentality, tax tension feelings and tax morale are the three elements that shape taxpayers' attitudes (Schmölders, 1970). The first element, tax mentality, describes a taxpayer who is feeling indecisive as to whether or not to obey tax laws. This is highly influenced by the social environment and individual experience.

The second element, tax tension feeling, derives mainly from an unequal tax burden distribution leading to the taxpayer's discontent with the tax system. The final element, tax morale, is defined as an individual's internal motivation from religious beliefs or moral values to pay taxes, also referred to as "intrinsic motivation". An improvement in taxpayers' positive attitudes from these elements is expected to encourage their willingness to pay taxes (Mohd, 2013).

The blend of both the economic and behavioural approaches, known as the fiscal psychological approach, was suggested by a number of researchers such as

Hasseldine and Bebbington (1991) and has provided a clearer understanding of the major issues of tax compliance. The term “fiscal psychology” was first introduced by Schmolders (1959) and emphasised the lack of motivation for taxpayers to pay taxes because there was no apparent gain from the benefit of tax payment either in the form of monetary or public goods.

The conceptual approach of tax evasion has expanded in the last two decades to include compliance and noncompliance and a variety of methodologies have been adopted to provide an in-depth understanding of the factors in tax compliance behaviour (McKerchar, 2001). Integrating the economic and non-economic factors in a study might offer the most promising route to solve the puzzle of tax compliance.

### **Empirical studies**

A lot of studies have been undertaken to investigate the determinants of tax compliance with the sole aim of providing a better understanding of taxpayer compliance behaviour as a prerequisite for public revenue mobilisation. A study conducted by Joseph Mukasa in 2011 in Uganda, examined the relationships between tax knowledge, perceived tax fairness and tax compliance of SMEs. The study adopted a cross-sectional research design, combined with qualitative (analytical and explanatory) and quantitative (descriptive and inferential) research designs. The study considered tax registered SMEs within the Central Division of Kampala District who constituted the population of study.



A sample of 330 respondents and self administered questionnaire were used to collect data from the SMEs' owners or managers. It was observed that tax knowledge and perceived tax fairness had a causal relationship with tax compliance. Tax knowledge was found to have a positive and significant relationship with tax compliance as well as perceived tax fairness did with tax compliance. However, the relationship between tax knowledge and perceived tax fairness was found to be weak.

Similarly, a study conducted by Brainyyah (2009), in Malang on the effect of perceived tax fairness, tax knowledge, and tax complexity in tax compliance decisions among SME entrepreneurs in Malang. A sample of 32 SMEs entrepreneurs were used and the data analysed by multiple regression method. The findings revealed that simultaneously, perceived tax fairness, tax knowledge and tax complexity influence taxpayers' compliance decision in order to meet their taxation obligations. A partial test revealed that both tax fairness and tax complexity affect the tax compliance among SMEs taxpayers in Malang. Tax knowledge however did not give any significant effect on tax compliance.

In a typical Ghanaian setting, a study was conducted in 2012 by Asante and Baba on self-employed in the Tema Metropolis to investigate the influence of demographic characteristics, specifically gender, age, marital status and education attainment on tax compliance among self-employed in Ghana. A survey method was employed and a sample of 350 self-employed was used. The data was analysed using frequency distribution tables and cross tabulation. The studied

revealed that female, educated, older and married self-employed in Ghana are less tax noncompliant.

Furthermore, an extensive review of literature revealed that a study of Chau and Leung (2009) heavily relied on socio-economic and psychological factors accounting for taxpayer compliance decisions. The study was largely anchored on Fisher's model of tax compliance with a little refinement to the model by incorporating another important environmental factor, culture and the interaction effect between noncompliance opportunity and tax system/structure on tax compliance.

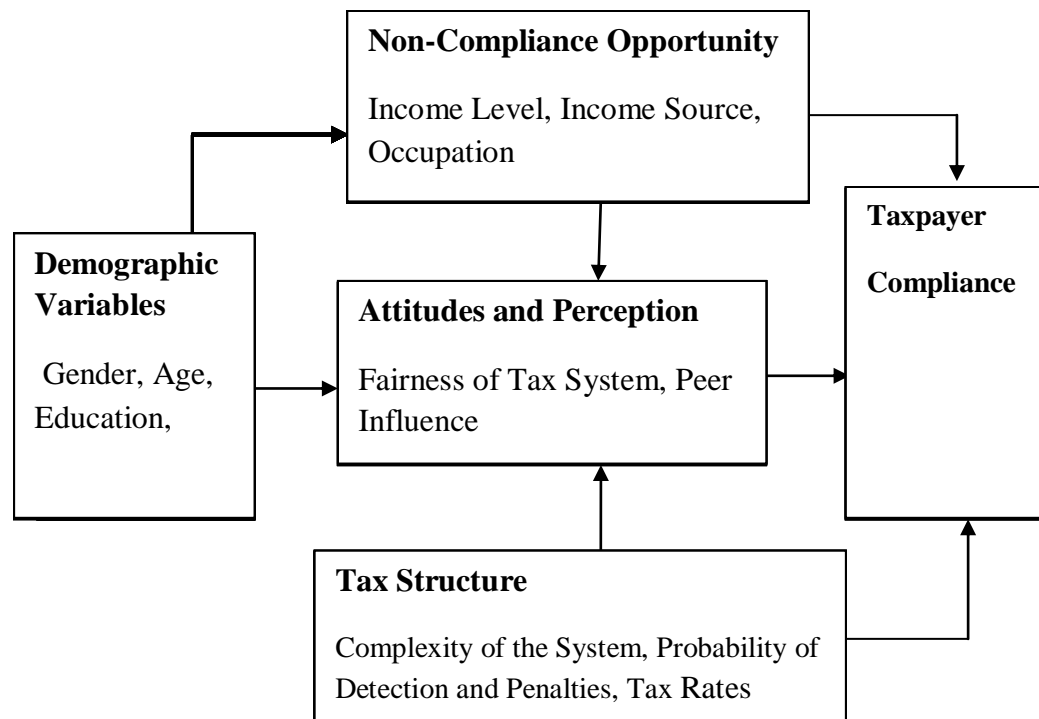
The Fischer model suggests that demographic variables indirectly affect taxpayer compliance by their impacts on noncompliance opportunities, attitudes and perceptions. The results of the study of Chau and Leung found out that in general, young taxpayers are more willing to take risks and are less sensitive to sanctions. The Fischer model suggests two major considerations for altering taxpayers' attitudes and perceptions to tax compliance. These are the fairness of the tax system and peer influence.

A study conducted by Mohd (2009) to investigate how facilitating factors interact in the development of a suitable SAS focusing in particular on the role of tax knowledge. Malaysia was used as a case tax system for the study. This study focused on the level of individual Malaysian taxpayers' knowledge and explored how tax knowledge levels influence tax compliance behaviour in a new SAS.

A large scale national postal survey was used to collect data which resulted in 1,073 responses. Five stages were used to facilitate the analysis. Stage

1, using the t-test and ANOVA, focused on the characteristics of taxpayers' knowledge including gender, ethnicity, educational level and income level. Stage 2 described the relationship between tax knowledge and tax compliance using multiple regressions. Stage 4 examined taxpayers' compliance determinants more widely than tax knowledge. Nine variables were tested in Stage 4. Control variables were added in both Stages 3 and 5 in order to assess whether the inclusion of control variables significantly affect tax compliance behaviour.

### Conceptual framework



**Figure 4: Tax Compliance Model**

Source: Adapted from Fischer et al. (1992, p. 3)

The Fisher's model (Figure 4) was adopted as the conceptual framework because it explains the various relationships that exist between the variables, concepts and constructs used in the study. It also gives a clear picture or approach to unravel the puzzle surrounding tax compliance.

This study is anchored on the Fisher tax compliance model. The model provides a framework for understanding the influence of those socio-economic and psychological components on taxpayer's compliance decision. The modified Fisher model in figure 5 shows that tax compliance is influenced by five factors namely demographic variables, tax knowledge variables, attitudes and perceptions, tax systems and structures and noncompliance opportunity. The various categories of variables of the model incorporate economic, sociological and psychological factors into a comprehensive manner. These variables and their influence on tax compliance are explained in detail in the foregoing discussion.

### **Demographic variables**

According to the modified Fischer model (2009), demographic variables which consist of age, gender and education indirectly have an influence on taxpayers compliance through their impact on non-compliance opportunities, attitudes and perceptions and tax knowledge.

With regard to age, studies have shown that tax compliance is high in older taxpayers and lower in younger taxpayers. (Chau & Leung, 2009). The influence of gender on tax compliance has shown mixed results.

### **Attitudes and perceptions**

Attitudes and perceptions influence tax compliance directly and this in turn is influenced by the fairness of the tax system, peer influence. Research has found that where the tax systems are considered fair, tax compliance is found to be higher. With regard to peer influence, it is observed that taxpayers with peers that do not comply are more likely not to comply and vice versa (Chau & Leung 2009). Attitudes and perceptions are directly influenced by tax knowledge, non-compliance opportunity and the tax system/ structure.

### **Tax system/ structure**

This variable influences tax compliance levels directly and indirectly through its impact on attitudes and perceptions of taxpayers. It refers to the complexity of the tax systems, probability of detection and penalties and how tax rates affect the effectiveness of a tax system. The more tax laws become complex the lower the compliance levels. Simple, understandable and clear tax rules enhance tax compliance.

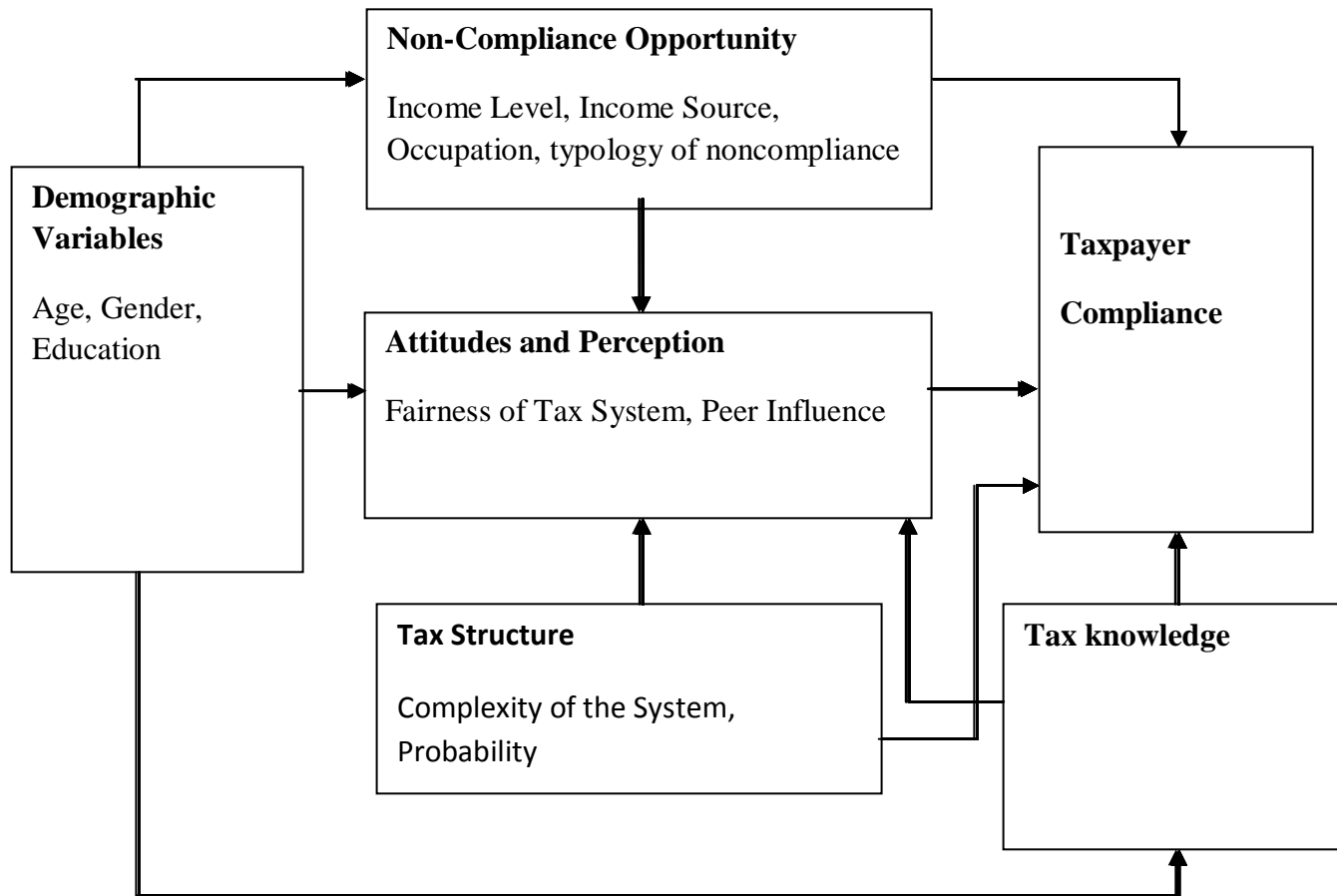
### **Noncompliance opportunity**

Noncompliance opportunity can affect taxpayers' compliance directly through their income levels, source of income or occupation, and indirectly through their attitudes and perceptions.

### **Tax knowledge**

This variable influences tax compliance directly and indirectly through its influence on taxpayers' attitudes and perceptions. Tax knowledge factor explains the level of understanding of taxpayers pertaining to their tax obligations and its subsequent influence on compliance. The tax system is one of our most complex social contrivances and realistically, one can only expect there to be limited knowledge about it. Given the extractive nature and technical complexity of the fiscal and tax related policies, they rarely raise public affection or sustained curiosity and therefore a paucity of public knowledge in these areas is thus to be expected (Young-dahl & Tinsley, 1978).

It has been argued by Jackson and Milliron (1986) that education has two elements: the general degree of fiscal knowledge and the specific degree of knowledge regarding tax evasion opportunities. According to Mohd (2002), specific tax knowledge combines information about tax rules with financial knowledge to make it possible to calculate economic consequences for taxpayers.



**Figure 5.**

Source: modified Fisher et. al. (1992) tax compliance model.

## CHAPTER THREE

### METHODOLOGY

#### **Introduction**

This chapter discusses the research design, population, study area, sample and sampling technique, data source, data collection instrument, data collection procedure, response rate and pre-testing. It also covers validity and reliability, data analysis, social desirability bias and measurement of variables. The discussion of the data analysis also includes the statistical tests used to test the hypotheses.

#### **Research design**

This study seeks to describe the taxpaying behaviour of self-employed persons. It seeks to identify the socio-economic and psychological factors which when properly implemented would encourage voluntary tax compliance. In most empirical studies involving taxpaying behaviour, subjects have completed a case study, a questionnaire or both, in an experimental setting (Taylor, 2001; McKerchar, 2001; and Copeland & Cuccia, 2002). In order to achieve a high degree of internal validity, this study also requires subjects to complete a questionnaire.

In a broader context of social sciences research, there are two distinct philosophical paradigms namely: positivism and interpretivism. In the positivist approach, the social world is viewed objectively by the researcher and confirmed only by empirical means through a systematic process (McKerchar, 2010). A



deductive reasoning style is adopted where the argument is made from general principles to reach specific solutions. Generally, the positivist approach is equated with quantitative research such as a survey. In contrast, subjective interpretation of the social world is adopted in the interpretivist approach based on a researcher's viewpoint stemming from his/her beliefs, experiences and existing knowledge (Carroll & Swatman, 2000).

This research uses the deductive approach of reasoning which means that it is a quantitative research which could be categorised as a causal research. According to Istijanto (2009), causal research is one whose main purpose is to attest the causal relationship or influence relationship among variables being tested. Generally, this research aims to examine the relationship among independent variables with the dependent variable. Three major independent variables were used in the study. These are Tax Fairness, Tax Knowledge, and Tax Complexity, while the dependent variable in the observation is the Tax Compliance from the self-employed.

With all these factors in mind, the most appropriate design is descriptive correlational design. According to Zikmund (2000), correlational design is most appropriate when the study is concerned with learning how one variable affects another.

### **Study area**

The study was concentrated in Cape Coast Metropolis (CCM). Cape Coast is one of the most historical cities in Ghana. It is the capital of the Central Region.

It was the centre of British Administration and the capital of the Gold Coast by 1700 until 1877 when the capital was moved to Accra. Most of the oldest and well-endowed schools in Ghana are in Cape Coast. The Cape Coast castle is one of the biggest of the slave trade castles on the coastline of Ghana.

The 2010 Population and Housing Census estimated 169, 894 as the population of Cape Coast. This figure has a breakdown of 82,810 males and 87,084 females. The number of households is 40,386. The population of residents who are 18 years and above is 110,333 with 54,462 as males and 55,871 as females (GSS, 2010).

### **Population**

According to Babbie (2005), a study population is the aggregation of element which a sample is actually selected. Nsowah-Nuamah (2005) defines a population as the complete collection of entities under investigation. Target population is the complete group of specific population elements relevant to the research (Zikmund, 1997). A taxpayer is anybody from whom government collects its tax revenue. This includes both the individual taxpayers and corporate taxpayers. The individual taxpayers were drawn from owners of SMEs. It is believed that most SMEs in Ghana are owned by individual entrepreneurs whose demographic characteristics need to be examined.

The target population of the study consisted of all SMEs in Cape Coast Metropolis. This is recorded by the National Board for Small Scale Industries (NBSSI) to be 325 as at 2010. However, data on the number of the SMEs from

the Cape Coast Metropolitan Assembly (CCMA) recorded only 45 registered SMEs. The closest information on the SMEs was obtained from the Domestic Tax Revenue Division (DTRD) of the Ghana Revenue Authority (GRA). The small tax office of the Cape Coast division of the DTRD, has 813 registered businesses on its permanent file, of which 416 are sole owned enterprises whilst 397 were companies. The GRA also recognises that most of the SMEs were registered on the temporary file. The office however could not readily ascertain the total number of businesses on the temporary file. The businesses were categorised on these files based on various criteria such as frequency of filing returns and office location. The other category of businesses were put on the tax stamp. This information cannot be deemed to be the list of all SMEs since the list only reflects those SMEs that pay taxes through the TIN mechanism. It was evident that most of the SMEs in CCM were not registered by the NBSSI, CCMA and GRA.

### **Sample and sampling technique**

Sampling is the process of choosing the research units of the target population, which are to be included in the study (Sarantakos, 1993). A sample is therefore defined as a part of a population, or a subset from a set of units, which is provided by some process or other, usually by deliberate selection with the object of investigating the properties of the parent population or set.

The choice of the sample size was also informed by the assertion of Saunders, Lewis, and Thornhill (2007) that a sample size of about 350 is enough from a population of 10,000 at 95% level of certainty. A simple random sampling

technique was used to select a sample of 350 SMEs in Cape Coast. This method is a -probability sampling method which gives every unit of the population a known and a non-zero probability of being selected. A simple random is devised in such a manner that no unit can be included more than once. It is drawn without replacement (Beri, 1998). The choice of a simple random sampling technique was inspired by the possibility of findings from the study to be generalised about the population been studied.

### **Data collection instrument**

Questionnaire were designed and distributed to the taxpayers for their responses. In line with the procedure of de Vaus, (2002), a short interview was conducted as and when the need arose to clarify issues pertaining to the instrument. In order to encourage good responses from respondents, a cover letter was attached to attract respondents' attention and motivate them to complete the questionnaire: particularly as the academic purpose of the study was clearly explained and confidentiality was assured.

The subjects were required to answer 37 questions which covered all the major constructs under study. The questions were then grouped into six sections. All the 37 questions were closed- ended. The choice of close-ended items was to ensure easy and quick analysis of the data. A three point Likert scale was used for 23 of the questions whilst a four point Likert scale was used for one question

### **Data collection procedure**

According to Miller (1991), there are two major approaches used in social research in gathering data. These are the primary and secondary sources. The primary sources comprised interview schedule, questionnaire, interviews and observation. The secondary sources of information were books, journals, magazines, internet and earlier research work in this discipline.

Illiteracy among some target respondents necessitated the use of interviews and self-administered questionnaire. With the help of five other research assistants, questionnaire were administered. The services of translators were sometimes employed. This survey method of data collection technique was adopted because of its rich potential as a source of information for tax noncompliance research. Only through questioning can one practically gather data about taxpaying behaviour, attitudes and the economic activities that provide the context for taxpaying.

A total of three hundred questionnaire were administered; however only 254 were answered and received. This represents a response rate of 72.57%. Research apathy on the part of some self-employed persons accounted for the short fall in the return rate. It was extremely difficult convincing some entrepreneurs to take part in the research. After a series of visits, those questionnaire were abandoned.

### **Pre-testing**

The interview schedule and the questionnaire were pre-tested with the sole aim of detecting mistakes, inconsistencies and repeated questions. The pre-testing was done in Takoradi using forty (40) SMEs after which some questions were deleted and others reframed before the final administration was done. The choice of Takoradi for pre-testing was informed by the fact that it is a Metropolis just like Cape Coast and has similar vibrant economic activities. It also has relatively similar cultural setting like Cape Coast. Pre-testing a questionnaire, like pre-testing a schedule provides an opportunity for detecting any mistakes in framing of questions, such as lack of consistency and clarity. Even after the questionnaire has been circulated, the question failing to elicit consistent and definite responses should be either revised or dropped (Bell, 1993).

### **Validity and reliability**

To ensure reliability and validity, the questions were scrutinised by supervisors before pre-testing. After a careful consideration of criticisms and suggestions from Supervisors and experienced researchers together with results from pre-testing, the initial questions were modified.

Regarding the survey questions, the Cronbach alpha reliability coefficient obtained was between 0.74 and 0.82 for the individual scales, indicating that the instrument was reliable. The questionnaire were developed based on the survey instrument developed by Richardson (2006), Kidder and Craig (1989) and Berhane (2011).

## Data analysis

The primary data collected from the field was analysed using the Statistical Package for Social Sciences (SPSS). Data was mainly analysed using descriptive statistics, correlation and regression analyses. Overall, descriptive analysis, simply stated as frequency, mean, median (med) and standard deviation (SD), was used to describe the background of each respondent such as his/her demographic and socio-economic status. The survey questions Q1, Q2, Q3, Q4, Q5, Q6 and Q7 which were categorised under section A, sought to elicit information pertaining to the demographic characteristics of the self-employed. Section B was designed to gather information relating to the tax structure/ system. Section C was to measure the average taxpayers' attitude towards tax issues as well as perception about fairness of the tax system.

This type of data was also used to provide a snap shot of respondents' perceptions and attitudes to tax issues. Furthermore, the *t*-test was used to compare means between two different groups and cross tabulation was employed to examine any basic interaction between variables. Section D required taxpayers to exhibit their level of knowledge on tax issues whilst Section E was meant to identify factors which account for noncompliance among taxpayers. The final section was F which was meant to measure tax compliance of self-employed persons.

The relationships between variables were tested using correlation analysis based on the Pearson correlation coefficient (*r*) and *p* value. All of the independent variables, tax fairness, tax knowledge, and tax complexity were

tested against the dependent variable, voluntary tax compliance. In order to predict the determinants for the tax compliance variables, multiple regression analyses were carried out for each dependent variable, namely voluntary tax compliance (Model1). The beta value ( $\beta$ ) or standard regression coefficient is a measure of the strength of the independent variables influence on a dependent variable.

### **Measurement of variables**

#### **Empirical model**

The following empirical model was adopted from Brainyah (2009) and used to examine the relationship between tax fairness, tax complexity, tax knowledge and tax compliance:

$$TCOMP_i = a + \beta_1 TFAIR + \beta_2 TKNOW + \beta_3 TCOMP + e$$

Where:

$TCOMP_i$  = Tax compliance

$TFAIR$  = Tax fairness

$TKNOW$  = Tax knowledge

$TCOMP$  = Tax complexity

$e$  = the error

#### **Definition of variables**

##### *Tax knowledge*

Tax Knowledge factor particularly emphasises how far a self-employed person understands the functions of tax collection, tax penalties and



understanding of the technical calculation of income tax. Knowledge as one of the factors in compliance is related to the taxpayers' ability to understand taxation laws, and their willingness to comply.

#### *Tax complexity/ tax structure*

This Tax Complexity variable accentuates how much the complexity a self-employed person should deal with the taxation in their opinion. The complexities contained in this variable are related to the wording in tax brochures and even tax return form, general calculation and rules of their own income taxes; and their effort to fill in the tax return as well fulfill their taxation duties as a taxpayer.

#### *Tax fairness*

Perceived Tax Fairness factor emphasises the extent to which the self-employed consider the taxation system in Ghana to be fair. The fairness points consisted in this variable are general fairness, exchange fairness, horizontal fairness, vertical fairness, retributive fairness, personal fairness and administrative fairness. The dimensions identified by Gerbing (1988) and which were tested by Christensen et al (1994), Hite and Roberts (1992) to find out the correlation with tax compliance in the Ghanaian context.

## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### **Introduction**

This chapter presents results and discusses findings on tax compliance behaviour of self-employed persons in the Cape Coast Metropolis (CCM). The findings were reported to conform to the objectives of the study. The social demographic characteristics of self-employed persons and their relationship with tax compliance will be discussed first. The chapter goes further to examine factors which cause tax compliance and how these factors vary across social demographic characteristics. In line with this, the typology of tax compliance as propounded by Kidder and Craig (1989) will be discussed.

#### **Demographic characteristics of the self-employed**

The demographic characteristics of respondents were sought through research questions one to six. The social demographic characteristics investigated included gender, age, marital status, level of education, religion, income and type of business. The descriptive statistics of the 254 survey respondents in the study area is represented in Table 1.

**Table 1: Socio-demographic characteristics of respondents**

Socio-demographic	Frequency	Percentage
<i><u>Gender</u></i>		
Male	136	53.5
Female	118	46.5
<i><u>Marital status</u></i>		
Married	152	59.8
Unmarried	102	40.2
<i><u>Level of education</u></i>		
No education	44	17.3
Basic	82	32.2
Tertiary	128	50.4
<i><u>Religion</u></i>		
Islam	89	35.0
Christian	139	54.7
Traditional	26	10.2
<i><u>Income</u></i>		
<2,000	57	22.4
2000-4000	94	37.0
>4,000	103	40.6
<i><u>Type of business</u></i>		
Services	128	50.4
Construction	34	13.4

**Table 1 continued.**

Manufacturing	37	14.6
Distribution	55	21.7

Source: Fieldwork, (2014) (N= 254)

### **Gender**

In profiling the respondents, it was observed from Table 1 that males, who comprise 53.5% of the total respondents, dominated the self-employed persons in Cape Coast. This result is similar to the findings of Brown, Farrel and Haris (2003) who found more men to be self-employed than women. Unlike the findings of Baba (2010) who found females to be dominant in self-employed sector, this study found majority of males in the self-employed sector. This could be due to the nature of businesses that the respondents were engaged in. These businesses are services, construction, manufacturing and distribution. Construction and manufacturing were male-dominated with the other two businesses being shared by both sexes. In total, the males outnumbered the females. This finding could also partly be explained by the fact that some females within the study area are housewives who are not self-employed.

### **Age**

The young respondents who were between the ages of 20 and 39 years formed about 63.7%. The oldest people aged between 40 and 60 years and above formed about 27.3% of the respondents. From the results, it can be inferred within the self-employed, that the young people dominate. These results are due to the

current unemployment situation in the formal sector of the economy. The Ministries, Departments and Agencies (MDAs) are unable to absorb the teeming youth into their organisations. This has even led to a high university graduate unemployment in the country. These affected youth therefore desperately resort to self-employment including petty trading as a source of livelihood. The working capital needed for self-employment is minimal, it therefore attracts many people into the sector.

### **Marital status.**

With regard to their marital status, majority of them were married (59.8%), whereas 40.2% of them were unmarried. This means that married taxpayers have a commanding influence on the self-employment sector in the CCM. This finding confirms the results of Schiller and Crewson (1997), Brown, Farrel and Harris (2003) and Baba (2010), that the presence of a helping spouse enhances the probability of self-employment. A helping spouse offers both parties the opportunity to engage in effective division of labour and household responsibilities. One party can be in full time employment in a formal sector while the other takes care of family business and related matters.

### **Educational Level**

A minority of 17.3% of the respondents were recorded to have no formal education. One-third of educated taxpayers (32.3%) had attained medium level of education, as they either completed secondary, technical or vocational school.

This finding does not support the study of Kidd (1993) that there is an inverse relationship between the level of educational attainment and self-employment. It also emerged from the study that about half of the respondents had attained tertiary levels of education; a majority of 50.4% had attended school up to the diploma and degree levels. It can be inferred that there are higher literacy levels among the self-employed in the Cape Coast Metropolis. The availability of highly educated self-employed persons can be attributed to the early introduction of education by the European missionaries resulting in the current proliferation and cluster of secondary and tertiary institutions in Cape Coast.

### **Religion**

In terms of religious background of self-employed respondents, it was identified that they were predominantly Christians (54.7%). Muslim respondents (35.0%) were the next largest religious group in the sample population followed closely by the traditionalist (10.2%) who formed the smallest proportion of the entire population. The predominance of Christians in self-employment in Cape Coast could partly be explained by the activities of the early European missionaries who came to settle in the region during the slave trade and engaged in religious and trading activities with the indigenous people.

### **Income levels**

With regard to income levels, about two-fifth of the self-employed representing 40.6% found them in the high income bracket earning more than

GHC4,000 annually. About 22.4% of the respondents were earning less than GHC2,000 annually. Generally, among the self-employed, average incomes from the sale of their goods and services are high, only that it is not regular.

### **Type of business**

Closely related to the socio-demographic characteristics of the self-employed was the nature or sector of economic activities the respondents were engaged in. This objective was achieved through research question 7. It was observed that the services sector continues to play a pivotal role in the informal sector in Ghana. Approximately 50.4% of the self-employed respondents were in the services sector whilst the construction business recorded the lowest number of people (13.4%). The services sector, which comprises many economic activities within the SMEs, requires the least investment and working capital to start with. The sector does not involve much risk compared to the other types of businesses.

In the ensuing discussions, the above mentioned demographic characteristics would be used to identify their impact on tax compliance as was first studied by Jackson and Milliron (1986).

### **Relationship between demographic characteristics of self-employed and tax compliance**

A chi-square test was conducted on the various demographic characteristics, so as to ascertain the various differences that exist between these

variables and how significant they impacted on compliance. Survey questions one (1) to seven (7) were compared to survey question thirty two (32).

For the purpose of this study, respondents who have ever filed returns were considered as compliant whilst those who have never filed returns were deemed as noncompliant.

### **Relationship between gender and income tax compliance**

Survey questions one (1) and (32) were compared to find the impact of gender on compliance. It was observed that nearly two-fifth of the male respondents were non-compliant (58.8%) compared to (55.9%) of female respondents who were non-compliant. Furthermore, approximately 41 % of male respondents were compliant where as 44.1% of females were tax compliant. It can therefore be concluded from this study that, female self-employed persons were more compliant to tax laws in Ghana than their colleague males.

Males, by nature, are aggressive and would always try to question the rationale for decisions taken by a society or the government. They are also generally risk seekers and deviants. They would therefore show these attributes in their daily activities including to noncompliance of tax laws. On the other hand, females are sober, law-abiding and would not want the society to point accusing figures at them. They will therefore endeavour to comply with the norms of a society and abide by the law including the payment of taxes. This finding affirms a common finding amongst studies reviewed by Richardson and Sawyer (2001) and previously by Jackson and Milliron (1986), which was that female taxpayers



were more compliant than their male counterparts. The finding also affirms a similar position opined by Baldry (1987), Torgler and Valev (2007) and Oxley (1993). It however does not confirm findings of Houton and Tran (2001), who saw females to engage more in tax evasion than their colleague males. The findings therefore seemed to be inconsistent. Hasseldine (1999) tried to find out the reasons which inform the gender differences in tax compliance. Gërkhani (2007) did not find statistically, any significant difference between males and females in tax evasion.

As part of the study of the association of gender and income tax compliance, a chi-square test was employed to test the overall relationship that existed between gender and tax compliance. It was also aimed at finding out whether there was statistically any significant difference between genders in respect of tax compliance. The test revealed that no significant association exists between gender and tax compliance ( $p=0.64$ ). Gërkhani (2007) had same results.

**Table 2: Relationship between gender and income tax compliance**

Socio-demographic	Frequency	Tax compliance		$X^2$ statistic (p-value)
		Yes (%)	No (%)	
Gender				
Male	136	41.2	58.8	0.21(0.64)
Female	118	44.1	55.9	

Source: Fieldwork (2014)

### **Relationship between age and income tax compliance**

Survey questions (2) and (32) were compared to find the association between age and compliance. The two questions were cross tabulated and it was observed that the older taxpayers who fall within the age bracket of 40 years and above were more compliant than the younger taxpayers. For instance, age categories, 40-49 and 50-59 recorded (51.2%) and (65.9%) of respondents as been compliant as compared to age categories 30-39 and 20-29 where (33.7%) and (29.3%) were recorded respectively. It was observed that for younger taxpayers (respondents below 40 years) recorded more than half of their respondents as noncompliant.

This finding is consistent with Richardson and Sawyer (2001), Ritsema et al. (2003), Baba (2010) and the 1997 Arkansas tax penalty amnesty programme who found young taxpayers to be less compliant. The younger are risk seeking and less sensitive to penalties. The study however does not confirm other researchers like Mason and Calvin (1978), Dubin and Wilde (1985) who found a negative relationship between age and non-compliance. In relation to this, Richardson and Sawyer (2001) proposed four possible explanations for this inconsistency: (i). the significance of age does not extend to all taxpayers. (ii) There is inconsistent definition of taxpayer noncompliance being used throughout the research. (iii) When age is considered with other variables, its impact on taxpayers' compliance is diluted (iv). The interaction of age with other variables is disturbed.

A chi-square test was employed to test the overall relationship that exists between age and tax compliance. The test revealed a significant link between age and compliance ( $p=0.00$ ). This finding is inconsistent with Porcano (1988) and Feinstein (1991) who hold the view that there is no relationship between age and compliance.

**Table 3: Relationship between age and income tax compliance**

Socio-demographic	Frequency	Tax compliance		X <sup>2</sup> statistic (p-value)
		Yes (%)	No (%)	
Age				
20-29	58	29.3	70.7	
30-39	104	33.7	66.3	23.9 (0.00*)
40-49	41	51.2	48.8	
50-59	44	65.9	34.1	
Above 60	7	85.7	14.3	

Source: Fieldwork (2014)

**Relationship between marital status and income tax compliance**

Survey question (2) was compared to question (32) to assess the association between marital status and tax compliance. It was observed from Table 4 that 53.3% of the married respondents were tax compliant whereas (26.5%) were compliant on the part of the single self-employed persons. In

addition, 46.7% of the married tax payers were non-compliant as compared to an overwhelming (73.5%) on the part of the single respondents. From Table 4, it is evident that, married taxpayers are more compliant than single taxpayers. This finding is in congruence with that of Richardson and Sawyer (2001).

The reason for married taxpayers been more compliant than single taxpayers could be informed by the assertion that females were more compliant than males. In effect it is believed that females exert an influence on their spouses to conform to tax laws in Ghana. The influence of peers on tax compliance has been recognised by taxation literature (Chan et al 2000). Single taxpayers are more risk seeking and aggressive than their married colleagues who due to family commitments are forced to be responsible and compliant.

**Table 4: Relationship between marital status and income tax compliance**

Socio-demographic	Frequency	Tax compliance		$X^2$ statistic (p-value)
		Yes (%)	No (%)	
<b>Marital status</b>				
Married	152	53.3	46.7	
Unmarried	102	26.5	73.5	17.9(0.00*)

Source: Fieldwork (2014)

It was observed that there existed significant difference between married self-employed and unmarried self-employed in terms of tax compliance (p=0.00).

The results suggest that there is an association between marital status and tax compliance.

### **Relationship between educational level and income tax compliance**

Survey question (4) was compared to survey question (32) to ascertain the relationship between education and tax compliance. Respondents who had little or no formal education were categorised under no education levels, where as those who have been to Senior High School (SHS), Vocational and Technical School were classified under basic education. Taxpayers who had their first and second degrees and diploma holders were put in the tertiary category.

**Table 5: Relationship between educational level and income tax compliance**

Socio-demographic	Frequency	Tax compliance		$X^2$ statistic (p-value)
		Yes (%)	No (%)	
Level of education				
No education	44	11.4	88.6	
Basic	82	43.9	56.1	22.6(0.00*)
Tertiary	128	52.3	47.7	

Source: Fieldwork (2014)

From Table 5, it was established that self-employed who had attained tertiary levels of education, were more compliant (52.3%). This was followed closely by taxpayers with basic education who recorded 43.9% and those with no education formed the narrow group with 11.4%. Essentially, it can be argued that taxpayers with higher levels of education have a higher tax knowledge which drives them to be more tax compliant. Kassipillai (1996) postulated that tax compliance can be improved with increased tax knowledge of the taxpayer through formal education. A higher tax knowledge means taxpayers are better informed of the benefits or uses to which tax revenue is being put and this to a large extent may influence compliance positively. On the contrary, Collins, Milliron and Toy (1992) have identified that taxpayers with higher educational levels are abreast with loop holes and opportunities to evade tax and may exploit such avenues to their advantage.

This result is similar to the findings of Chau and Leung (2009) who observed that Australian taxpayers with tertiary education reported higher tax compliance whilst taxpayers without tertiary education reported lower levels of compliance. A chi-square test was also employed to test the overall association that exists between educational levels and tax compliance. It was noted that there existed significant difference between educational levels and tax compliance ( $p=0.00$ ).

There is therefore a strong association between educational levels and tax compliance. This finding is in agreement with Eriksen and Fallan (1996), Chan et

al. (2000) who revealed that higher education is directly linked to an increased likelihood of tax compliance.

### Relationship between income level and income tax compliance

This objective was achieved by comparing survey questions (7) and (32). For the purpose of this study, taxpayers who fall within the income bracket of below GHC2,000 were considered low income earners, those who found themselves earning between GHC2,000 and GHC4,000 were assumed to be in the middle income group and finally those respondents who earned above GHC4,000 were put in the high income class. Table 6 gives us a summary of findings to enable the above objective to be discussed.

**Table 6: Relationship between income level and income tax compliance**

Socio-demographic	Frequency	Tax compliance		$X^2$ statistic (p-value)
		Yes (%)	No (%)	
Income				
<GHC2,000	57	29.8	70.2	
GHC2000	94	28.7	71.3	27.3(0.00*)
GHC4000.				
>GHC4,000	103	28.7	71.3	

Source: Fieldwork (2014)

From Table 6, another important pattern was described by the variable 'income'. It was observed that self-employed persons who fall within the low income bracket were more compliant than those within the medium and high income group. The low income group recorded (29.8%) of the respondents been compliant whilst the medium and high income group recorded (28.7%) of respondents been compliant. It was also observed that (70.2%) and (71.3%) were recorded for low income earners and high income earners respectively for not been tax compliant.

This revelation confirms the findings of most theoretical models which established that as income rises, tax evasion should increase over most ranges (Andreoni, Erard & Feinstein 1998). It also affirms the position of Ritsema, Thomas and Ferrier (2003) who identified during the 1997 Arkansas Tax penalty Amnesty Programme that income level is positively related to the tax owed.

It is however important to note that the finding is different from that of Houston and Tran (2001) who concluded that respondents in the lower income group tend to have a lower proportion of tax compliance by under-reporting income and by over-claiming expenses than their counterparts in the higher income group.

Again, a chi-square test was used to test whether significant difference exists between the various income levels in respect of compliance. The test revealed that there were significant difference between the various income levels with regard to compliance ( $p= 0.00$ ). It can be concluded that there is a strong association between income levels and tax compliance.



### Relationship between religion and income tax compliance

In order to explore the influence of religion on compliance, the survey question (6) was compared to question (32). The study revealed that Christians, representing 47.5% were tax compliant as compared to traditional religion who recorded the narrowest category or least compliant behaviour (19.2%). The Islamic religion was an intermediary between the two religions in terms of tax compliance as it recorded 41.6% of tax payers been compliant (Table 7).

**Table 7: Relationship between religion and income tax compliance**

Socio-demographic	Frequency	Tax compliance		$X^2$ statistic (p-value)
		Yes (%)	No (%)	
Religion				
Islam	89	41.6	58.4	
Christian	139	47.5	52.5	7.20 ( 0.03*)
Traditional	26	19.2	80.8	

Source: Fieldwork (2014)

Noncompliance levels were also observed to get a clearer picture of the relationship that exists between the two variables under study. It was found out that fourth- fifth of traditionalist were non-compliant compared to about half of Christians who were non-compliant. The reason why Christians and Muslims are seen to be more compliant can be attributed to some of the values, teachings and

beliefs they uphold. The concept of giving alms by Muslims also known as “zakat” and tithing by Christians were some religious practices which increased the tax moral of respondents to comply with tax laws. The habit of giving some part of incomes earned over the period to religious institutions may improve their willingness to pay tax.

The Muslim respondents, for example, viewed the sense of paying ‘zakat’ as strongly driving the same sense of paying tax to the government from the concept of ‘sadaqah’ and ‘barakah’. ‘Sadaqah’ means giving something voluntarily to somebody without asking for something in return, only with the intention to please Allah so that ‘barakah’ or blessing from Allah will be received.

In Malaysia, for instance, Muslims are given a tax rebate on their income levels because the government seeks to avoid the problem of “double taxation”. This is because Muslims are obliged to make two compulsory payments levied on the same source of income every year. As such “zakat” is treated as a tax rebate Mohd (2013). Nearly all Muslims who pay ‘zakat’ in Malaysia are willing to comply with tax laws because ‘zakat’ has lowered their actual cost of taxes.

Similarly, in order to explore whether there was significant difference that exists between the various religious groups and their association with compliance, a chi-square test was carried out which revealed that there was statistically significant difference between the variables concerned ( $p=0.03$ ). It can therefore be concluded that there is an association between religion and tax compliance. Tax payers, like any other rational decision makers, usually rely on internal elements such as moral beliefs and/or religious beliefs to choose whether to

comply or not. Stalans, Smith and Kinsey (1989) supported this by stating that normally, many taxpayers use their inner values in the decision-making process. This position is in semblance with the argument raised by Margolis (1997) that religious faith can supposedly provide moral constraints to distinguish and choose between good and bad behaviour in any religion.

Strong religious beliefs were expected to prevent illegal behaviour through self-imposed guilt, particularly in the case of tax evasion (Grasmick et al.1991).Grasmick et al.(1991) and (Stack & Kposowa, 2006) discovered that those with no religious affiliation were more inclined to cheat. Torgler (2003a) revealed that tax morale depends positively on religiosity.

### **Relationship between business status and income tax compliance**

Survey question (5) was compared to question (32) to assess the association between business status and tax compliance. It was observed from Table 8 that, self- employed persons who were engaged in the construction business were more compliant than their counterparts in other businesses. It recorded a majority of 58.8% whilst that of services, distribution and manufacturing recorded 43.0%, 40.0% and 29.7% respectively.

**Table 8: Relationship between business status and income tax compliance**

Socio-demographic	Tax compliance			$X^2$ statistic (p-value)
	Frequency	Yes (%)	No (%)	
Type of business				
Services	128	43.0	57.0	
Construction	34	58.8	41.2	6.33 (0.09)
Manufacturing	37	29.7	70.3	
Distribution	55	40.0	60.0	

Source: Fieldwork (2014)

The major factors accounting for the difficulty in taxing some types of businesses such as the manufacturing industry, which recorded about 70.3% of its respondents not been compliant, are due to the peripatetic nature of the informal sector businesses and the predominance of cash transactions. It was found that many informal sector businesses were peripatetic as the self-employed did not have a permanent place of business. Furthermore, the sales among the informal sector businesses were largely made on the basis of cash only, while a few respondents sold both on cash and credit basis. It is well established in the literature Braithwaite (2003) that cash sales leave no evidence of sales and therefore some revenue may not be captured in total revenue. The high cash basis of sales is largely informed by the fear of default by customers.

Based on the poll tax in Tanzania, Fjeldstad and Semboja (2001) found support for differences in opportunities for tax noncompliance. Employees paying their head-tax through a tax withholding system have fewer opportunities to evade than the self-employed. Houston and Tran (2001) also revealed a significantly higher proportion of tax evasion among respondents who are self-employed. A chi-square test employed among the various variables concerned revealed a p-value of 0.09. This means there is no significant difference among the nature of business and tax compliance. This is conflicting with Richardson (2006) who reported that income source is significantly related to tax evasion.

### **The typology of noncompliance**

The first objective of the study was meant to provide literature and offer a clear understanding of typology of noncompliance. Seven variables were used by Kidder and Craig (1989) to assess the reason for which individual taxpayers would comply or not comply to payment of taxes. These variables, they named as taxonomy or topology of tax compliance, are: procedural, brokered, unknowing, lazy accounting, protest or symbolic, asocial and habitual non-compliance. In trying to understand this phenomenon, survey question (32) was asked and analysed using a frequency distribution table. The results are shown in Table 9.

**Table 9: Factors influencing tax non-compliance**

Factors	SNI (%)	NI (%)	I (%)	SI (%)
Complex income tax returns procedure	34.9	15.1	17.1	32.9
Accounts advice	45.2	12.3	27.4	15.1
Ignorance	39.7	15.7	24.7	19.9
Lazy accounting	34.9	15.8	19.2	30.1
Taxes not beneficial	22.6	3.4	28.8	45.2
Associate of friends	30.8	13.0	28.1	28.1
Maintain the status quo of not filing	30.8	11.0	29.4	28.8

Source: Fieldwork (2014)

SNI= Strongly Not Influenced, NI= Not Influenced, I= Influenced

SI= Strongly Influenced

### **Procedural non-compliance**

The procedure and requirements for filing an income tax return may be a hindrance for taxpayers in discharging their taxpaying obligations when it is perceived to be too bureaucratic and complex. Procedural noncompliance may be due to complexity of filing procedures (Owens & Hamilton, 2004). Clotfelter (1983) found that the complexity of the return was associated with non-compliance. Intending to investigate this phenomenon, respondents were asked in question (32a) to rate the extent to which procedure for filing tax return had an

influence on their inability to file a return. It was observed from Table 9 that (32.9%) of the respondents viewed the complexity of the filing procedures as having a strong influence on their inability to file returns.

It is worth knowing that procedural noncompliance is the fourth largest factor contributing to the self-employed not filing their returns. Respondents who have never filed and even those who have in some time past ever filed income tax returns and who faced some difficulties in completing the tax return form and getting to know their final tax liability cited this as a key factor contributing to their noncompliance. Even though about the same number of people (34.9%) felt procedural noncompliance does not strongly influence their inability to comply, the earlier finding still confirms Clotfelter (1983) and Richardson (2006) who found that complexity of the system had been associated with greater underreporting of tax. It can be said that these findings are informed by the expectancy theory. According to the theory, individuals seek desired outcomes and weight these outcomes by their likelihood. As taxpayers perceive the procedure for filing tax returns to be complex and a hindrance to their behaviour, they will choose the desired outcome by failing to pay their share of tax. Essentially, people choose behaviours that maximise a combination of expected personal and interpersonal consequences.

The reasons or bottlenecks that some respondents cited for possibly accounting for complexities in the filing process are complex nature of forms, too many forms and requirements, inconsistencies in the assessment of tax amount, poor attitude of tax officials, non-accessibility of tax offices among others. In

order to curb some of these bottlenecks, some developed countries have introduced the electronic filing (e-filing) system which could be piloted and implemented in Ghana.

### **Brokered non-compliance**

It takes place when taxpayers refuse, reduce or defer the payment of taxes based upon the technical advice of a knowledgeable expert such as a tax accountant, lawyer or bond dealer. It is often believed that these experts have a significant influence on the taxpaying behaviour of corporate entities and individual taxpayers. Brokered non-compliance occurs when taxpayers become non-compliant because of expert advice.

As shown in Table 9, it turned out that majority of the self- employed were not influenced by accountants in refusing to file their returns. An overwhelming respondents of 57.5 % said they were not influenced by accountants' advice. This affirms the findings of Baba (2010), who recognised that majority of self employed in the Tema Metropolis, were not influenced by accountants in not filing their returns. Most of the self-employed in the informal sector do not rely on the expertise of accountants in filing their returns and this largely explains this finding. It is also evident that poor record keeping practices of the self-employed who more often than not do not engage the services of accountants is another reason for the high rate of brokered noncompliance. High levels of illiteracy and the low level of education among members of the



association result in poor record keeping by the association, making accounting and auditing procedures difficult (World Bank, 2002).

### **Unknowning non-compliance**

Unknowning noncompliance occurs when taxpayers are not aware of the changing rules in the tax laws that occur yearly. This arises when taxpayers fail to comply either in part or in whole with the tax laws mainly due to ignorance or complexity of some of the tax laws that do not lend themselves for easy comprehension (Picciotto, 2007). As indicated in Table 9, 55.4% of the respondents, who are second after brokered noncompliance, indicated that ignorance is the least cause of noncompliance among the self-employed.

However, a sizeable percentage of the respondents (44.6%) gives the indication that ignorance still has a huge influence in the income tax non-compliance decisions of the self-employed in CCM. Majority of self-employed persons or owners who are salaried workers in other companies usually have their taxes deducted at source and other withholding tax arrangements. This, to a very large extent, influences their perceptions or awareness of the taxing arrangement as they are only aware of withholding tax to the neglect of other items such as gift tax which are not deducted at source. Taxpayers often times are only aware of changes in the Internal Revenue Act, 2000 (Act 592) that relates to individuals' employment income but do not bother about changes in the tax law.

### **Lazy (Accounting) non-compliance**

The inability of individuals to keep proper set of accounts or records may lead to noncompliance. It exists where individuals discover that they cannot document legitimate expenses for business or fail to keep track of other earnings for which there is no withholding tax (Azah, 2005). Proper accounting records help in determining taxpayer's income and thereby their tax liabilities (Ayres & Braithwaite, 1992). This attitude towards record keeping may become a norm with the passage of time and can lead to noncompliance.

This type of noncompliance attitude may emanate from the burden of income tax payment which can be viewed in two dimensions. It requires effort and skills to keep records for tax purposes and to save income for payment of taxes. This burden of income tax often emanates from careless underreporting which over the years may develop into a habit.

Survey question (32d) helped solicit response which is relevant for discussion. As shown in Table 9, 50.7% felt lazy accounting does not influence their noncompliance behaviour whilst 49.3% felt it accounted for their inability to file returns. This supports Braithwaite (1995) who concluded that one of the reasons that small businesses fail to file returns is inadequate, inaccurate or nonexistent books and records. The extent, nature and detail of the records maintained will depend on the type of business and the information required. The same reasons of self-employed persons not hiring the services of accountants to keep proper records can be used to explain this phenomenon. Good records are essential in accounting and auditing processes.

### **Protest or symbolic non-compliance**

Taxpayer noncompliance may be triggered by their perception of unfairness of the tax laws and inequity in the use of revenue from taxes. Protest against payment of taxes which is informed by these factors is referred to as symbolic noncompliance. The individuals in this case do not see the need for them to pay taxes. These taxpayers cheat the state by running their activities such that it is difficult, if not impossible, for tax officials to identify, let alone tax them (Thuronyi, 2003). Failure to comply with tax laws is seen as a protest against the inequitable tax system (Kidder & Craig, 1989).

It was observed that this factor is the largest cause of noncompliance in the CCM. About 79.9% of the respondents felt there was unfairness in the use of which tax revenues and for that matter taxes were not beneficial. However, 20.1% felt it did not have an influence on their noncompliance behaviour. This finding confirms Chung (2002) who recognised that taxpayers who perceive an unfair exchange from the government or who are not in agreement with the government's spending policies in return for tax payments may feel distressed and report less income than those who consider equity in their transactions with the government. The self-employed persons can choose to conceal their activities from the DTRD of the GRA, Registrar General Department (RGD) and the Social Security and National Insurance Trust (SSNIT) as an avenue of protesting injustices in the taxing system.

### **Asocial noncompliance**

It is a classic type of tax evasion also known as “tax cheater”. For instance, feeling a little if any sense of obligation to pay a share of taxes, a taxpayer may arrange his or her business so as to minimise its visibility to tax authorities and manages to avoid taxes altogether by accepting payment for his or her work in cash only, paying cash for supplies, and avoiding a written trail of his economic activity (Azah, 2005).

Taxpayers as social beings are in one way or the other influenced by the actions and inactions of their associates. Where a network of individuals decides not to comply with tax laws, their associates are also influenced to follow suit in pursuit of the group’s mission (Baba, 2010). Grasmick and Bursik (1990) found that family and friends do have significant influence on taxpayer compliance behaviour.

Survey question (32f) asked respondents the extent to which they relied on friends and associates’ advice to evade tax. Table 9 indicated that, 56.2% of self-employed evaded tax under the counsel of friends and peers. This supports the findings of Banerjee (1992) who indicated that social influences may affect compliance, in particular by affecting the perceived probability of detection. One of the most consistent findings about taxpayer attitudes and behaviour in Western countries is that those who report compliance believe that their peers and friends (and taxpayers in general) comply, whereas those who report cheating believe that others cheat (Yankelovich *et al.*, 1984). Evidence suggests that perceptions about the honesty of others may affect compliance behaviour. In line with the social

influence theory, we would expect to find that individuals who perceive other people to be compliant have a tax compliant attitude. It is not surprising that the respondents who were influenced by asocial compliance far exceed those who were not.

### **Habitual noncompliance**

It was also observed that some behavioural traits cultivated over time by respondents in underreporting income and evading taxes was a norm. Some self-employed persons simply did not have any tangible reason for failing to comply. Tax noncompliance has become part and parcel of them resulting from a long period of noncompliance. Noncompliance effectively can be said to have become their habit. For instance, taxpayers who rely on prior year tax reforms as beginning estimates in completing current year's tax form may result in underreporting incomes and deductions. This, if not curtailed, may develop into a habit.

Kidder and Craig (1989) identified that the attitude of taxpayers not paying taxes over a long period is one of the major causes of tax noncompliance. Research question (32g) sought to determine the impact habitual noncompliance had on self-employed evading taxes. As depicted in Table 9, habitual noncompliance recorded the second largest cause of noncompliance in CCM. It came up that 58.2% of the respondents indicated that habitual non-compliance informed their non-compliance decision whilst about 41.8% were not influenced by habitual non-compliance. This reaffirms the study of Eriksen and Fallan (1996)

who revealed that taxpayer's attitude towards tax system has influence on reinforced desire toward tax evasion and compliance. Trivedi *et al.* (2005) also revealed that there is a relationship between attitude and compliance

The third objective of this study was to examine the determinants of income tax compliance or non-compliance among the self-employed. Table 10 provided information for the achievement of this objective.

**Table 10: Determinants of income tax compliance among the self- employed**

Factors	Variables under the domain	Loadings	Eigen Values	% Variance Explained	Cronbach Alpha
<i>I</i>	<u><i>Tax structure/system</i></u>				
	Computation of my tax liability is very complicated	0.84			
	Tax laws in Ghana are difficult to understand	0.76	2.95	22.4	0.74
	The filing and payment processes is not convenient	0.78			
	The filing and payment processes have a bearing on my attitude towards taxation	0.73			
<i>II</i>	<u><i>Tax payers attitude and perception</i></u>				
	Incase tax authorities would improve their services, it would be easier to fulfil my tax responsibilities	0.87			
	Compared to the amount paid by more wealthy taxpayers, I pay more than my fair share of income	0.86	1.96	20.6	0.82
	On the whole, the burden of income taxes is fairly distributed	0.67			

**Table 10 continued.**

	A fair tax rate should be the same rate regardless of the amount of income earned	0.62			
III	<i>Tax knowledge</i>				
	All income earners are charged the same tax rate regardless of the amount	0.78	1.78	17.8	0.76
	GRA collects taxes on behalf of the government	0.77			
	It is the tax payers obligation to file tax returns	0.76			
	Small business payers have no special provision for taxing them	0.73			
	There are no penalties for failure to pay taxes	0.72			
	Total variance			60.8	

KMO = 0.894; Bartlett's Test of Sphericity (Approx.  $X^2$ ) = 1480.29; P = 0.00

Source: Fieldwork, 2014

### Factor analysis

Factor analysis is a statistical method to reduce a large set of related variables into smaller set of components or dimensions. Before factor analysis can be conducted, sufficient sample size should be ensured. Tabachnick and Fidell (2001) suggest suitability of data and approach must be determined before factor analysis is conducted. After assessing respondents' reactions to individual variables on the three main dimensions or determinants of income tax compliance among the self-employed persons using basic descriptive statistic, it was then imperative to take a further look at the major underlying factors affecting income tax compliance and noncompliance among the self-employed. Hence Factor Analysis (FA) was employed. It was used because considering the bulky nature of

the variables (23) used in measuring the dimensions, there was the need to ascertain most pressing constructs and their corresponding variables. According to Pallant (2005), FA is a data reduction' technique which takes a bulky set of data and looks for a way to reduce or summarise, using a smaller set of factors or components.

FA was carried out on three factors as suggested by Brainyyah (2009) namely Tax knowledge, Tax structure (complexity) and Taxpayers attitudes (Tax fairness). Before using the tool, the basic assumptions underlying the use of FA, that is the Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) that measure sampling adequacy and the factorability of the data were examined to make sure that they were not violated and they are suitable for the analysis.

According to Tabachnick and Fidell (2001), for the Bartlett's test of sphericity to be significant, the p value should be  $<0.05$  while the KMO index should range from 0-1, with 0.6 recommended as the minimum value for a good FA. For this study, the Bartlett's test of sphericity was found to be statistically significant ( $p = 0.00$ ), on the other hand the KMO index was 0.894 exceeding the recommended value.

As a result, the variables were later subjected to the Principal Component Analysis (PCA) employing the varimax rotation which reduced the twenty- three variables (23) to three (3) main underlying constructs of thirteen (13) variables explaining income tax compliance. In addition, the correlation matrix and Eigen values were looked at. Pallant (2005) again makes a case that it is important to make sure that correlation matrix is 0.3 or more. Factors with Eigen values of 1.0



or more are retained for further investigation with respect to individual sub-dimensional factor loadings

More importantly, the Cronbach's alpha was employed to test the reliability of the scale used and the extent to which the variables contribute in explaining a dimension. Pallant (2005) recommends that in order to determine the degree at which all items under the construct effectively measure, the Cronbach's alpha coefficient should be more than 0.7, which is from (0.7-1).

The resulting procedure using the orthogonal rotation led to a three factor structure that explained 60.8% of the total variance in the determinants of tax compliance with the remaining 39.2% of the variance being explained by other factors that possibly were not captured in the instrument or otherwise. As a result, further research is needed to identify these factors. The corresponding factor loading matrix, including the commonalities to the explanation of the total variance.

Factor one (I) labelled as tax structure/system had four (4) of the thirteen (13) overall items and consisted of issues pertaining to computation of tax liability, complexity of tax laws, convenience of filing and its bearing on payment of taxes. The factor explained 2.95 (22.4%) and its internal consistency accounted for Cronbach alpha of 0.74 and its factors loadings ranged from (0.73-0.87). This result shows that tax structure/ system explains most of tax compliance and non compliance issues in the Metropolis. This is obvious because, according to Chau et. al(2009), the complexity of tax systems/ stucture, probability of detection and penalties and tax rates are major factors affecting the effectiveness of a tax

system. The more tax laws become complex, the lower the compliance levels. Simple, understandable and clear tax rules enhance tax compliance (Chau et al. 2009).

Factor two (II) which was captioned taxpayers attitude and perception/ tax fairness sought to address behavioural/ attitudinal issues. Tax Fairness factor accentuates how far the self-employed assume that taxation system in CCM is fair. The factor tried to explore the perceptions of taxpayers on the fairness of the tax system and its association with compliance. Issues here were four (4) and comprise the four dimensions out of the five dimensions of tax fairness designed by Gerbing (1988). After the FA, it was observed that special provisions/attitude towards taxes of the wealthy was not contributing significantly to issues of compliance in the Metropolis. However, issues of general/fairness/distribution, exchange with government, progressive versus flat tax rate and self-interest were found to be relevant and were contained in the four factor loadings.

Altogether, the factor explained 1.96 (20.6%) of the total variance and all items under the construct effectively measured it at a Cronbach alpha value of 0.82. Individually, the variables loaded in ascending between (0.62-0.87). Perhaps, the finding suggests how dependable and accurately attitudes and perceptions of fairness influence tax compliance. Attitudes are generally assumed to influence compliance behaviour because they represent taxpayer's propensity to respond positively or negatively to a particular situation (Eagly & Chaiken, 1993 and Ajzen, 1991).

Tax knowledge constituted Factor three (III) and is made of five statements. It looked at concerns such as the availability of information and level of awareness of taxpayers on tax issues. Low level of awareness has created many misconceptions on the true value of tax and consequently an underestimation of the tax burden needed in sustaining public services (Saira, Zariyawati & Yoke, 2010). Citizens are not only misinformed about taxes, but they also have an uncertain knowledge of state expenditure and the true costs of free public services. Citizens have very limited knowledge on government true expenditure and the cost of public service provided by the government (Csontos, Kornai & Tóth, 1998). They are therefore in most cases not convinced that tax should be paid.

Each of the variables loaded ranges between as low as 0.72 to a high value of 0.78. Together, factor three accounted for 1.78 (17.8%) of the total variance explained with an alpha value of 0.76. This finding is in line with Eriksen and Fallan (1996) who suggested that fiscal knowledge correlates with attitudes towards taxation and that tax behaviour can be improved by better understanding of tax laws. In recent times, other researchers have confirmed this assertion. For instance Kirchler *et. al.* (2008) also emphasises that tax knowledge in individual taxpayers is also positively related to tax compliance. This finding is in line with findings of (Wahlund, 1992; Eriksen & Fallan, 1996; Park & Hyun, 2003).

**Table 11: Relationship between determinants of tax compliance or non-compliance**

Factors	B	SE	B	T	P value	Tolerance	VIF
Tax structure	0.059	0.090	0.039	0.651	0.516	0.944	1.059
Tax attitude	0.483	0.090	0.331	5.392	0.000*	0.890	1.124
Tax knowledge	-0.219	0.087	0.156	2.528	0.012*	0.881	1.135
<i>Constant</i>	0.114	0.294		7.699	0.000*		

$R^2 = 0.407$ ; Adjusted  $R^2 = 0.391$ ;  $F = 16.51$ ;  $P = 0.000$

\* $p \leq 0.05$

The regression formula can thus be stated as:  $Y = 0.114 + 0.331X_1 + 0.156X_2 + 0.039X_3 + 0.294$

To investigate the association of the independent variables, Tax Knowledge, Tax Attitude and Tax Structure with the dependent variable, Tax Compliance, the regression equation used by Brainyyah (2009) was modified based on the factor analysis output in Table 10. The regression equation identifies the direct effect tax knowledge, tax structure/complexity and tax attitude/fairness have on tax compliance. On that account, the Ordinary Least Squares (OLS) regression model was used. Suitability of the data in terms of sample size adequacy, linearity, absence of multi-collinearity and autocorrelation among others were met as recommended by Richardson (2006). The impact of multi-collinearity was analysed. Dewberry (2004) stated that the tolerance and Variance Inflation Factor (VIF) are the two ways of checking for multi-collinearity problems. VIF and tolerance were considered for the model in this study. Pallant

(2005) stated that model multi-collinearity assumptions are not violated if the tolerance values are above 0.10 and the values of VIF are less than 10. The model was clear of multi-collinearity problems. For instance, all tolerance values of the predictor variables were greater than 0.10 and (VIFs were less than 10. The Durbin–Watson statistic test of autocorrelation stood at 2.26, implying the absence of autocorrelation (Asteriou & Hall, 2011).

The OLS results indicated that the entire model significantly accounted for 39 % of the variation in tax compliance. Notwithstanding the power of the model in explaining the tax compliance of the self-employed, not all the dimensions significantly explained the phenomenon. In Table 11, the ‘tax attitude/fairness’ dimension exerted the greatest influence ( $\beta = 0.33$ ), suggesting that self-employed persons who were fulfilled with this dimension, were 0.33 times more likely to comply with tax laws.

This observation explained by Eagly and Chaiken (1993) and Ajzen (1991) who opined that attitudes are generally assumed to influence compliance behaviour because they represent taxpayer’s propensity to respond positively or negatively to a particular situation. It was also observed that there is a significant link between taxpayers’ attitudes or perception of fairness and tax compliance ( $p=0.000$ ). Within literature of tax compliance, the perception of the taxpayers about the fairness of the tax system is recognised as an important factor that can have significant influence on tax compliance behaviour. According to Gilligan and Richardson (2005), the tax system that is perceived as unfair by the citizens

may likely to be less successful and this will encourage the taxpayers to engage in noncompliant behaviour.

In addition, the tax knowledge also had a significant bearing ( $p=0.012$ ) on tax compliance. The regression weight indicated that self-employed persons who had a greater tax knowledge or high level of awareness of tax and its related issues were 0.156 times likely to comply. This reaffirms previous studies which evidenced that general tax knowledge has a very close relationship with taxpayers' ability to understand the laws and regulations of taxation, and their ability to comply with them (Singh, 2003a). However, tax structure/ complexity was the only factor that did not pose any significant ( $\beta = 0.039$ ) effect on the tax compliance.

#### **The analysis of hypothesis 2, 3 and 4 of the research**

*H<sub>2</sub>: Tax knowledge does not influence tax compliance among the self-employed.*

*H<sub>3</sub>: There is no association between tax fairness and tax compliance of the self-employed.*

*H<sub>4</sub>: Tax complexity does not influence tax compliance of the self-employed.*

Brainyyah (2009) tested the three independent variables (tax knowledge, tax complexity and tax fairness) to find out if there was any significant increase or decrease in the amount of variance that could be explained when the determinants were used to measure tax compliance behaviour. Table 11 presents the summary

of multiple regression results. It shows that the result is significant at  $p < 0.000$  level with F statistics at 16.15 while the adjusted  $R^2$  was 0.391%.

In summary, for  $H_2$ , the results of the regression analysis saw a significant association between tax knowledge and compliance. This implies that the null hypothesis will be rejected. This also implies that, it is most likely that taxpayers' with better understanding of tax matters will compel them to fulfill their tax obligation and hence do away with tax evasion tendencies. This affirms literature by Fikriningrum (2012), Ghoni (2012) and Rajif (2011) which have shown an existing relationship between tax knowledge and tax compliance. It however differs from the results of Carolina and Simanjuntak (2011) and Somang (2006) which stated that there is no influence of the variable tax knowledge on the level of tax compliance.

Also,  $H_3$  was tested through the model to identify the association between tax fairness/ attitude and tax compliance. It was revealed that, there was a significant association between tax fairness and tax compliance. In this regard, the null hypothesis will be rejected again. This implies that, taxpayers are more likely to comply with the tax regulations if they perceive the tax system to be fair. It conforms to earlier findings that taxpayer's perceptions of the fairness of the tax system are likely to influence their willingness to evade payment. Park and Hyun (2003) and Chan, Troutman and O'Bryan (2000) found evidence that the perception of fairness was directly associated with compliance. This is however not in consonance with research done by Pris (2010).

The association between tax complexity/structure and tax compliance was examined in  $H_3$ . The regression model tested in Table 11 indicated that there was no significant association between tax complexity/structure and tax compliance. The null hypothesis will be accepted. Tax complexity factor which consists of content complexity and compliance complexity saw no significant correlation to tax compliance behaviour of self-employed. This situation indicated that the higher the complexity in tax regulation, tax return and tax reporting activities were, the complexity had no significant association with the levels of tax compliance. This supports results of research conducted by Forest, Adam, Sheffrin and Steven (2002). It however varies from the findings of Brainyyah (2009) and Saad (2010).

The study also sought to explore the influence of general education on tax knowledge. In this regard the following hypothesis was set:

***H<sub>1</sub>: education does not improve tax knowledge of individual tax payers.***

Results in Table 12 were used to discuss the above objective.

**Table 12: Relationship between Level of education and tax knowledge**

	Tax knowledge		B	t	p-value
	B	SEB			
Constant	1.80	0.06		31.6	0.00
Level of education	0.02	0.02	0.06	0.98	0.329

$R^2$  0.15; Adjusted  $R^2$  = 0.10 (F =0.957; P 0.329)

It was revealed that there was no significant association between general levels of education and tax knowledge (p=0.329). It implies that general education levels does not account for an improvement in tax knowledge of the self-



employed. This finding therefore suggests the training of the self-employed on issues pertaining to their tax obligations. The null hypothesis was accepted and the alternative rejected. This result is different from Chan et. al., (2000), who suggested that those with a higher education level are more likely to have a higher level of moral development and higher level attitudes towards compliance and thus will tend to comply more.

It can be concluded that general education does not improve on tax knowledge in any way. This finding supports the position of Hite and Hasseldine (2001) who highlighted that tax authority needed to emphasise teaching tax courses because of its positive impact it has on tax knowledge and compliance.

### **Determinants of tax compliance across socio-demographic characteristics of self-employed**

The fourth objective sought to find out whether the determinants of tax compliance vary across the socio-demographic characteristics of self-employed persons. Tables 13, 14 and 15 will provide results to aid in this discussion. One way analysis of variance and the independent sample t-test were employed to test for differences among groups. *T*-test statistical analysis was employed on socio-demographic variables that were measured along a dichotomous scale. These included gender (1 = male, 2 = female) and marital status (1 = single, 2 = married), whereas ANOVA was used for those with more than two categories (that is where characteristics were measured along interval scale differences).

It was observed that with regard to “tax structure”, there was a significant association between “tax structure” and gender, level of education, age, religion, income and type of business. However there was no association between “tax structure” and marital status ( $p=0.21$ ) both married and unmarried respondents strongly agreed that the complexity of the tax structure affects compliance levels. A post-hoc comparison using Least Significant Difference (LSD) test among the statistically significant variables revealed the following:

*Gender*

Males and females contributed significantly to the association with tax structure ( $p=0.00$ ,  $t=6.14$ ). There were significant variations between the various categories of gender. Males moderately agreed while females strongly agreed that complexity of the tax system affects compliance levels (Table 13).

**Table 13: Socio-demographic of respondents’ by mean responses of tax structure**

Socio-demographic	N	Mean	St.d	p-value	Test statistic
<i>Gender</i>					
Male	136	2.05	0.25	0.00*	t-test
Female	118	1.86	0.22		6.14
<i>Marital status</i>					
Married	152	1.98	0.24	0.21	t-test
Unmarried	102	1.94	0.27		1.25
<i>Level of education</i>					
No education	44	1.90**	0.28	0.05*	ANOVA
Basic	82	1.94	0.22		2.85
Tertiary	128	2.00**	0.26		
<i>Age</i>					
20-29	58	1.92**	0.26	0.00*	ANOVA
30-39	104	1.93	0.25		7.60
40-49	41	1.95	0.23		

**Table 13 continued.**

50-59	44	2.15**	0.21		
60 above	7	1.94	0.19		
<u>Religion</u>					
Islam	89	1.94	0.24	0.04*	ANOVA
Christian					
	139	2.00**	0.26		3.16
Traditional	26	1.87**	1.87		
<u>Income</u>					
<2,000	57	1.95	0.28	0.02*	ANOVA
2000-4000	94	1.91**	0.27		3.97
>4,000	103	2.20**	0.22		
<u>Type of business</u>					
Services	128	1.89**	0.24		ANOVA
Construction	34	2.18	0.26	0.00*	15.2
Manufacturing	37	1.94	0.19		
Distribution	55	2.03**	0.23		

Note: \*Significant difference exists at  $p \leq 0.05$ .

\*\*Post-hoc test

Scale : 1 = Strongly Agreed; 2= Moderately Agreed; 3= least Agreed

#### *Level of education*

The results showed that for this variable only respondents who fall within categories of “no education” and “Tertiary education” contributed to the association that existed between the variables concerned. For instance, the variables “no education” and “tertiary” recorded mean values of 1.9 and 2.00 respectively.

#### *Age*

The results also disclosed that age categories “20-29” and “50-59” were the respondents who accounted for the association that existed with the

determinant “tax structure”. Post-hoc test revealed that 1.92 and 2.15 mean values were obtained respectively.

*Religion*

It was evident that it was only the Islamic religion with a mean of 1.94 that did not have any impact on the “tax structure”.

**Table 14: Socio-demographic of respondents’ by mean responses of tax knowledge**

Socio-demographic	N	Mean	St.d	p-value	Test statistic
<i>Gender</i>					
Male	136	1.89	0.29	0.07	t-test 1.61
Female	118	1.80	0.24		
<i>Marital status</i>					
Married	152	1.86	0.24	0.55	t-test 0.62
Unmarried	102	1.84	0.32		
<i>Level of education</i>					
No education	44	1.81	0.25	0.60	ANOVA 0.50
Basic	82	1.85	0.30		
Tertiary	128	1.86	0.26		
<i>Age</i>					
20-29	58	2.81**	0.30	0.00*	ANOVA 3.85
30-39	104	1.79	0.28		
40-49	41	1.91	0.21		
50-59	44	1.95	0.24		
60 above	7	1.97	0.27		
<i>Religion</i>					
Islam	89	1.84	0.27	0.66	ANOVA 0.41
Christian	139	1.86	0.29		
Traditional	26	1.81	0.23		
<i>Income</i>					
<2,000	57	1.82	0.31	0.16	ANOVA 1.79
2000-4000	94	1.89	0.32		
>4,000	103	1.83	0.19		
<i>Type of business</i>					
<i>Services</i>					
Construction	34	1.86	0.14	0.10	ANOVA 2.10
Manufacturing	37	1.85	0.20		
Distribution	55	1.92	0.38		

Note: \*Significant difference exists at  $p \leq 0.05$ . Scale: 1 = Agreed; 2= Moderately Agreed; 3= Least Agreed \*\*Post-hoc test

Table 14 showed results that sought to explore how socio-demographic characteristics vary across tax knowledge. It was only age which showed a significant association with tax knowledge. A post hoc test was therefore carried out on this variable using LSD. The age category “20-29” (M=2.81, SD=0.30) was identified as the only cause of this significant influence. This means that there was no variation in opinions by respondents between the ages of 40-49 (M =1.91, SD=0.21), 50-59 (M=1.95, SD=0.24), 60 above (M=1.97, SD=0.27).

**Table 15: Socio-demographic of respondents’ by mean responses of tax attitude**

Socio-demographic	N	Mean	St.d	p-value	Test statistic
<i>Gender</i>					
Male	136	2.01	0.30		t-test
Female	118	2.07	0.21	0.54	1.93
<i>Marital status</i>					
Married	152	2.07	0.26	0.02*	t-test
Unmarried	102	1.99	0.27		2.21
<i>Level of education</i>					
No education	44	1.94**	0.20		ANOVA
Basic	82	2.00**	0.27	0.00*	6.47
Tertiary	128	2.09	0.27		
<i>Age</i>					
20-29	58	2.03**	0.27		ANOVA
30-39	104	1.98	0.25	0.00*	5.95
40-49	41	2.04	0.25		
50-59	44	2.19	0.24		
60 above	7	1.89**	0.31		
<i>Religion</i>					
Islam	89	1.98	0.25		ANOVA
Christian	139	2.09**	0.27	0.00*	7.25
Traditional	26	1.93**	0.23		
<i>Income</i>					
<2,000	57	1.94**	0.20		ANOVA
2000-4000	94	2.00**	0.27	0.00*	6.47
>4,000	103	2.09	0.27		

**Table 15 continued.**

<i>Type of business</i>					
<i>Services</i>	128	1.96**	0.23		ANOVA
Construction	34	2.26	0.26	0.00*	14.8
Manufacturing	37	2.02**	0.24		
Distribution	55	2.09	0.27		

Note: \*Significant difference exists at  $p \leq 0.05$ .

\*\*Post-hoc test

Scale: 1 = Agreed; 2= Moderately Agreed; 3=Least Agreed

Similarly, ANOVA was conducted to explore the impact of socio-demographic characteristics of taxpayers on the underlying dimension (tax attitude). There was no statistically significant difference at  $p \leq 0.05$  level for factor III (tax attitude/ fairness) and responsiveness of gender. It was observed that gender had ( $p=0.54$ ,  $t=1.93$ ). Males ( $M=2.01$ ,  $SD=0.31$ ) and Females ( $M=2.07$ ,  $SD= 2.21$ ). This means that there was no variation in opinions by respondents between gender in terms of tax attitudes. However the other demographic characteristics (age, income levels, educational levels, business type, religion and marital status) saw significant variations in terms of opinions of these characteristics and tax attitudes.

With regard to age, there was no variation in opinions by respondents between the ages of 30-39 ( $M =1.98$ ,  $SD=0.25$ ), 40-49 ( $M=2.04$ ,  $SD=0.25$ ), 50-59 ( $M=2.19$ ,  $SD=0.24$ ). They all viewed tax attitudes as the same. However taxpayers who fall within age categories 20-29 ( $M=2.03$ ,  $SD=0.27$ ) and 60 and above ( $M=1.89$ ,  $SD=0.31$ ) had variations in tax attitudes and subsequent tax compliance. There was statistical significant variation in tax attitude in all educational categories except for tertiary taxpayers ( $M=2.09$ ,  $SD=0.27$ ) at  $p \leq 0.05$ .

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### Introduction

The primary purpose of this study was to investigate the influence of psychological factors on tax compliance and to examine the reasons why people generally failed to pay their share of taxes. The study employed the Fisher tax compliance model to provide a framework for understanding the influence of those socio-economic and psychological components on tax payers' compliance decision. Specifically, the study examined the influence of some demographic characteristics of the self-employed on income tax compliance. Furthermore, the factors affecting income tax compliance and or non-compliance were examined. The economic factors influencing tax compliance were equally examined in the study.

#### Summary of findings

The following summaries are presented based on the findings presented in chapter four of this study.

The first objective of the study was to investigate the impact of socio-demographic characteristics on income tax compliance. The main findings are:

- It was observed that there was no significant association between gender and tax compliance.

- There was an association between age and income tax compliance.
- Married taxpayers are more compliant than single taxpayers.
- It was also observed that there existed significant difference between married self-employed and unmarried self-employed in terms of tax compliance.
- It can be argued that taxpayers with higher levels of education have a higher tax knowledge which drives them to be more tax compliant.
- There was a strong association between educational levels and tax compliance.
- There was a significant association between religion and tax compliance.

As part of the study of the determinants of tax compliance, the influence of some non-economic factors such as tax knowledge, tax complexity/ structure and tax fairness/ attitudes were explored. A summary of the findings are presented below:

- Tax attitude/fairness' dimension exerted the greatest influence on tax compliance.
- This was followed closely by tax knowledge which exerted or explained on tax compliance.
- Tax structure/ complexity was the only factor that did not pose any significant effect on the tax compliance.
- The entire model significantly accounted for 39 percent of the variation in tax compliance.

Four hypothesis were tested during the study and the follow findings were discovered:



- *H<sub>2</sub>: Tax knowledge does not influence tax compliance among the self-employed.*

The regression showed that for H<sub>2</sub>, there was a significant association between tax knowledge and compliance. The null hypothesis is therefore rejected.

- *H<sub>3</sub>: There is no association between tax fairness and tax compliance of the self-employed.*

It was revealed that, there was a significant association between tax fairness and tax compliance. In this regard, the null hypothesis is rejected again.

- *H<sub>4</sub>: Tax complexity does not influence tax compliance of the self-employed.*

There was no significant association between tax complexity/structure and tax compliance. The null hypothesis will be accepted.

- *H<sub>1</sub>: education does not improve tax knowledge of individual tax payers.*

There was no significant association between education and tax compliance.

The null hypothesis will be accepted.

## Conclusions

The following conclusions are drawn from the study. Males dominate the self employed in the Cape Coast metropolis. Most of the self-employed in the CCM are young. Majority of the self-employed have attained high educational levels. Married couples dominate the self-employed in the study area.

Female self-employed are more compliant with income tax laws than their male counterparts are. This study again revealed that old persons are more compliant with income tax laws than the young self-employed. The self-employed with high educational level are more compliant with income tax laws than their counterparts with low educational levels are. Married self-employed are more compliant with income tax laws than their unmarried counterparts.

The level of tax knowledge in the metropolis is moderately low despite the high levels of education attained by the self-employed. There was no significant association between education and tax compliance. The level of income tax education in the study area is very low resulting in the high income tax non-compliance among the self-employed. There was however, a significant association between tax knowledge and compliance.

Tax fairness is the key determinant of tax compliance behaviour in the study area. Taxpayers are generally willing to pay their taxes. They however, would want to see their actions being reciprocated by the government through the provision of public services.

Opposed to tax fairness is tax complexity variable/ tax structure which exerts the least influence in the compliance behaviour of taxpayers in the metropolis. There was no significant association between tax complexity/structure and tax compliance.

There is a significant effect between independent variables Perceived Tax Fairness; Tax Knowledge; and Tax Complexity simultaneously to the

dependent variable Tax Compliance Behaviour. The Perceived Tax Fairness variable is the dominant factor in the test.

### **Recommendations**

Based on the findings, the following recommendations are made:

- The tax authorities should embark on an intensive tax education among the self-employed. Tax education is essential in ensuring taxpayers have a good understanding of tax laws and uses of tax revenue. This will help boost public confidence in the tax system. It was observed that general education had no significant influence on tax compliance as such tax authorities need to emphasise the teaching of tax courses because of its impact on tax compliance. Tax literacy level among taxpayers need to be enhanced on a regular basis through tax education to keep their knowledge up to date and relevant. Tax education should be targeted at areas such as timing of submission of returns and computation of tax liability, income tax compliance would see a much and better improvement if these measures are put in place.
- Tax revenue must be equitably distributed in providing public services. Taxpayers should be well educated on the utilisation of tax revenue since this will help eradicate perceptions of unfairness and further boost tax morale.
- A flexible tax rate scheme should be maintained and tax rates lowered to a suitable level to help rope a lot of the self-employed into the tax net. The rate of tax should be affordable since a high tax rate deter compliance.

- The tax filing procedure should be made less complex and cumbersome through new methods such as the electronic filing (e-filing) system and use of tax stamps. The number of tax offices should be increased and situated at vantage points for proximity. The registration processes and forms should be made very easy to complete.
- It is also necessary that the tax laws be reviewed and redrafted to make them easy to read and comprehend. This will reduce drastically ignorance among taxpayers and improve compliance levels.
- The self-employed must be assigned a Tax Identification Number and the data base of the DTRD of the GRA, be constantly updated to help track all potential taxpayers and bring them into the tax net.
- Tax audits should be aggressively maintained and targeted at the categories of taxpayers found to be largely non-compliant with their tax obligations. The tax laws must be punitive enough to deter compliance. A mix of the economic and non-economic factors are required to ensure an optimum mobilisation of tax.

### **Limitations of the study**

The scope of this study was restricted to taxpayers in the Cape Coast metropolis. Though they are likely to represent the entire population of taxpayers, other taxpayers in other parts of this country may have different perceptions about the tax system and may exhibit different taxpaying behaviour.

It was extremely difficult getting people to voluntarily disclose information on their business activities and their tax status. This is because people are generally suspicious and uncooperative in tax issues.

### **Directions for further studies**

The scope of the study was restricted to Cape Coast. This study can be replicated in other regions of Ghana to help offer a better understanding of behaviour of self-employed taxpayers. This study largely relied on the use of questionnaires as a tool for gathering data. Future research on tax compliance in Ghana should consider designing a case for the respondents on their taxpaying behaviour which could be followed by a questionnaire.

Future researchers can refine the Fisher tax compliance model by including another important environmental factor – culture and the interaction between noncompliance opportunity and tax system/ structure on tax compliance.

## REFERENCES

- Abor, J., & Quartey, P. (2010). Issues in SME development in Ghana and South Africa. *International Research Journal of Finance and Economics*, 39(6), 215-228.
- Adams, J. S. (1965). Inequity in social exchange. *Advances in experimental social psychology*, 2, 267-299.
- Allingham, M. G., & Sandmo, A. (1972). Income tax evasion: A theoretical analysis. *Journal of public economics*, 1(3), 323-338.
- Alm, J. (1991). A perspective on the experimental analysis of taxpayer reporting. *The Accounting Review*, 66(3), 577-93.
- Alm, J., Jackson, B. R., & McKee, M. (1992). Estimating the determinants of taxpayer compliance with experimental data. *National Tax Journal*, 107-114.
- Alm, J., Sanchez, I., & De Juan, A. (1995). Economic and non-economic factors in tax compliance. *Kyklos*, 48, 3-18.
- Alm, J., & McKee, M. (1998). Extending the lessons of laboratory experiments on tax compliance to managerial and decision Economics. *Managerial and Decision Economics*, 19(4/5), 259-275.
- Asteriou, D., & Hall, S. G. (2011). *Applied econometrics*. New York: Palgrave Macmillan.
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behaviour*. Englewood-Cliffs, NJ: Prentice-Hall.

- Ajzen, I. (1991). *Attitudes, personality and behaviour*. Buckingham: Open University Press.
- Ariff, M., & Pope, J. (2002). *Taxation & compliance costs in Asia Pacific economies*. Sintok: Universiti Utara Malaysia Press.
- Ayres, I., & Braithwaite, J. (1992). *Responsive regulation: Transcending the deregulation debate*. Oxford University Press.
- Ayub, S.M.C. (1994). *Tax Administrative Reform for the Malaysian Inland Revenue Department with an Adaptation of the Voluntary Tax Compliance Function*. Unpublished Doctoral dissertation, Golden Gate University.
- Azah, C. C. (2005). *An examination of taxpayer behaviour and the implication for Public revenue in Ghana*. Unpublished M.Phil thesis, University of Ghana.
- Baba, S. A. (2010). *Enforcing income tax compliance among the self-employed in the Tema metropolis of Ghana*. Unpublished M.Phil thesis, University of Cape Coast.
- Baba, S. A., & Asante, S. (2012). Sanctions: panacea for income tax non-compliance among Ghanaian self-employed? *European Journal of Business and Management*, 4(7), 121-129.
- Babbie, E. (2005). *The basics of research*. Belmont, CA: Thomson Wadsworth.
- Baldry, J. C. (1987). Income tax evasion and the tax schedule: Some experimental results. *Public Finance= Finances publiques*, 42(3), 357-83.

- Banerjee, A. V. (1992). A simple model of herd behavior. *The Quarterly Journal of Economics*, 797-817.
- Bell, J. (1993). *Doing your research project. A guide for first-time researchers in education and social science* (3rd ed.). Open University Press.
- Beri, G. C. (1998). *Marketing research* (2nd ed.). Tata McGraw Publishing Company, New Delhi.
- Bernoulli, D. (1738). Specimen theorae novae de mensura sortis, commentarri asadamiae scientiarum imperialis petropolitanae, tomus, 175- 92,  
Translated by Louise Sommer as “ Expositions of a New Theory on The Measurement of Risk”, *Econometrica*, January 1954, 22.
- Beron, K.J., Tauchen, V.H., & Witte, A.D. (1992). Effects of audits and socioeconomic variables on compliance in Slemrod, J.(ed), *Why people pay taxes. Tax compliance and enforcements*, 67-89.
- Bird, R.M. (1984). *Tax policy and economic development*. Baltimore, London: The Johns Hopkins University Press.
- Brainyah M.Q., (2009). The effect of tax fairness, tax knowledge, and tax complexity on tax compliance: the case of SME entrepreneurs’ taxpayers in Malang.
- Braithwaite, V. (1995). Games of engagement: Postures within the regulatory community. *Law and Policy*, 17(3).
- Braithwaite, V. (2003). Dancing with tax authorities: motivational postures and



noncompliant actions. In Valerie Braithwaite (Ed.). Taxing democracy. understanding tax avoidance and tax evasion (15-39). Aldershot, UK: Ashgate.

Brown, S., Farrell, L., & Harris, M.N. (2003). Who are the self-employed? A new approach. Monash University, Australia. Department of Economics and Business statistics, working paper, 11/2003.

Cape Coast Metropolitan Assembly (2014). Number of registered businesses.

Carolina, V. & Simanjuntak, T.H. (2011). Pengaruh Tax Knowledge dan Persepsi

Carroll, J.S. (1978). A psychological approach to deterrence: The evaluation of opportunities. *Journal of Personality and Social Psychology* 36, 1512-1520.

Carroll, J.S. (1982). Committing a crime: The offender's decision, 49-67 in V.J Konecni & E.B. Ebbesen, eds., *The Criminal Justice System: A Social-Psychological Analysis*, San Francisco: W.H. Freeman.

Carroll, J.S. (1989). A cognitive-process analysis of taxpayer compliance in taxpayer compliance. *Social Sciences Perspectives* 2, 228-264.

Carroll, J. M., & Swatman, P. (2000). Structured case: A methodological framework for building theory in information systems research. *European Journal of Information Systems*, 9(4), 235-242.

Camel, D. (2000). Self-employed in the United Kingdom and Ireland. Current trends, policies and programmes. *Working Profiles*, 9(2) 45-58.

- Chan, C. W., Troutman, C. S., & O'Bryan, D. (2000). An expanded model of taxpayer compliance: Empirical evidence from the United States and Hong Kong. *Journal of International Accounting, Auditing and Taxation*, 9(2), 83-103.
- Chau, G., & Leung, P. (2009). A critical review of Fischer's tax compliance model: A research synthesis. *Journal of Accounting and Taxation*, 1(2), 34-40.
- Christensen, A. L., Wehrich, S.G. & Gerbing, M. D. (1994). The impact of education on perceptions of tax fairness. *Advances in Taxation*, 6, 63-94.
- Cialdini, R. B. (1989). Social motivations to comply: Norms, values and principles. *Taxpayer compliance*, 2, 200-227.
- Clotfelter, C. T. (1983). Tax evasion and tax rates: an analysis of individual returns. *Review of Economics and Statistics*, 65, 363-373.
- Collins, J.H., Milliron, V.C., and Toy, D.R. (1992). Determinants of tax compliance: A contingency approach. *The Journal of American Taxation Association*, 14(2), 1-29.
- Copeland, P. V., & Cuccia, A. D. (2002). Multiple determinants of framing referents in tax reporting and compliance. *Organizational Behavior and Human Decision Processes*, 88(1), 499-526.
- Csontos, L., Kornai, J., & Tóth, I. G. (1998). Tax awareness and reform of the welfare state: results of a Hungarian survey. *Economics of Transition*, 6 (2), 287-312.

- de Vaus, D. A. (2002). *Surveys in social research*. Crows Nest: Allen & Unwin.
- Department of Statistics Malaysia. (2001). Population and Housing Census.
- Devos, K. (2005). Attitudes of tertiary students on tax evasion and penalties for tax evasion- A pilot study and demographic analysis. *Journal of Tax Research*, 3(2), 222-273.
- Dewberry, C. (2004). *Statistical methods for organizational research: theory and practice*. Psychology Press.
- DFID, E. (2002). UNDP and World Bank. 2002. *Linking poverty reduction and environmental management: Policy challenges and opportunities*.
- Dubin, J., & Wilde, L. (1985). An empirical analysis of federal income tax auditing and compliance. *National Tax Journal*, 41(1), 61-74.
- Eagly, Ann H. & Chaiken, S. (1993). *The psychology of attitudes*. Forth Worth, TX : Harcourt Brace.
- Eriksen, K., & Fallan, L. (1996). Tax knowledge and attitudes towards taxation; A report on a quasi-experiment. *Journal of Economic Psychology*, 17(3), 387-402.
- Fairlie, R.W. (2005). Self-employment, entrepreneurship and the NLSY79. *Journal of Labour Economics*, 20(3), 40- 47.
- Feld, L. P., & Frey, B. S. (2002). Trust breeds trust: How taxpayers are treated.

- Feinstein, J. (1991). An econometric analysis of income tax evasion and its detection. *Rand Journal of Economics*, 22(1), 14-35.
- Feige, E. L. (1989). *The underground economy and the currency enigma, supplement to public finance*. Cambridge University Press.
- Fikriningrum, W.K. (2012). Analisis faktor-faktor yang mempengaruhi wajib pajakorang pribadi dalam memenuhi kewajiban membayar pajak (studi kasus pada kantor pelayanan pajak pratama semarang candisari). *Unpublished thesis*. Universitas Diponegoro.
- Fischer, C. M., Wartick, M., & Mark, M.(1992). Detection probability and taxpayer compliance: A review of the literature. *Journal of Accounting Literature*, 11, 1-46.
- Fischhoff, B., Goitein, B., & Shapira, Z. (1983). Subjective expected utility: A model of decision- making, pp.183-207 in R.W. Scholz, ed.,decision making under uncertainty, New York: North-Holland.
- Fleming, M. H., Roman, J., & Farrell, G. (2000). The shadow economy. *Journal of International Affairs*, 53(2), 387-409.
- Flynn, K.E. (2003). *An empirical investigation into alternative theories explaining taxpayer behavior*. Unpublished Doctorial thesis, Orevel University.
- Forest, A., & Sheffrin, S. M. (2002). Complexity and compliance: An empirical investigation. *National Tax Journal*, 75-88.

- Frey, B. S. (2003). Deterrence and tax morale in the European Union. *European Review*, 11(3), 385-406.
- Friedman, M., & Savage, L. J. (1948). The utility analysis of choices involving risk. *The Journal of Political Economy*, 279-304.
- Friedland, N., Thibaut, J., & Walker, L. (1973). Some determinants of the violation of rules. *Journal of Applied Social Psychology*, 3(2), 103-118.
- Fjeldstad, O. H., & Semboja, J. (2001). Why people pay taxes: The case of the development levy in Tanzania. *World Development*, 29(12), 2059-2074.
- Ghana Revenue Authority (2014). Number of registered businesses in Cape Coast metropolis.
- Ghana Statistical Service (2000). 2000 Population and Housing Census.
- Ghana Statistical Service (2010). 2010 Population and housing census, Sakoa Press Limited.
- GLSS. (2010). Ghana Living Standards Survey 5, Ghana Statistical Service, Accra, Ghana.
- Gerbing, M.D. (1988). *An empirical study of taxpayer perceptions of fairness*. Unpublished PhD thesis, The University of Texas at Austin.
- Gërzhani, K. (2007). Explaining gender differences in tax evasion: the case of Tirana, Albania. *Feminist Economics*, 13(2), 119-155.
- Ghoni, H. A. (2012). *Pengaruh motivasi dan pengetahuan wajib pajak terhadap kepatuhan wajib pajak daerah*. Minor thesis, Universitas Negeri Surabaya.

- Gilligan, G., & Richardson, G. (2005). Perceptions of tax fairness and tax compliance in Australia and Hong Kong-a preliminary study. *Journal of financial crime, 12*(4), 331-343.
- Grasmick, H. G., & Bursik, R. J. (1990). Conscience, significant others, and rational choice: Extending the deterrence model. *Law & Society Review, 24*(3), 837-861.
- Grasmick, H. & Bursik, R. (1990). Extending the deterrence model. *Law and Society Review, 24*(3), 837-861.
- Grasmick, H. G., Kinsey, K., & Cochran, J. K. (1991). Denomination, religiosity and compliance with the law: A study of adults. *Journal for the Scientific Study of Religion, 30*(1), 99-107.
- Hanno, D. M., & Violette, G. R. (1996). An analysis of moral and social influences on taxpayer behavior. *Behavioral Research in Accounting, 8*, 57-75.
- Harris, T. D. (1989). *The effect of type of tax knowledge on individuals' perceptions of fairness and compliance with the federal income tax system: An empirical Study*. Unpublished Doctoral dissertation, University of South Carolina.
- Hasseldine, J. (1999). Using persuasive communications to increase tax compliance: What experimental research has (and has not) told us.
- Hasseldine, J., & Bebbington, K. J. (1991). Blending economic deterrence and fiscal psychology models in the design of responses to tax evasion: The

New Zealand experience. *Journal of Economic Psychology*, 12(2), 299-324. *Australian Tax Forum*, 15, 227-241.

Hite, P.A & Roberts, M.L. (1991). Empirical investigations on rate structure and the individual income tax system. *The Journal of the American Taxation Association*, 13 (2), 47-63.

Hite, A., & Roberts, M.L. (1992). An analysis of tax reform based on taxpayer's perceptions of fairness and self interest. *Advances in Taxation*, 4, 115-37.

Hite, P.A. (1997). Identifying and mitigating taxpayer non-compliance. *Australia Tax Forum*, 13, 155-180.

Hite, P., & Hasseldine, J. (2001). A primer on tax education in the United States of America. *Accounting Education*, 10(1), 3-13.

Holler, M., Hoelzl, E., Kirchler, E., Leder, S., & Mannetti, L. (2008). Framing of information on the use of public finances, regulatory fit of recipients and tax compliance. *Journal of Economic Psychology*, 29(4), 597-611.

Houston, J., & Tran, A. (2001). A survey of tax evasion using the randomized response technique. *Advances in taxation*, 13, 69-94.

Internal Revenue Act, 2000, Act 592.

Istijanto, M. M. (2009). *Aplikasi praktis riset pemasaran*. Gramedia Pustaka Utama.

Jackson, B.R., & Milliron V.C. (1986). Tax compliance research, findings and problems and prospects. *Journal of Accounting Research*, 5, 125-165.

- James, S., & Alley, C. (2000). Tax compliance, self-assessment and tax administration. *Journal of Finance and Management in Public Services*, 2(2), 27-42.
- James, S., Murphy, K., & Reinhart, M. (2005). Taxpayer beliefs and views: Two new surveys. *Australian Tax Forum*, 20, 157-188.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decisions under risk. *econometrica*, 47, 263-291.
- Kaplan, S. E., & Reckers, P. M. J. (1985). A study of tax evasion judgments. *National Tax Journal*, 38(1), 97-102.
- Kassipillai, J. (1996). *Taxpayer's understanding and knowledge index (TUKI) as a clue to non-compliance*. Unpublished Ph.D. Thesis, Australia.
- Kasipillai, J., Baldry, J., & Rao, D. S. P. (2000). Estimating the size and determinants of hidden income and tax evasion in Malaysia. *Asian Review of Accounting*, 8(2), 25-41.
- Kasipillai, J., & Hanefah, M. M. (2000). Tax professionals' view on Self Assessment System. *Analisis*, 7(1&2), 107-122.
- Kasipillai, J., Aripin, N., & Amran, N. A. (2003). The influence of education on tax avoidance and tax evasion. *eJournal of Tax Research*, 1(2), 134-146.
- Kasipillai, J., & Abdul-Jabbar, H. (2006). Gender and ethnicity differences in tax compliance. *Asian Academy of Management Journal*, 11(2), 73-88.
- Kidd, M. P. (1993). Immigrant wage differentials and the role of self-employment in Australia. *Australia Economic Paper*, 32(4), 92-115.



- Kidder, R., & Craig, M. (1989). Taxpaying behaviour in social context: A tentative topology of tax compliance and, non-compliance, in taxpayer compliance, 2, 142-163. Social Science perspective, Philadelphia University of Pennsylvania press.
- Kinsey, K. A. & Grasmick, H. G. (1993). Did the Tax Reform Act of 1986 improve compliance? Three studies of pre and postTRA compliance attitudes. *Law and Policy Issue*, 15, 239-325.
- Kirchler, E., & Maciejovsky, B. (2001). Tax Compliance within the Context of Gain and Loss Situations, Expected and Current Asset Position, and Profession. *Journal of Economic Psychology*, 22(2), 173-194.
- Kirchler, E., Hoelzl, E., & Wahl, I. (2008). Enforced versus voluntary compliance: The “slippery slope” framework. *Journal of Economic Psychology*, 29, 210-55.
- Kirchler, E. (2009). *The economy psychology of tax behaviour*. Cambridge University Press.
- Lewis, A., (1982). *The psychology of taxation*. New York: St. Martin’s Press.
- Long, S.B. (1981). Social control in the civil law: The case of income tax enforcement, 185-214, in H.L. Ross, ed., *Law and Deviance*, Beverly Hills, Calif.: Sage Publications.
- Loo, E. C., & Ho, J. K. (2005). Competency of Malaysian salaried individuals in relation to tax compliance under Self-Assessment. *eJournal of Tax Research*, 3(1), 45-62.

- Loo, E. C., & McKerchar, M. (2012). Understanding tax compliance.
- Margolis, H. (1997). Religion as Paradigm. *Journal of Institutional and Theoretical Economics*, 153(1), 242-252.
- Mason, R., & Calvin, L. (1978). A study of admitted income tax evasion. *Law and Society Review*, 13, 73-89.
- McGowan, J.R. (2000). The effect of political affiliation on taxpayers' attitudes towards alternative tax system. *Journal of the American Taxation Association*, 22(1), 111-128.
- McKerchar, M. (2001). The study of income complexity and unintentional noncompliance: Research method and preliminary findings, *ATAX Discussion Paper Series*, 6, University of Sydney, [www.orange.usyd.au](http://www.orange.usyd.au) Park, California.
- McKerchar, M. (2010). Design and conduct of research in tax, Law and Accounting. Sydney: Thompson Reuters.
- Milliron, V.C. (1985). An analysis of the relationship between tax equity and tax complexity. *Journal of the American Taxation Association*, Fall, 19- 32.
- Milliron, V. C., & Toy, D. R. (1988). Tax Compliance: An investigation of key features. *Journal of the American Taxation Association*, 9(2), 84-104.
- Miller, D. C. (1991). *Research design and social environment*. SAGE Publication Newbury.
- Mohd A, N. R., (2013). The influence of religiosity on tax compliance in Malaysia. Unpublished Ph.D. thesis, Curtin University, Curtin Business School, School of Economics and Finance.

- Mohd, P. R. (2002). Taxpayer's knowledge: A descriptive evidence on demographic factors in Malaysia. *Jurnal Akuntansi & Keuangan*, 7(1), 11-21.
- Moore, M. (2004). Revenues, state formation, and the quality of governance in developing countries. *International Political Science Review*, 25(3), 297-319.
- Murphy, K. (2004). The role of trust in nurturing compliance: A study of accused tax avoiders. *Law and Human Behavior*, 28(2), 187-209.
- National Board for Small Scale Industries (2012). Refined list of registered small scale industries.
- Nicoleta, B.M. (2011). A review of factors for tax compliance.
- Nsowah-Nuamah, N.N.N. (2005). *Basic Statistics: A handbook of description Statistics for asocial and Biological sciences*. ACADEC Press.
- Orviska, M., & Hudson, J. J. (2002). Tax evasion, civic duty and the Law abiding citizen. *European Journal of Political Economy*, 19, 83-102.
- Osei, B., A. Baah-Nuakoh, K. A. Tutu, and N. K. Sowa, N. K. (1993). Impact of structural adjustment on small-scale enterprises in Ghana, in Helmsing, A. H. J. and Kolstee, T. H. *International Research Journal of Finance and Economics - Issue 39*.
- Otieku, J.K. (1988). *An examination of the problems of income tax administration in Ghana and prospect of their solution*. Unpublished MBA Thesis, University of Ghana, 1988.

- Otieku, J. K. (1992). A look at factors affecting efficient income tax administration in Ghana. *Journal of Management Studies*, 8.
- Owens, J., & Hamilton, S. (2004). Experience and innovations in other countries. In H. Aaron and Slemrod, J. (Eds.), *Crisis In Tax Administration*. Washington DC: Brookings Institute Press, 347-379.
- Oxley, P. (1993). Women and paying tax. *Wellington institute of policy studies*,
- Pallant, J. (2005). *SPSS Survival Manual, A step by step guide to data analysis using SPSS for windows (version 12)*. Allen & Unwin, Crows Nest NSW.
- Palil, M. R., & Lymer, A. (2009). Tax knowledge and tax compliant behaviour in Self-Assessment Systems: What can we learn from the case of Malaysia. Paper presented at the 18th Tax Research Network Annual Conference, Cardiff.
- Palil, M. R., & Mustapha, A. F. (2011). Determinants of tax compliance in Asia: A case of Malaysia. *European Journal of Social Sciences*, 24 (1), 7-32.
- Park, C., & Hyun, J.K. (2003). Examining the determinants of tax compliance by experimental data: A case of Korea. *Journal of Policy Modelling*, 25, 673-684
- Peter, V., & Dijke, M. V., (2007). A self-interest analysis of justice and tax compliance: How distributive justice moderates the effect of outcome favorability. *Journal of Economic Psychology* 28, 704-727.
- Picciotto, S. (2007). Constructing compliance: Game playing, tax and the regulatory state. *Law and Policy*, 29, 11-30.

- Porcano, T. (1988). Correlates of tax evasion. *Journal of Economic Psychology*, 9, 47-67.
- Porcano, T., & Price, C. (1992). Some evidence on the association between judgment criteria and fairness perceptions. *Advances in Taxation*, 4, 183-210.
- Price Waterhouse Coopers. (2008). Pocket tax book: a summary of Cambodian taxation. Retrieved 12 May 2014, from [http://www.pwc.com/Extweb/service.nsf/docid/F365DD8F4BE64113CA25723A0033D677/\\$FILE/CambodiaPBT-2008.pdf](http://www.pwc.com/Extweb/service.nsf/docid/F365DD8F4BE64113CA25723A0033D677/$FILE/CambodiaPBT-2008.pdf)
- Prichard, W., & Bentum, I. (2009). Taxation and development in Ghana: Finance, equity and accountability. University of Sussex.
- Pris K, A. (2010). Dampak dimensi keadilan pajak terhadap tingkat kepatuhan wajib pajak badan. Unpublished *Minor thesis*, Universitas Diponegoro.
- Rakner, L. (2002). The politics of revenue mobilization: Explaining continuity in Namibia tax policies: NEPRU working paper 86.
- Rajif, M.(2011).*Pengaruh pemahaman, kualitas pelayanan, dan ketegasan sanksi perpajakan terhadap kepatuhan pajak pengusaha UKM di daerah Cirebon*. Unpublished master's thesis, Universitas Gunadarma.
- Reckers, P. M., Sanders, D. L., & Roark, S. J. (1994). The influence of ethical attitudes on taxpayer compliance. *National Tax Journal*, 47(4), 825-836.

- Riahi-Belkaoui, A. (2004). Relationship between tax compliance internationally and selected determinants of tax morale. *Journal of International Accounting, Auditing and Taxation*, 13(2), 135-143.
- Richardson, M., & Sawyer, A.J. (2001). Taxonomy of the tax compliance literature: Further findings, problems and prospects. *Australian Tax Forum* 16, 137-320.
- Richardson, G. (2006). Impact of tax fairness dimensions on tax compliance behavior in an Asian jurisdiction: The case of Hong Kong. *The International Tax Journal*, 32(1), 29-42.
- Ritsema, C.M., Thomas, D.W., & Ferrier, G.D. (2003). Economic and behavioral determinants of tax compliance: Evidence from the 1997 Arkansas tax penalty amnesty program. Paper prepared for 2003 IRS Research Conference.
- Roath, J., Scholz, J. & Witte, D.A. (1989). *Taxpayer compliance, an agenda for research*. Philadelphia, University of Pennsylvania Press.
- Roberts, M. L. (1994). An experimental approach to changing taxpayers' attitudes towards fairness and compliance via television. *Journal of the American Taxation Association*, 16(1), 67-86.
- Roberts, L.H., Hite, P.A., and Bradley, C.F. (1994). Understanding attitudes toward progressive taxation. *Public Opinion Quarterly*, 58, 165-190.
- Saira, K., Zariyawati, M. A., & Yoke-May, L. (2010). An exploratory study of goods and services tax awareness in Malaysia, seminar on national resilience (SNAR): Political managements and policies in Malaysia, 13-15

July, Langkawi, Malaysia <http://repo.uum.edu.my/3178/1/S14.pdf>.

Retrieved on 16/11/2013.

Sandmo, A. (2005). The theory of tax evasion: A retrospective view. *National Tax Journal*, 58(4), 643-663.

Saad, N. (2010). Fairness perceptions and compliance behaviour: The case of salaried taxpayers in Malaysia after implementation of the Self-Assessment System. *eJournal of Tax Research*, 8(1).

Sarantakos, S. (1993). *Social Research*. Macmillan Press Ltd. London

Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research methods for business students* (4th ed.). Financial Times Prentice Hall.

Schepanski, A. & Shearer, T. (1995). A prospect theory account of the income tax withholding phenomenon, organisational behaviour and human decision processes, 174-186.

Schisler, D. L. (1995). Equity, aggressiveness, consensus: A comparison of taxpayers and tax preparers. *Accounting Horizons*, 9, 76-87.

Schisler, D.L. (1996). An experimental examination of the effects of withholding positions and tax preparer recommendations on taxpayer aggressiveness. *Advances in Taxation*, 8, 149-173.

Schiller, B., & Crewson, P. (1997). Entrepreneurial origin: A longitudinal inquiry. *Economic Inquiry*, 25, 523-531.

Schmölders, G. (1959). Fiscal Psychology: A new branch of public finance. *National Tax Journal*, 12(4), 340-345.

- Schmölders, G. (1970). Survey research in public finance: A behavioral approach to fiscal theory. *Public Finance*, 25(2), 300-306.
- Schoemaker, P, J.H. (1982). The expected utility model: its variants, purposes, evidence, and limitations. *Journal of Economic Literature*, 20, 529-563.
- Simone, L. D., Sansing,R., & Seidman, J. K. (2012). When are enhanced relationship tax compliance programs mutually beneficial? 2012 American Accounting Association Annual Meeting – Tax Concurrent Sessions, <http://ssrn.com/abstract=2097907>. Retrieved on16/12/2013.
- Singh, V. (2003a). *Tax compliance and ethical decision-making*. A Malaysian perspective. Pearson Malaysia Sdn Bhd.
- Singh, V. (2003b). *Malaysian Tax Administration* (6th ed.). Kuala Lumpur: Longman.
- Slemrod, J. (1989). Complexity, compliance costs, and tax evasion. In Roth, J.A., and Scholz, J.T. (eds.) *Taxpayer Compliance: Social Perspectives*, Philadelphia, 2,156-181.
- Slemrod, J. (2007). Cheating ourselves: The Economics of tax evasion. *The Journal of Economic Perspectives*, 21(1), 25-48.
- Smith, P. (1994). Assessing the size of the underground economy: The Canadian statistical perspectives, *Canadian Economic Observer*, 11-010.
- Smith, K. W., & Kinsey, K. A. (1987). Understanding taxpaying behavior: A conceptual framework with implications for research. *Law & Society Review*, 21(4), 639-663.



- Snavely, K. (1990). Marketing in the government sector: a public policy model. *The American Review of Public Administration*, 21(4), 311-326.
- Somang, M. R. (2006). Analisis faktor-faktor yang mempengaruhi tingkat kepatuhan wajib pajak badan di kabupaten serang. Unpublished master's thesis, Universitas Indonesia.
- Song, Y., & Yarbrough, T. (1978). Tax ethics and taxpayer attitudes: A survey. *Public administration review*, 442-452.
- Spicer, M. W., & Becker, L. A. (1980). Fiscal inequity and tax evasion: An experimental approach. *National Tax Journal*, 33(2), 171-175.
- Stack, S., & Kposowa, A. (2006). The effect of religiosity on tax fraud acceptability: A cross-national analysis. *Journal for Scientific Study of Religion*, 45(3), 325-351.
- Stalans, L. J., Smith, K. W., & Kinsey, K. A. (1989). When do we think about detection? structural opportunity and taxpaying behaviour. *Law & Social Inquiry*, 14(3), 481-503.
- Steel, W. F., & Webster, L. M. (1991). Small enterprises in Ghana: responses to adjustment industry, *Series Paper, No. 33, The World Bank Industry and Energy Department, Washington DC*. Retrieved on 5<sup>th</sup> June 2013, from <http://www-wds.worldbank.org>
- Tabachnick, B.G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). New York: Happer Collins.
- Taylor, N. (2001). Understanding taxpayer attitudes through understanding taxpayer identities, Working Paper No. 14, Australian National University.

- Terkper, S. (2003). Managing small and medium-size taxpayers in developing economies. *Tax Notes International*, 211-234.
- Thuronyi, V. (2003). *Presumptive taxation of the hard to tax*, paper presented at the conference “The hard to tax: An international perspective “May 14-1, 2003 Atlanta, Georgia.
- Tilly, C. (1992). *Coercion, capital, and European states, AD 990-1992*. Oxford: Blackwell.
- Tonge, J. (2001). The review of small business literature, Part 1: Defining the small business, WPS025 [Online], Manchester Metropolitan University Business School Working paper series. Retrieved on July, 13, 2013, from [www.ribm.mmu.ac.uk/wps/papers/01-18.pdf](http://www.ribm.mmu.ac.uk/wps/papers/01-18.pdf)
- Torgler, B. (2001). What do we know about tax morale and tax compliance? *International Review of Economics and Business*, (RISEC series 214, School), 48, 395-419.
- Torgler, B. (2003a). Tax morale, rule-governed behaviour and trust. *Constitutional Political Economy*, 14(2), 119-140.
- Torgler, B. (2003b). To Evade Taxes or Not to Evade: That is the Question. *Journal of Socio-Economics*, 32(3), 283-302.
- Torgler, B., & Valev, N.T. (2007). *Public attitudes towards corruption and tax evasion: Investigating the role of gender over time*. School of Economics and Finance Discussion papers and working papers of Economics and Finance Queensland University of Technology.

- Trivedi, V.U., Shehata, M., & Mestelman, S. (2004). Attitudes, incentives and tax compliance. Hamilton: McMaster University, Department of Economics.
- Trivedi, V. U., Shehata, M., & Mestelman, S. (2005). Attitudes, Incentives, and Tax Compliance. *Canadian Tax Journal*, 53(1), 29-61.
- Von Newmann, J. and Mongenstern, O. (1944). *Theory of games and economic behaviour* (3rd ed.). Princeton University Press.
- Wahlund, R. (1992). Tax changes and economic behaviour: The case of tax evasion. *Journal of Economic Psychology*, 13, 657-677.
- Wallschutzky, I. G. (1984). Possible causes of tax evasion. *Journal of Economic Psychology*, 5(4), 371-384.
- Wartick, M. (1994). Legislative justification and the perceived fairness of tax law changes: A reference cognitions theory approach. *The Journal of the American Taxation Association*, 16(2), 106-123.
- Wenzel, M. (2002). The impact of outcome orientation and justice concerns on tax compliance: The role of taxpayers' identity. *Journal of Applied Psychology*, 87, 629-645.
- Wenzel, M. (2003). Tax compliance and the psychology of justice: Mapping the field. In V. Braithwaite (Ed.), *Taxing Democracy: Understanding Tax Avoidance and Evasion*. Aldershot: Ashgate Publishing, 2003.
- Yan, M. C. K., Arokiasamy, L. & Suat, C. L. A. (2010). Indirect taxation: Awareness and impact on undergraduates. *International Research Journal of Finance and Economics*, Issue 41. Retrieved on 15/11/2013, from [www.eurojournals.com/finance.htm](http://www.eurojournals.com/finance.htm).

Yankelovich, Skelly, & White (1984). Survey of tax attitudes, prepared for the IRS. Department of the Treasury, Washington DC.

Young-dahl, S., & Tinsley, E. Y. (1978). Tax ethics and taxpayer attitudes: A survey. *Public Administration Review*, 38, 442-452.

Yucedogru, R., Grainger, A., & Lymer, A. (2012). *Religiosity influence on tax compliance*. Paper presented at the 21st Tax Research Network Annual Conference, Roehampton.

Zikmund, W. (1997). *Business research methods*. London: Dryden Press.

Zikmund, W. G. (2000). *Business research methods* (3rd ed.).fortworth: Harcourt College Publishers.

**APPENDIX A**

**UNIVERSITY OF CAPE COAST**

**DEPARTMENT OF ACCOUNTING AND FINANCE**

**SCHOOL OF BUSINESS**

**Questionnaire Serial Number.....**

**Introduction**

Thank you for agreeing to take part in a study of taxpayer behaviour. This forms part of the requirement for the award of an MCOM degree in Accounting from the University of Cape Coast. You are assured that all the responses will be kept stringently confidential and your anonymity is also guaranteed. Please try to answer every question on the instrument. If you have any questions or reservations, please, kindly feel free to contact the researcher on 024622095 or eferuta@yahoo.com

**SECTION A: DEMOGRAPHIC CHARACTERISTICS**

- 1) Gender: 1. Male [ ]      2. Female [ ]
- 2) Age (in complete years).....
- 3) Marital Status 1.Married [ ]      2.Unmarried [ ]
- 4) What is your highest level of education?
  1. No Education [ ]
  2. Basic/ Secondary [ ]
  3. Tertiary [ ]

5) Type of business engaged in

- |                  |     |                                 |     |
|------------------|-----|---------------------------------|-----|
| 1. Services      | [ ] | 4. Distribution                 | [ ] |
| 2. Construction  | [ ] | 5. Others (please specify.....) |     |
| 3. Manufacturing | [ ] |                                 |     |

6) What is your religion?

- |                 |     |                         |     |
|-----------------|-----|-------------------------|-----|
| 1. Islam        | [ ] | 3. Traditional Religion | [ ] |
| 2. Christianity | [ ] |                         |     |

7. Income per annum
- |                                  |     |                      |     |
|----------------------------------|-----|----------------------|-----|
| 1. Below GHC2,000.00             | [ ] | 3. Above GHC4,000.00 | [ ] |
| 2. Between GHC2000 - GHC 4000.00 |     | [ ]                  |     |

**SECTION B: TAX STRUCTURE/SYSTEM**

For each of the following given statements, please tick: 1. if you **Strongly Agree** 2. if you are **Moderately Agree** 3. if you **Least Agree**

		1. S.A	2. M.A	3 L.A
8	Tax laws in Ghana are difficult to understand			
9	I find the filing and payment processes convenient			
10	The filing and payment processes have a bearing on my attitude towards taxation			
11	I am satisfied with the tax system and work of tax authorities			
12	Tax is very complicated-I do not know how to calculate my own tax liability			
13	In case the tax authorities would improve their services, it would be easier for me to fulfil my tax responsibilities			
14	The imposition of sanctions deters non-compliance			

15	The imposition of penalties alone would serve as a sufficient deterrent from income tax non-compliance			
16	The current VAT rate of 17.5% is fair			

**SECTION C: TAXPAYER ATTITUDES AND PERCEPTION**

For each of the following given statements on **TAX FAIRNESS**, please tick: 1. if you **Strongly Agree** 2. if you are **Moderately Agree** 3. if you **Least Agree**

		1.S.A	2. M.A	3. L.A
17	Current tax laws don't require me to pay more than my fair share of income taxes			
18	On the whole the burden of income taxes is fairly distributed			
19	benefits I receive from the government in exchange for my income-tax payments are reasonable			
20	Compared to the amount paid by more wealthy taxpayers, I pay more than my fair share of income taxes			
21	It is fair that high-income earners pay proportionately more tax than low income earners			
22	People whose income is about the same as mine should pay the same amount			
23	A fair tax rate should be the same for everyone, regardless of their income			

24. How do you view the attitude of people not paying taxes on their income?

1. Not wrong at all [ ] 2. Wrong but understandable [ ] 3. Wrong and punishable [ ]

**D. TAX KNOWLEDGE**

For each of the following given statements, please tick: 1. if you **Strongly Agree**  
2. if you are **Moderately Agree** 3. if you **least Agree**

		1. S.A	2. M.A	3. L.A
25	Ghana Revenue Authority ( GRA) collects taxes on behalf of central government			
26	The Government does not provide enough information about the use of tax payers' money			
27	There are no penalties for failure to pay taxes			
28	Small business taxpayers have no special provisions for taxing them			
29	All income earners are charged the same tax rate regardless of the amount of income earned			
30	Taxpayers cannot object to or make appeal against Ghana Revenue Authority.			
31	It is the taxpayer's obligation to file tax returns			

**SECTION E: NON- COMPLIANCE**

32. Have you ever filed returns? Yes [  ] 2. No [  ]

If no, indicate the extent to which the following factors influence your decision not to file returns for any year.

Scale: Strongly not influenced=1, Not influenced =2, Influenced=3, Strongly influenced = 4

a	Complex income tax returns procedure	1	2	3	4
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b	Accountants advice	1	2	3	4
c	Ignorance	1	2	3	4
d	Lazy accounting	1	2	3	4
e	Taxes not beneficial or fair	1	2	3	4
f	Associate or friends advice	1	2	3	4
g	Maintain the status quo of not filing	1	2	3	4

### SECTION F: TAX COMPLIANCE

For each of the following given statements, please tick:

1 if you **strongly agree** with the statement

2 if you **moderately agree** with the statement

3 if you **least agree** with the statement

I wish **to comply** with tax laws for the following reasons:

33	I feel the tax collected by the government is utilised properly	1	2	3
34	Serious enforcement and penalty by the tax authority may result if I do not comply	1	2	3

I wish **not to comply** with tax laws for the following reasons:

35	Because the tax law does not treat everyone equally, a person is entitled to “even things up” by not declaring all information correctly	1	2	3
36	My friends do not comply and they have never been penalised	1	2	3
37	I believe that the probability of being detected by the Ghana Revenue Authority for not declaring the exact income is low	1	2	3

APPENDIX B

