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TAX AUDIT AND COMPLIANCE AMONG CORPORATE ENTITIES: THE ROLE OF TAX EDUCATION AND FEAR-APPEALING MESSAGES

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DECLARATION

Student's Declaration

I, Josephine Kesewaah Frimpong, declare that, this thesis, with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

Signature: …………………………………………

Date: …………………………………………….

Supervisor's Declaration

I hereby declare that the preparation and presentation of this work was supervised in accordance with the guidelines for supervision of thesis as laid down by the University of Education, Winneba.

Supervisor's Name: Dr. Richard Oduro

Signature: ……...………………………………

Date…………………………………………

DEDICATION

To my parents, Mr. Edward Asamoah Frimpong and Mrs. Mary Pomaa Frimpong, my lovely brothers, Emmanuel Dankyi Frimpong and Christian Ankomah Frimpong and to my uncle, Mr. Edward Kwame Frimpong.

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I'm grateful to the audit unit of Ghana Revenue Authority, Large Taxpayers' Office, for their assistance and provision of essential information, despite their demanding schedules. Thank you very much.
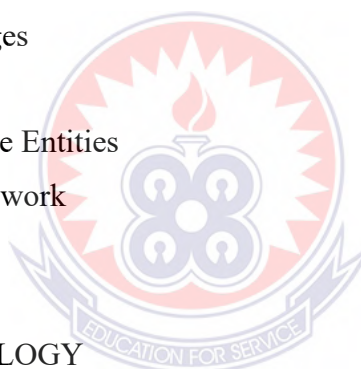
To all my colleagues, friends, and anyone who contributed in any way to my academic journey and success, I ask for God's blessings upon you all.

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LIST OF ABBREVIATIONS

GRA   Ghana Revenue Authority

VAT   Value Added Tax

OECD   Organization for Economic Co-operation and Development

ISODEC   Integrated Social Development Centre

MOF   Ministry of Finance

GDP   Gross Domestic Product

FAM   Fear-Appealing Messages

TA   Tax Audit

TE   Tax Education

TC   Tax Compliance

IMF   International Monetary Fund

TPB   Theory of Planned Behaviour

TRA   Theory of Reasoned Action

ERCA   Ethiopian Revenue and Customs Authority

PLS-SEM   Partial Least Square – Structural Equation Modelling

SPSS   Statistical Package for Social Science

CFA   Confirmatory Factor Analysis

SRMR   Standardized Root Mean Square Residual

NFI   Normed Fit Index

D_ULS   Squared Euclidean Distance

D_G   Geodesic Distance

AVE   Average Variance Extracted

HTMT   Heterotrait-Monotrait Ratio

ABSTRACT

The study examined the role of tax education and fear-appealing messages in the linkage between tax audit and tax compliance among corporate entities in Ghana using the Greater Accra Region as the case study. Using the correlational research design and a quantitative research approach the study focused on a clustered population of 766 companies representing the Weija-Gbawe Municipality. Sampling 256 corporate entities, questionnaires were administered with an 80% response rate. Data analysis was conducted using Partial Least Squares – Structural Equation Modeling (PLS-SEM). The findings recorded a significant and positive relationship between tax audit and tax compliance. Again, tax education mediates the existing relationship between tax audit and tax compliance. However, fear-appealing messages negatively but significantly affects tax audit and tax compliance. The study concluded that regular organization of tax audits and thorough selection of the tax audit unit collectively contribute to the effectiveness of the tax audit process resulting in enhanced tax compliance. Therefore, the Ghana Revenue Authority must increase the pace to increasing tax audit frequency which would lead to an improved level of tax compliance among corporate entities in Ghana.

CHAPTER ONE

INTRODUCTION

1.1 Overview

Citizens from all nations are required to pay taxes as a means of contributing their share to the government for the purpose of funding developmental projects. However, when citizens do not directly benefit from their tax payments, it can significantly impact their willingness to comply with tax laws. Tax authorities have been unwavering in their efforts to address issues related to taxpayer compliance and are optimistic about receiving positive responses while upholding the necessary standards to make their projections achievable. This chapter encompasses the study's background, problem statement, study objectives, research questions, limitations, significance, organizational structure, and the definition of key terms.
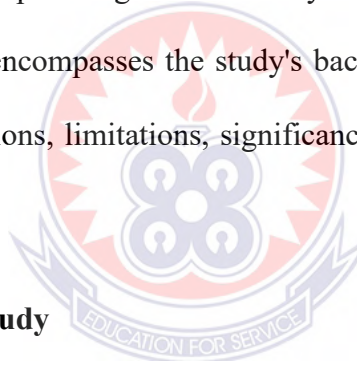
1.2 Background to the Study

The progress of any nation is crucial for its citizenry, as it directly impacts their quality of life and living expenses. Taxes continue to serve as a significant revenue source for the government, collected from both individuals and business activities within the country (Kuug, 2016). In Ghana, tax compliance refers to the extent to which individuals and corporate entities fulfill their tax obligations per the country's tax laws and regulations (Abdul–Razak & Adafula, 2013; Okpeyo *et al.*, 2019). Tax compliance is crucial for sustaining government revenue, supporting public services, and ensuring a stable economic environment (Kurian, 2017; Pestoff, 2014). However, like many other

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countries, Ghana faces challenges in achieving high levels of tax compliance, particularly among corporate entities (Abdul–Razak & Adafula, 2013; Okpeyo *et al.*, 2019).

A corporate entity is a legal structure to conduct business activities and is treated as a separate legal entity distinct from its owners (Chaffee, 2017; Hiller, 2013). Private Limited Liability Companies (Ltd.), Public Limited Liability Companies, Partnerships, Sole Proprietorships, and Branches of Foreign Companies are the types of corporate entities that are usually operated in Ghana (Akumfi, 2022; Asare *et al.*, 2015). Corporate entities in Ghana play a crucial role in the nation's economy which includes contributing to employment generation, capital investment, and economic growth (Zafar & Mustafa, 2017) . They also play a significant role in the tax net by paying various taxes to the government such as corporate income tax rate levied at 25% for both resident and non-resident companies (Iddrisu *et al.*, 2021). They contribute 15% of VAT from the previous 12.5%, which took effect in January 2023 and hold the responsibility for deducting and remitting withholding taxes on payments made to employees, suppliers, contractors and payroll taxes on behalf of tax authorities (Ghana Revenue Authority [GRA], 2021).

Corporate entities' contribution to the tax net in Ghana has become significant as tax payments aids government revenue and fund public services, infrastructure development, and social programs. Since the year 2000, higher corporate and personal income taxes, as well as VAT and other similar taxes, have contributed significantly to Ghana's growth in tax collections; however, the growth of these two taxes has more recently slowed. Over 70% of all collections in 2019 came from these taxes, up from 57% in 2000 (Iddrisu *et al.*, 2021). According to OECD (2022), corporate entities contribute about 25 percent of Ghana's tax revenue representing a quarter of our entire revenue generated from taxes. In

the GRA (2021) annual report, the average contribution from corporate entities lies around 23.03%, which is not extremely below the confirmation of the former. These taxes play a vital role in financing the government's operations and contributing to Ghana's overall economic and are deeply relied on.

Nevertheless, business entities may encounter significant obstacles due to the intricate nature of the tax system and the limited availability of tax education and awareness. The aforementioned consequences may limit the taxpayer's comprehensive knowledge of the overall tax system and structure, increasing the likelihood of their involvement in tax evasion or avoidance (Balakrishnan *et al.*, 2019; Devereux & Vella, 2014). The four major components of tax compliance, as recognized by the Organization for Economic Co-operation and Development (OCED) and referenced in the work of Mebratu (2016), are acknowledged. The aforementioned elements encompass becoming officially recognized as a taxpayer, adhering to prescribed deadlines for submitting tax returns, accurately disclosing tax obligations, and promptly fulfilling tax payment obligations. Furthermore, the existing body of literature examines tax compliance as the practice of timely tax payment and accurate filing of tax returns in adherence to legal requirements (Lichter *et al.*, 2021; Mittone & Saredi, 2016; Sebele-Mpofu, 2020; Trawule *et al.*, 2022). However, taxpayer's reluctance to comply with tax laws has made it prudent to be enticed or coerced by tax officials into doing what is required, resulting in huge sums of losses by tax agencies. A report by the Integrated Social Development Centre [ISODEC] recorded; - Ghana, for example, loses roughly $2.1 billion in tax income every year as a result of taxpayers' tax evasion practices (Oduro *et al.*, 2017).

Similarly in 2019, the GRA lost close to GHS1 billion as a result of the manual operation of the tax system (MOF, 2020). According to a survey undertaken in relation to the Ghanaian tax system, Ghana's tax-to-GDP ratio, which was 13% in 2019, is still much below the government's goal of 20% by 2023 (MoF, 2020). Despite being 5 percentage points greater than 8% in 2000, this ratio has stayed constant since 2017 (Finance, 2020; Iddrisu *et al.*, 2021).

A speech given by the Honorable Minister of Finance, Ken Ofori-Atta in 2020 titled "Enhancing Revenue Collection through the Tax Audit & Quality Assurance Unit," revealed that a significant number of unregistered taxpayers, estimated at 5 million, encompasses both individuals and corporate entities. Additionally, the speech highlighted the presence of outstanding debts amounting to GH¢400-600 million, as a results of difficulties in filing and payment processes attributed to bottlenecks in the system. The speaker emphasized on the importance of observing transparency and consistency in implementing debt-recovery measures (Best *et al.*, 2021; Finance, 2020).

Advocating voluntary compliance along with tax rules has been a persistent challenge faced by tax administrators and agencies worldwide over decades. This problem had had adverse effects on the economies of nations (Chepkurui *et al.*, 2014; Kuug, 2016). In Ghana for instance, despite the diligent endeavors by the Ghana Revenue Authority (GRA) to implement convenient solutions, such as the self-assessment systems, (Daniel *et al.*, 2016), tax education and awareness (Mohamad *et al.*, 2023; Oduro *et al.*, 2017), tax audits (Bedi, 2016; Sharoja Sapie & Kasipillai, 2013; Siregar *et al.*, 2019) among others, some taxpayers which include many corporate entities resort to evading or avoiding taxes (Armstrong *et al.*, 2015; Hope *et al.*, 2013).

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Nonetheless, tax compliance is greatly influenced by the execution and efficacy of tax audits (Bagdad *et al.*, 2017). Tax audits aim to find any anomalies or probable non-compliance while confirming the correctness and completeness of tax filings (Jayawardane & Low, 2016). However, tax audits in Ghana can be effective or ineffective, and some corporate organizations could view them as being opaque or inconsistent (Daniel *et al.*, 2016). This perception thus, impacts organizations' general compliance practices, contributing to their reluctance. Regardless of the inconsistencies, the adaptation of tax audits seems to aid in the government's ability to generate more income (Best *et al.*, 2021; Gemmell & Ratto, 2012; Kasper & Alm, 2022; Onoja & Iwarere, 2015)

The tax auditing system or program has become essential due to the government's ability to collect the revenue needed for their short- and long-term budgets (Payne & Raiborn, 2018). It contributes to maintaining economic and financial order and stability by ensuring that taxpayers submit satisfactory returns and drastically reducing the degree of tax avoidance and evasion (Olaoye *et al.*, 2018). By encouraging greater levels of voluntary compliance on the part of taxpayers and guaranteeing that the amount owed is collected and used for its intended purpose, the audit system ensures that taxpayers strictly abide by tax regulations (Nyakamba, 2013). According to Sarin and Summers (2019), increasing Internal Revenue Service Audit capacity might result in an additional $1 trillion in revenue for the United States. This finding may be relevant in the context of the United States and developing countries like Ghana in Africa. Researchers have

recorded anticipation of a 15% rise in taxable income after one year of an operational audit (Beer *et al.*, 2020; Kotsogiannis *et al.*, 2022)

In this context, tax education seems to play a crucial role in enhancing tax audits effectiveness and maximizing tax compliance's potential impact (Kwok & Yip, 2018; Oduro *et al.*, 2017). Tax education can be provided in the following areas: workshops or in-depth tax courses where instructors enable the taxpayer to become conversant with the tax returns filing process, keeping records, preparing business and personal tax returns, handling self-employment tax issues, and paying employment taxes (Bornman & Ramutumbu, 2019). Introducing tax education may contribute to enhanced compliance awareness, improved record-keeping and reporting reduction of compliance costs and increased trust and cooperation (Newman *et al.*, 2018; Omondi & Theuri, 2019). This aids in reflecting the influence that tax audits may have on tax compliance when a backup of strategic educational dynamics is effectively adopted to aid in the changing their mindset.

Additionally, the introduction of penalties, fines and the possible discontinuation of business operations, which could equally be described as fear-appealing messages as a result of inaccurate and the untimely filling of tax returns and payments respectively are believed to pose a level of threat to taxpayers and encourage or coerce them to comply willingly (Fauziati *et al.*, 2020; Lakuma, 2019; Musimenta, 2020; Musimenta *et al.*, 2017) as cited in (Trawule *et al.*, 2022).

1.3 Statement of the Problem

Tax compliance is critical to maintaining a functioning and sustainable tax system (Bird & Davis-Nozemack, 2018; Wadesango *et al.*, 2018). Governments rely on taxpayers' compliance with tax regulations to fund public services and promote economic stability. Despite implementing tax audits and education initiatives, tax compliance rates however, remain challenging in many jurisdictions (Blaufus *et al.*, 2022) which includes corporate entities (Bedi, 2016; Siregar *et al.*, 2019). This has become a global concern of tax authorities and administration (Yusof *et al.*, 2014).

It is worth knowing that, after exhibiting advancements since 2000, Ghana's tax-to-GDP ratio has now struck a plateau below the government's targeted goal of 20% by 2023. (Finance, 2020; Iddrisu *et al.*, 2021). This phenomenon prompts enquiries on the efficacy of strategies employed to contribute to reducing tax non-compliance. Enquires such as; - Are there limitations or deficiencies in the processes used for self-administered assessments? Do penalties and punishments prove ineffective in deterring taxpayers? Is tax education failing to reach and influence taxpayers properly? And finally, to what extent does tax audits impact tax compliance in Ghana?

An existing body of scholarly research on the impact of tax audits on tax compliance is abundant, particularly about individual taxpayers and Small and Medium-Sized Enterprises (SMEs) (Alshira'h & Abdul-Jabbar, 2020; Ayalew, 2014; Beer *et al.*, 2020; Best *et al.*, 2021; Chalu & Mzee, 2018; Kasper & Alm, 2022). The conceptions of these authors, including Alemu (2020), Ayalew (2014), Chalu and Mzee (2018), George and Diavastis (2015), Kasper and Alm (2022), Olaoye *et al.* (2018), Olaoye and Ekundayo (2019), and Yosef Nurebo and Mersha Lekaw (2019), primarily focus on the perspective

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of tax authorities, neglecting the interests of tax payers. However, limited studies have been conducted to examine the impact of tax audits on tax compliance among corporate organizations (Bedi, 2016; Fury Puspita *et al.*, 2016; Saw, 2017; Sharoja Sapie & Kas ipillai, 2013). Most of this research were undertaken in Europe, Asia, and America, with only a handful in Africa. Despite the enormous attention given by scholars and researchers in the discipline of accounting and taxation regarding tax audit and tax compliance, there remains a need for empirical research on these concepts in less-explored African countries and regions within emerging nations such as Ghana.

Numerous studies have examined the direct correlation between tax audits and tax compliance, yielding conflicting conclusions. For example, several studies (Alshira'h & Abdul-Jabbar, 2020; Ayalew, 2014; Beer *et al.*, 2020; Bérgolo *et al.*, 2017; Gemmell & Ratto, 2012; Kasper & Alm, 2022; Olaoye *et al.*, 2018; Olaoye & Ekundayo, 2019; Saw, 2017) have found a statistically significant positive association between tax audit and tax compliance. However, other studies (Bedi, 2016; Siregar *et al.*, 2019) have reported no significant relationship between tax audit and compliance. Additional research conducted by Best *et al.* (2021) and Kasper and Alm (2022) has revealed varying impacts on the compliance behaviours of taxpayers following an audit. Therefore, the efficacy of tax education programmes in facilitating taxpayers' comprehension of tax legislation and its potential role in mediating the association between tax audits and compliance behaviour necessitates additional investigation.

Finally, existing literature on tax compliance has primarily focused on the direct effects of tax audits on tax compliance or tax education on compliance behavior separately, and has largely overlooked the potential moderating role of fear-appealing messages (FAM)

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(Mohamad *et al.*, 2023). Upon further examination, it becomes evident that various models have been employed in the study of tax audits and tax compliance. These models included the implementation of specialised information system tools (George & Diavastis, 2015), the utilisation of statutory audits adjustments (Blaufus *et al.*, 2022), and the provision of management support (Yosef Nurebo & Mersha Lekaw, 2019). In order to strengthen the connections within this field, this study aims to address the gap in knowledge on the role of fear-appealing messages that would moderate the relationship between tax audits and tax compliance behaviour.

Therefore, this study aims to fill the gaps in the literature by investigating the moderating role of fear-appealing messages and the mediating role of tax education in the relationship between tax audits and tax compliance. By examining these nuanced relationships, this research provides a comprehensive understanding of the factors influencing tax compliance behavior among corporate entities in Ghana, thereby contributing to the development of effective strategies for promoting tax compliance and addressing the persistent compliance challenges faced by governments.

1.4 Purpose of Study

This study aims to assess the mediating role of tax education and the moderating role of fear-appealing messages on the relationship between tax audit engagements and tax compliance.

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1.5 Objectives of the Study

The study is premised on the following objectives:

1. To assess the influence of tax audits on tax compliance.

2. To examine the impact of tax audit on tax education.

3. To examine the mediating role of tax education in the relationship between tax audit and tax compliance.

4. To examine the moderating role of fear-appealing messages in the relationship between tax audit and tax compliance.

1.6 Research Questions

In order to achieve the research objectives, the following research questions guided the study:

1. What is the influence of tax audit on tax?

2. What is the impact of tax audit have on tax education?

3. Does tax education mediate the relationship between tax audit and compliance?

4. Does Fear-appealing messages (FAM) moderate the relationship between tax audit and compliance?

1.7 Hypotheses of the Study

The study is therefore hypothesized as follows:

1. H1: Tax audits significantly influence tax education conveyed to corporate tax payers.

2. H2: Tax Education mediates the relationship between tax audit and tax compliance.

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3. H3: Fear-appealing messages significantly moderates the relationship between tax audit and tax compliance.

1.8 Significance of Study

The significance of this current studies is premised on three lenses: research, policy and practice. This study is to give premise to filling the knowledge gap in scholarly research by introducing a translating mechanism to aid in raising the tax compliance level of taxpayers. Again, the study adds to the empirical literature on tax compliance in emerging economies like Ghana as tax revenue increases. would help to reduce over-reliance on donor support from development partners such as the World Bank and International Monetary Fund (IMF).

Further, the findings of this study would be utilized as a strategic reform for policymakers in Ghana and globally contributing to the approaches to be taken to effectively perform tax audits as it mobilizes enough funds for the nation as a whole. In case of practice, this study would aid the Ghana Revenue Authority in finding solutions in terms of the understanding the corporate taxpayers' view of the entire tax audit process and devise strategies on how to effectively engage in tax audits with increased results.

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1.9 Delimitation of the Study

This study would cover corporate entities in the Greater Accra region that have been tax audited since 2010. This is because the period from 2010 experienced a significant increase in the tax-to-GDP ratio from 10.8% to 13.4% in 2017 and has remained constant till the present (OECD, 2022). Greater Accra region has been selected because of its major representation as an avenue contributing close to 31% of the annual tax revenues specified in the Quarterly Revenue Bulleting of the Ghana Revenue Authority (GRA, 2021). In addition, most companies in the Greater Accra region are known to bear similar characteristics to companies in other Ghanaian regions (Owusu et al., 2016).

The study is more delimited to tax audits, tax education, fear-appealing messages and tax compliance in Ghana. The content of tax audits used in this study portrayed the frequency of tax audit conducted, detection risks of tax non-compliance and challenges faced between tax audit engagements. The content of tax education used in this study is the extent to which taxpayers understand and apply tax laws and the form of recommendations given to management to enhance their compliance level. Fear-appealing messages were defined as the associated threat to the payments of fines, penalties and punishments arising from uncovering misstatements and underfilling tax reports after tax audit associated with non-compliance. Threats to companies that reported and paid tax returns accurately and timely are considered too. Such messages usually may significantly influence taxpayers' compliance level, though reluctantly.

1.10 Limitation of the Study

The study was limited to the views of corporate tax payers only without inputs from the tax auditors. Again, the study employed the use of the quantitative approach only and could not allow detailed views of respondents. The researcher faced reluctance on the path of some tax payers which contributed to an 80% response rate out of the entire questionnaires administered.

1.11 Definition of Terms

Tax Audit

A tax audit looks at whether a taxpayer has accurately calculated and disclosed their tax burden as well as met any other duties (OECD, 2022). The definition of a tax audit, on the other hand, is an action or set of actions taken by tax auditors to ascertain a taxpayer's correct tax liabilities for a specific accounting or tax period (Ayalew, 2014). This is done by inspecting the organization's products and financial records of the taxpayer to determine whether tax laws have been complied with and to confirm the accuracy of tax returns and financial statements (Mebratu, 2016; Bérgolo *et al.*, 2017).

Tax Education

Any program, whether formal or informal, put on by the tax authorities to help taxpayers file their returns accurately and raise awareness of their duties regarding the tax system is considered tax education (Joumard *et al.*, 2013). For the purpose of this study, tax education signifies any formal or informal education relayed to corporate tax payers as a result of findings of tax officials after every tax audit. Here the inclusiveness of tax education rejects Fear-Appealing Messages (FAM) and is treated as a separate construct. The aforementioned facts point to tax education as one of the most successful techniques

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for encouraging taxpayers to comply more. In other words, if taxpayers are aware of the fundamentals of taxation, they will be more likely to comply (Ayalew, 2014).

Tax Compliance

The degree to which taxpayers abide by the tax structure is typically used to define tax compliance in its most basic form. The notion of compliance, however, can be thought of as nearly a range of definitions, like many other similar ideas. This includes everything from a focused law enforcement strategy to broader economic definitions and even more thorough versions relating to taxpayer actions to comply with societal goals that are reflected in tax policy.

Corporate Entities

A business unit with legal rights and obligations that are distinct from those of its owners is referred to as a legal entity. A legal entity can thus sign contracts, buy and own property, open bank accounts, bring legal action and be sued, recruit and fire personnel, and other activities. A legal entity must also abide by all current laws, including those pertaining to registration, licensing, tax filing, regulatory compliance, and other applicable laws (Coulibaly & Camara, 2022).

Fear-appealing messages

These are referred to as the messages or responses from the tax auditor that reluctantly compels the taxpayer to accurately file and pay the differences of evaded taxes and their respective fines and penalties (Trawule *et al.*, 2022). These messages are usually threats relayed to taxpayers to either deter them from committing wrongly or coerces them to file accurate taxes in the future.

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1.12 Organization of the Study

There are five chapters in the study. The first chapter is devoted to the introduction, which provides a thorough foundation for the study, details of the issue being investigated, its goals, research questions, significance, and scope. It also talks about the study's restrictions and boundaries. The review of pertinent literature is presented in Chapter Two. The study's methodology is covered in Chapter Three. Results and discussions are presented in the fourth chapter. The summary, results, and suggestions of the study are presented in Chapter Five, which serves as its conclusion.

CHAPTER TWO

LITERATURE REVIEW

2.1 Overview

This chapter examines recent findings that are pertinent to the current study. It examines the literature on the theoretical underpinning of the study. The review establishes the theoretical framework for the study by identifying, analyzing, and evaluating prior information on the study and establishing the relationships between the dependent and independent variables of the study. An analysis of significant empirical research on each variable follows. In addition, the Ghanaian tax system, principles of the good tax system, tax audit issues, tax education, tax compliance and characteristics of corporate entities would be reviewed. Following is a discussion of conceptual issues raised by these ideas and documented in previous empirical studies. The conceptual framework for the study is then established, and findings emerging from the reviews are then examined.

2.2 Theoretical Framework

In literature, many theories have been adopted in the study of tax-related issues like tax evasion, tax avoidance, tax audit, tax compliance, and tax education, among others, both globally and across developing countries like Ghana. With the concept of tax audit effectiveness and tax compliance, many researchers use theories such as; Contingency theory (Chalu & Mzee, 2018), Agency theory (Chalu & Mzee, 2018; Tigist, 2021), Deterrence theory (Kasper & Alm, 2022; Beer *et al.*, 2020; Chalu & Mzee, 2018; Kuug, 2016), Game theory, Theory of economic regulations (Chalu & Mzee, 2018), Theory of tax performance and productivity (Olaoye *et al.*, 2018), Sociological theory of fraud

(Tapang *et al.*, 2020) among others. For solidifying, comparing and contrasting the findings of other researchers, the study sought to review the deterrence theory that other studies have widely used in line with tax audit effectiveness and also the theory of planned behaviour (Ajzen, 1991) for the inclusion of tax education.

2.2.1 Deterrence Theory

This is a theory first propounded in literature by (Zagare, 1996) as it gained importance in strategic studies and sought to have the capacity to harm another state used as a motivating factor for other states to avoid it and influence their behaviour. According to (Jackson & Milliron, 2002), The economic deterrence models are oriented towards a theoretical standpoint in comprehensively examining tax evasion and compliance. The theory assumes that taxpayers are unwilling to discharge their tax liability and that the risk of audit, detection and penalty often "deter" them into compliance, hence the termed: "deterrence model". Although this theory distinguishes between the threat of punishment and the actual punishment (Chalfin & McCrary, 2017), economics literature primarily focuses on the former. The decision to comply made by a taxpayer is often examined within an expected utility framework that incorporates Becker (1968) economics-of-crime methodology.

This analysis was initially formulated as a decision under risk by Allingham and Sandmo (1972), Srinivasan (1973), and (Yitzhaki, 1987). According to these models, an increase in the likelihood of an audit or the severity of the penalties will result in higher compliance, which explains the overall deterrent effect of tax audits. The fundamental tenet of deterrence theory is that people decide whether to comply or break the law depending on the benefits and outcomes of their actions. In other words, the deterrence

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theory posits that people obey the law after they realize its advantages exceed its drawbacks. While some have argued in favour of this viewpoint, others have argued against it because it is the certainty of punishment when it is realistically promised, not the harshness of punishment, which compels people to obey. In the United States for example, a study by Beer *et al.* (2020) demonstrated that, in aggregate, estimates indicates that operational tax audits induce taxpayers to increase their reported taxable income by roughly 15% a year after the examination.

For taxpayers who had additional tax assessment after tax audit engagements, it was reported that they report a tax income of about 64% after the first year's audit and maintain a 44% increase in taxes reported three years after the audit. The vice-versa happens if tax audit doesn't take place at all. Overall, then, the specific deterrent effect of audits on subsequent reporting behavior adds to the static gain from direct audit revenue. This theory will however seek to portray a positive relationship between tax audit and tax compliance due to the possible risk of detection and penalties to be raised after an effective tax audit if taxpayers do not comply and the fear-appealing messages that may arise as a result of possible non-compliance by the corporate tax payer. And would also detect a positive relationship as fear-appealing messages influence corporate tax payers' tax compliance levels after tax audits.

2.2.2 Theory of Planned Behaviour

According to Ajzen (1991), the TPB is a social psychology theory that explains how behavioral intention is influenced by attitudes toward conduct, subjective standards, and perceived behavioral control. The Theory of Planned Behavior (TPB) is an extension of the earlier Theory of Reasoned Action (TRA), which assumes that people have volitional
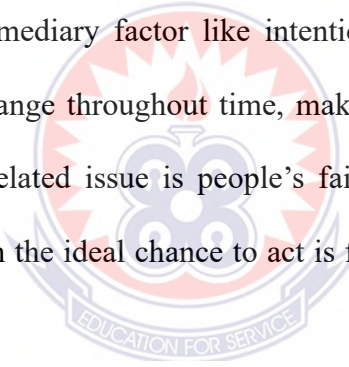
control over their behavior and incorporates behavioral intentions as significant motivators for predicting actual human behavior (Ajzen & Fishbein, 1975; Ajzen & Fishbein, 2004). The likelihood of engaging in a certain conduct increases with the intention to do so. However, Ajzen (1991) contends that TRA cannot explain non-volitional behavior since behavioral intentions periodically fail to anticipate actual action because of imperfect control in relation to opportunities and resources, such as time, money, and opportunity.

According to the TPB, achieving and maintaining behavioral change necessitates an intention to stop engaging in a bad behavior or start engaging in good behavior (Ajzen, 2005). According to TPB, intention is influenced by perceptions of social norms (the strength of others' opinions about the behavior and the individual's desire to follow such significant others), as well as by attitude toward the behavior and the degree of perceived behavioral control.

The TPB is pertinent to this study because it provides a methodical way to identify the concerns that still matter most to a person's decisions about how to carry out particular behaviors, including tax compliance (Brewer & Rimer, 2008). Since many important attitudes and beliefs are modifiable, they are the ultimate goals for any ensuing tax education programs (Brewer & Rimer, 2008; Trawule, 2017). According to this approach, tax education should encourage tax compliance. This is because the idea contends that when good intentions are developed, actual behavior is positively influenced. (Putra, 2018) looked at the TPB's applicability in describing the behavior of corporate tax payers with relation to tax compliance. The TPB's emphasis on the precision of intended or planned behavior is one of its greatest advantages (Brewer & Rimer, 2008). The TPB is

also highly supported by data from past laboratory experiments, behavioral health interventions, and field research (Sheeran & Orbell, 1999).

The measurement of TPB's behavioral intentions has drawn criticism (Brewer & Rimer, 2008) however, the TPB asserts that intentions cause behaiours, while actual evidence suggests a different conclusion. Although research over time suggest a very strong link between intention and behavior (Sheeran, 2002; Trawule, 2017), carefully planned experimental experiments show a much lesser influence (Webb & Sheeran, 2006). According to TPB, attitudes can affect behavior just by intentions. This claim is dubious because it's not always the case. It has been demonstrated that attitudes frequently predict behavior without an intermediary factor like intentions (Liska, 1984). Intentions and attitudes are subject to change throughout time, making it difficult to predict how they will affect behavior. A related issue is people's failure to create intentions for every behaviour, especially when the ideal chance to act is far off, is a related issue (Brewer & Rimer, 2008).

The idea of planned behavior holds that the information people learn shapes their intentions, which are then manifested in their behavior. This suggests that when people are being educated right after tax audit procedures have been held, it tends to increase the awareness of corporate tax payers and results in the enhancement of tax compliance in the future. However, this theory would portray a strong positive relationship that exist between tax education after tax audit and tax compliance level in the future.

2.3 Empirical Review and Hypothesis Development

This section reviews other studies concerning the study's constructs. The section is organized in line with the specific objectives of the study. As part of the review, hypothesis is also developed.

2.3.1 Tax audit and tax compliance

Most tax administrations have historically utilized tax audits as a common technique. Because companies discovered evading taxes must pay taxes on the hidden income with penalties inclusive, audits directly enhance tax compliance Tax audits have been a widely employed tool by tax authorities over time. They effectively boost tax compliance because companies found evading taxes are required to pay the taxes on their undisclosed income, including associated penalties (Alm, 2021). However, other studies also conclude that tax audit does not significantly influence on tax compliance (Bedi, 2016). Highlights of extent reviews on the relationship that exists between tax audit effectiveness and compliance are presented below for further justifications.

Chalu and Mzee (2018) in their research, Determinants of tax audit effectiveness in Tanzania sought to explore the factors that influences the effectiveness of tax audit in Tanzania. They further categorized the factors into four issues: the organizational-related, tax auditors- related, taxpayers-related and regulatory-related. They adopted the Explanatory approach to research and surveyed 225 Auditors in 23 tax regions through random probability sampling techniques. Analysis was done using descriptive statistics like frequency, percentage, mean and standard deviation and employed the inferential use of exploratory factor analysis (EFA) and multiple regression analysis. The study findings revealed that, five major critical factors largely affected tax audit effectiveness. The first

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factor, the implementation of tax auditors' recommendations, was found under the organizational category. The tax auditors' category found under the second factor, sprouted out the adequacy of tax audit unit as a measure of ensuring effectiveness during tax audits units to ensure the effectiveness during tax audits.

Meanwhile the third factor contributing to tax audit effectiveness was taxpayers' attitude, found under the taxpayers' category. The fourth and fifth factors: the availability and application of regulations and standards for tax audit, and leadership and tax policies for tax audit, respectively, were found under the regulatory category. Chalu and Mzee (2018) applied a robust methodology with samples from various respondents. However, they only focused on tax auditors without considering, responses from tax payers. This current study focuses on bridging that gap in the Ghanaian Context.

In the study, Drogalas *et al.* (2015), tax audit effectiveness in Greek firms: The tax auditors' perception focused on examining the relationship that existed between tax audit effectiveness, tax legislation and the use of specialized information system tools. Their research sampled 200 tax auditors who were administered with questionnaires. They utilized factor analysis and multiple regression analysis, a robust analytical procedure to help statistically produce results that could be interpreted. Key conclusions indicated that, efficient information systems aid tax auditors in locating tax infractions. On the contrary, it is challenging for tax auditors to perform their jobs effectively due to the complexity and ongoing changes in tax legislation. The amount of training, job experience, and education of tax auditors also improves their capacity to find tax infractions. This implies that, adopting ICT in the tax audit procedures helps to effectively track tax non-compliance and infringements, enhancing tax compliance. This study would align with

our present research as it would be extended to aid in an appropriate approach towards educating taxpayers to increase the compliance rate.

Another study conducted by Olaoye *et al.* (2018) on the topic of tax audit and tax productivity in Lagos state, Nigeria aimed at examining the impact that tax audit had on tax productivity in Nigeria, analysing the trends of tax audit and tax productivity and the impact of desk audit, field audit and back duty audit on the tax productivity in the Lagos state. The study used of both primary and secondary data and randomly sampled 350 staff of the Lagos state Internal Revenue Services for the issuing of questionnaires. They sourced their secondary data from the Federal Inland Revenue Service and Lagos Internal Revenue Service audit division in Lagos state over the period spanning from 2000 to 2015. They analyzed them inferentially, making use of unit root test, and estimation techniques such as Fully Modified Least Square (FMOLS) co-integration regression and Logit regression analysis. The study revealed that, field tax audit, desk tax audit and Back duty tax audit exert a significant positive impact on tax productivity.

Again, Kasper and Alm (2022) in their study, Audit, audit effectiveness and post audit in the United States. The study investigates the effect of audit effectiveness or the share of undeclared income that the tax agency detects in an audit on post-audit tax compliance. The study sampled 333 tax payers and surveyed them by administering questionnaires. Laboratory experiments were used in analyzing findings. Their findings showed that tax audits have differential effects on post-audit compliance and that the effectiveness of audits determines these responses; that is, while effective audits increase post-audit tax compliance, ineffective audits have the opposite effect. However, results from the

laboratory experiment may not reflect taxpayers' post-tax audit behavior in the real world. And for this matter has become necessary for this present study.

Comparatively, a study by Tefera (2012) on the assessment of tax audit effectiveness: The case of Addis Ababa City Government Revenue Authority Large Tax Payer's Branch Office looked at assessing the factors that affect their tax audit effectiveness in Addis Ababa city. The study adopted qualitative and quantitative approaches where 50 auditors were sampled randomly and surveyed using questionnaires. Data were analyses using SPSS through descriptive statistics like frequency, mean, tables, and percentages. The results showed that tax audit attribute, audit quality, top management support, and competency of staff auditors have a statistically significant influence and positive impact on the assessment of the studied organizations on tax audit effectiveness. Unlike Chalu and Mzee (2017), the tax payers' attitude or variable was missing in their study. Again, the methodology used for this study was only based on descriptive statistics like tables mean and percentages. Meanwhile, more robust analysis could have been employed to help in making concrete resolutions for this study.

In addition, Saw (2017) went a step further and studied on the topic: Does frequency of audit improve taxpayer compliance? This research was conducted in Malaysia to determine whether frequency of audit can improve tax payer compliance as well as determining how the findings can impact policymakers' decisions and tax agencies future strategic action plan. In achieving this purpose, the researcher sampled 250 audited business firms in the year 2012. Questionnaires were issued, and respondents' data were analyzed using mean, standard deviation, Chi square and finally regression analysis. The results concluded that future tax audit strategic plan should focus on effective approaches

to ensure a higher level of compliance after an audit to reduce time and costs incurred by business entities or tax authorities during subsequent audits. Hence the call to find an effective approach to educating tax payers and enhancing corporate tax compliance.

A study by Beer *et al.* (2020) on the topic, Do Audits deter or provoke future tax Noncompliance? Evidence on self-employed taxpayers in the United States sought to investigate the effects of operational tax audit on future reporting behavior. 7500 self-employed US tax payers were sampled. A matched difference-in-difference approach was employed using programme evaluation techniques to quantify the impact of audit on future tax payer reporting behavior. Their results suggested that improved targeting of audits toward noncompliant taxpayers would yield more direct audit revenue and pay dividends in future tax collections. In the aggregate, taxable income was estimated to increase by roughly 15% one year after an operational audit. However, the figure masked a substantial heterogeneity within the population. Among those taxpayers who receive an additional tax assessment, reported taxable income is estimated to be 64% higher in the first year after the audit (44% after 3 years) than it would have been in the absence of the audit. In contrast, among those taxpayers who do not receive an additional tax assessment, reported taxable income is estimated to be approximately 15% lower the year after the audit (21% 3 years later) than it would have been had the audit not taken place. Among every other study on tax audit effectiveness, the quantification of its impact on tax compliance from this study gave a different turning point that sought to realistically convey on field results in the context of America. The study would adopt some variables in communicating the findings in the Ghanaian context.

In contrast, Ayalew (2014) embarked on a study title, factors affecting tax audit effectiveness, a study on category 'A' tax payers in Bahir Dar City Administration Revenue Office in Ethiopia. The objective of the study was to examine the statistical significance that existed between factors and tax audit effectiveness. Using a random probability sampling technique, 333 taxpayers responded to a set of questionnaires through a thorough survey. Responses from the sample population were analysed using Pearson's correlation, linear regression and other descriptive statistics. The findings indicated that there is no statistically significant inverse association between the auditee's characteristics and the success of a tax audit. Also, the findings indicated that there is no statistically significant link between organizational context, top management support, and tax audit effectiveness. Instead, the researcher found that there is a strong significant positive relationship that existed between audit quality, organizational independence and tax audit effectiveness.

In Ghana a similar study from Bedi (2016) on the influence of tax audit on tax compliance confirmed the research of Ayalew (2014) as it aimed to assess the statistical significance of tax audit on tax compliance in Ghana. 160 companies' annual reports were sampled within a three-year period, 2011 and 2013 through content analysis. Statistically, the Ordinary least square regression model was employed for analysis. The study found that tax audit and cash flow had no significant influence on tax compliance. However, board size and auditor type were significant and positively related to tax compliance. He added that, Industry has a statistically significant negative influence on tax compliance. The study confirmed the truism that taxpayers would not voluntarily comply with tax obligations. Nevertheless, post effects of audit were missing in this

research where this current study will focus on in line with the right approaches to be adopted when educating tax payers in enhancing tax compliance (Tefera, 2012; Ayalew, 2014; Chalu & Mzee, 2018; Saw, 2017; Kasper & Alm, 2022)

Best *et al.* (2021) on their research problem, the deterrence value of tax audit estimates from a randomized audit program exploited a national programme of randomized audits covering the entire population of VAT fliers from Pakistan to study how much evasion audit uncovers and how much evasion it prevents by changing behavior. Probabilities were adopted as their descriptive analytical procedure and regression analysis. Findings of the study sprouted that, combining VAT returns and audit outcomes data, audit detects a substantial amount of evasion: the detected amount is 8% of the aggregate annual turnover of audited firms though the evasion rate, however, varies substantially across firms. In this world, profit-maximizing firms report easy-to-detect transaction but hide the rest, and audit would change firm priors only if it goes after the hidden transactions. Their interviews with auditors revealed that, it is usually not the case. Instead, auditors scrutinize reported transactions only, looking for any mechanical violations of law. Insufficient focus on uncovering hidden transactions means audit does not change firm priors on the detection probability and thus does not induce a permanent change in behavior. However, since the main focus of an audit is not to uncover fraud but instead to express an opinion and in the aspect of tax audit, crosscheck if all tax returns have been filed right as stipulated by law, the detection risk of uncovering evasion will be high due to the fact that tax evasion are usually perfectly planned.

Finally, from Blaufaus *et al.* (2022) on the topic, Information Sharing between Tax and Statutory Auditors: Implications for Tax Audit Efficiency in the European context. Their study examined whether tax audits become more efficient if tax auditors have access to information about statutory audit adjustments. To this end, they extended the standard tax compliance game by including a statutory auditor and analyze the strategic interactions among a firm issuing financial and tax reports, a statutory auditor, and a tax auditor. The researchers used probability in analyzing their multistage game that involved three players (i.e., The manager, the statutory auditor and the tax auditor). After the analysis the study showed that granting the tax auditor access to information on statutory audit adjustments can, in some cases, increase tax revenues while simultaneously decreasing tax audit frequency. Thus, more information sharing between statutory and tax auditors could be a policy instrument to combat tax evasion and increase tax audit efficiency. However, the tax audit efficiency enhancing effect comes at the cost of a reduction in financial statement quality as the probability of overstated financial assets increases. Moreover, the additional information may also reduce tax revenues depending on the importance of firms' financial statement valuation

In conclusion, this present study concentrates on how tax audit engagements affect tax compliance in Ghana among corporate entities capitalizing on its operational effect on the tax payers.

H1: Tax audits significantly influence future tax compliance.

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2.3.2 Tax Audit and Tax Education

After tax audit, management letters and recommendations are crucial. These are crucial steps in the audit process because they offer the audited company valuable knowledge and direction on how to enhance internal controls and tax compliance (Bott *et al.*, 2020). The relationship that leads to tax education after tax audit has not been clear and have empirically not been established. However, the end product of every audit, being the auditors opinion is usually complimented with some management letters and recommendations that seek to improve some internal controls, financial statement procedures and tax compliance on a whole (Furnham & Gunter, 2015; Kaka, 2021). This empirical review seeks to throw light on the role of these management letters and recommendations from tax auditors to aid in explaining the relationship that exist between tax audit and tax education.

With regards to identification of issues, the corporate tax payers are provided with assistance to identify any problems, shortcomings, or areas of concern related to the entity's tax compliance or financial reporting practices by management letters that the tax auditor has prepared following a thorough examination of the audited entity's financial records, tax returns, and internal controls (Stephan Hayes & Baker, 2014). They proceed on to give thorough justifications for the problems found. They outline the type, extent, and potential effects of the issues on the entity's ability to comply with tax laws and maintain accurate financial records.

These suggestions are usually useful and feasible, and they are made to assist the company in improving its internal control and tax compliance procedures, whose adoption assists the entity in lowering the possibility of future mistakes, omissions, or

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tax-related issues. The management letters often make suggestions to ensure that, the organization complies with all applicable tax laws and rules to prevent penalties and legal consequences that may occur from breaking tax regulations. To practically sense the direct impact of tax audit on the type of education given, the management letter requires swift action from the audited entity. This is to avoid additional difficulties or penalties. It is in the entity's best advantage to resolve the concerns that have been found and put the suggestions into practice as quickly as feasible.

H2: Tax audits significantly influence tax education conveyed to corporate tax payers.

2.3.3 The Role of Tax Education and Tax Compliance

Tax evasion poses a severe danger to the ability of the government to collect taxes, hence tax compliance is an increasing international concern for tax authorities and public policymakers. If taxpayers have sufficient information to comprehend any new system, they will embrace it with no hesitation (Kasipillai *et al.*, 2003 as cited by (Berhane, 2011). As a result, in order to achieve the goals of voluntary compliance, taxpayers must be knowledgeable, and well-educated (especially in tax matters), and their level of tax literacy must be continually raised to maintain it, current and applicable. There are some relevant pieces of literature to be reviewed in line with tax education and tax compliance and the approaches towards educating taxpayers.

Deterrence (such as audits, and punishments) and tax morale are two groups of factors that can aid with compliance and tax revenue that has received a lot of attention in tax compliance literature (e.g., peer effects, fiscal reciprocity) (Mascagni & Santoro, 2018). These writers came up with a third factor that is tax knowledge and education, that could

equally assist taxpayers in navigating complex tax systems. Where the originality of this present study came from with regards to tax education. Moreover, it is becoming more evident that tax knowledge is a major factor in determining tax compliance (Palil 2010; Richardson 2006). Aiko and Logan (2014) claimed that the majority of Africans think it is challenging to understand what taxes they are required to pay and how their government uses tax income using Afrobarometer data (Mascagni & Santoro, 2018). According to Alasfour *et al.* (2016) , attitudes toward tax compliance and tax morale are negatively connected with not understanding how taxes are used. Nevertheless, the only thorough analysis of US tax knowledge to date reveals that sharing information has little impact on the amount of reported income (Chetty & Saez, 2013). As a result, compliance and tax morale are uncertainly affected by increasing tax knowledge (Mascagni & Santoro, 2018). Although there is no concrete evidence, a related study has recently demonstrated that, depending on individual circumstances and the institutional framework, education can positively or negatively affect tax morale (Rodriguez-Justicia & Theilen, 2018; Mascagni & Santoro, 2018).

A study by Berhanes (2011) on the influence of tax education on tax compliance attitude in Addis Ababa focused on second-year undergraduate accounting students from St. Mary University College to undertake an experiment to examine the impact of tax education on tax compliance attitude and the exploration of the relationship between tax education and tax knowledge, as well as the level of tax knowledge of taxpayers. They randomly sampled 35 experimental undergraduate students and 150 actual taxpayers. And used only descriptive statistics for their analysis. The results of their study indicated that, before the tax course was offered, most of the experiment participants were unable to precisely

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identify taxable and non-taxable types of income, unaware of offenses and their penalties and compounding, or unwilling to fulfil these obligations as taxpayers. On the other hand, the survey's findings show that while taxpayers are well-versed in their general duties and sources of income, they are less familiar with the bulk of fines and their associated penalties. These findings though only analyzed descriptively, call for the necessity of researchers and tax authorities to put down innovative strategies and approaches towards the content and nature of tax education among taxpayers.

In line with the findings of Berhanes (2011), Mascagni and Santoro (2018) in their search; What is the Role of Taxpayer Education in Africa? Aimed at exploring the initiatives that African revenue authorities have undertaken in the area of tax education, including both traditional training and more innovative approaches. Qualitatively, they sampled seven African countries and systematically reviewed their traditional training and innovative approaches employed in enhancing tax compliance. The search concluded that Rigorous evaluation must be done by revenue authorities to shed light on which initiatives have a significant impact, and develop strategies for improving existing initiatives to enhance their effectiveness. Again, about the nature and content of existing initiatives, causing a positive impact on the attitudes of taxpayers, they concluded that even programs with entirely technical content could help individuals' opinions of the government by displaying a welcoming and customer-focused side of government that they might not typically encounter. Yet, a more overt focus on reciprocity, transparency, and accountability is more likely to benefit state-building and institutional confidence, creating a strong and long-lasting foundation for tax revenue mobilization.

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Again, Oduro *et al.* (2017) on the research title, Determinants of tax evasion in the developing economies: A structural equation model approach of the case of Ghana aimed at examining the factors determining whether a taxpayer would evade tax. They also sought to explore the mediating role of tax education in the relationship between traditional, institutional, and sociocultural factors and tax evasion. Using structural equation modelling with bootstrapping analysis, they found the tax education mediating variables showing that, increasing taxpayer education will lessen the negative effects of traditional and institutional factors and, as a result, lower tax evasion. For instance, it demonstrates that tax education is crucial in mediating the relationship between tax rates, the penalty for non-compliance with tax laws, and the likelihood of an audit, followed by tax evasion. Traditional characteristics and tax evasion have a positive direct association, but their relationship is moderated by education about the importance of paying taxes.

In contrast, With the aim of understanding how the role of tax education through the tax volunteer community is to help someone become more tax compliant, even amid the COVID-19 pandemic, especially in the 2020–2021 range, Dwianika *et al.* (2022) added up in their study on Small Business Tax Compliance During Covid 19 Pandemic: Tax Education Challenge in Urban Community. Qualitatively, through the execution of observations and interviews with taxpayers who have been assisted by tax volunteers, results of the findings showed that, while tax socialization such as tax seminars does not affect taxpayer compliance, there is a strong suspicion that the level of taxpayer compliance is influenced by tax incentives and online-based tax information systems submitted by tax volunteers. The major resource for tax policymakers to continue enhancing public tax compliance is the aspect of simplicity of payment and tax reporting.

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A quantitative study conducted by Trawule (2017) in line with investigating the relationship between tax education and tax compliance among the self-employed in the Cape Coast metropolis. The study's main findings showed that tax education has an impact on self-employed people's tax compliance, but the exact nature of the relationship relies on the subject matter of tax education and the desired level of compliance. He added that the division of tax compliance into committed, capitulated, and inventive tax compliance has a considerable impact on overall tax compliance. This also confirms Berhanes (2011) and Mascagni and Santoro (2018) findings.

Additionally, Ayalew (2014) in his findings indicated that, most taxpayers with insufficient knowledge of the tax laws and regulations, might fail to cooperate with the tax system and the tax auditors instead of educating taxpayers, penalize them, leading to the reluctance of some honest taxpayers in terms of filing and reporting. While others deliberately fail to support the tax auditors with the required information during the audit. This then leads to the call of the third hypothesis:

H3: Tax Education mediates the relationship between tax audit and tax compliance.

2.3.4 The Role of Fear-appealing messages

A study by Alemu (2020) on the impact of tax audit on tax compliance with reference to Category "A" Taxpayers: A Case Study in Hawassa City Administration, South Nations, Nationalities and Peoples' Regional State of Ethiopia, aimed at providing relevant information to policy-makers and implementers in the area to help them design an appropriate tax system that can increase government revenue and assure economic stability. It was a mixed research design with a sample of 50 tax auditors with results

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analyzed using both correlation and regression analysis. The study found that fines and penalties had a negative effect on tax compliance.

Penalties and fines had a favorable effect on the degree of tax compliance, whereas anticipated opportunities for tax evasion had a negative effect (Dulleck *et al.*, 2016). The study provides some preliminary evidence that enforcing penalties and fines, as well as educating investors in the real estate industry about taxes, may improve tax compliance. On the other hand, high compliance costs and opportunities for tax evasion will discourage investors in the real estate industry from adhering to tax laws (Osebe, 2013). The study advised that the cost of tax compliance should be set in a way that discourages people from evading taxes. In order to deter tax evasion, it was also advised that penalties and fines should be strictly enforced (Osebe, 2013).

This study seeks to respond to the call of Trawule *et al.* (2022) to analyze if the strict enforcement of some fear-appealing messages such as fines, penalties, imprisonment among others will enhance the future compliance of corporate tax payers by either strengthening or weakening the relationship that exist between tax audit and tax compliance. Therefore, the call for the fourth hypothesis stated;

H4: Fear-appealing messages significantly moderates the relationship between tax audit and tax compliance.

2.4 Conceptual Review

2.4.1 The Ghanaian Tax system

This section addresses Ghana's tax administration system and how it pertains to corporate entities. It also provides background information on Ghana's tax administration system and the different taxes that make up its fiscal system.

Our colonial masters, who had complete power and control over Ghana, instituted taxation. By enacting of the Income Tax Ordinance No.27 of 1943, British Rule instituted income taxation in September 1943. The first income tax was modelled after the Colonial Income Tax Law, which was a simplified version of the United Kingdom Tax Act as it was in existence around 1920. Before taxes took this form, colonial masters involved in empire-building would collect some sort of tax (Essel & Pobbi, 2015). In 1850, customs duty was introduced as the first form of taxation (Asante & Marfo-Yiadom, 2010) and was managed by a chief collector based at Cape Coast Castle and assessed at a rate of 0.5% ad valorem on imported goods (Asante & Marfo-Yiadom, 2010; Wahabu, 2017).

The Internal Revenue Service (IRS), VAT Service (VATS), and Customs, Excise and Preventive Service (CEPS), which separately administered direct taxes, indirect taxes, and import duties, are now combined into one organization called the Ghana Revenue Authority (GRA), which is responsible for managing taxes in Ghana. Separate revenue agency operations were, however, ended by the Ghana Revenue Authority Act 2009 (Act 791), a long overdue reform required to improve and modernize Ghana's tax and customs administration. The Internal Revenue Service (IRS) and the Value Added Tax Service (VATS) have combined under the new organizational arrangements to create the

Domestic Tax Revenue Division (DTRD) while the Customs Excise and Preventive Service (CEPS), which was once the Customs Division and was led by a commissioner, has become the Customs Division. The former separate agencies financial, administrative, and research services were combined to form the Support Services Division, which now provides the current demand for managerial services, freeing up the other two divisions from having to focus on non-core tasks and allowing them to concentrate on assessment and collection. A Commissioner serves as the head of this third tier as well.

The Income Tax Law has undergone numerous alterations and adjustments over the years, including the Income Tax (amendment) Act 1952. The Income Tax Ordinance's initial consolidated edition was released in March 1953. (Iddrisu *et al.*, 2021). Before the second consolidated edition, known as the Income Tax Decree, 1966 (No. 78), was released in September 1966, the first consolidated version underwent a number of revisions (Abdallah, 2016). In December 1975, the third condensed edition of Income Tax Decree 1975 SMCD5 was released. The Internal Revenue Act 2000 (Act 592) is the current law governing tax administration in Ghana. It is the fourth consolidated edition. This has also undergone a number of changes and alterations. Finally, in 2015, the self-assessment tax system was expected to commence according to Graphic Business (2014).

2.4.2 Taxation

A tax is a required payment to the government that is imposed in the interest of everyone in order to cover the costs of performing public activities or for regulatory purposes without taking into account any specific advantages that the payer may get (Alemu, 2020). Taxation is the imposition of mandatory payments by public authorities with the

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tax authority to cover the expense of their operations without providing the taxpayer with any direct benefits (Abdallah, 2016). Similar to this, (Mukasa, 2011) described taxation as the process by which the government enacts tax rules and regulations so as to profit from their application. In general, it can also be described as a required payment that the government collects from citizens and corporations in order to fund public expenditures without offering any immediate or direct services in exchange (Essel & Pobbi, 2015). Ghana, a developing nation, is hardly an exception in light of this.

2.4.2.1 Classification of Taxes

Taxes are broadly divided into two; direct and indirect.

Direct Taxes

According to Essel and Pobbi, 2015, direct taxes are a kind of taxes, imposed directly on taxpayers and paid directly to the government. Income tax administration as a direct tax was introduced into Ghana in 1943 when an Income Tax Department was established by the Colonial Government in the then Gold Coast Civil Service and placed under the Ministry of Finance with the responsibility to levy taxes on incomes. After some time, the Central Revenue Department in 1963 was designated. It was still attached to the Ministry of Finance and additional responsibility was given to collect other taxes such as entertainment and betting taxes. The Central Revenue Department had its responsibilities further expanded with the passage of time to include Capital Gains Tax which had been repealed but reintroduced together with Gift Tax in 1975, followed by the Hotels and Restaurant Tax in 1976.

In 1986, as part of the Economic Reform and Structural Adjustment Programme of the government, the Department was transformed into a semi-autonomous Service – the Internal Revenue Service (IRS) with the promulgation of PNDC – Law 143 – and placed under a nine–member Board of Directors. At the inception of a VAT service (VATS) in 1998, the authority for the collection of Hotels and Restaurants Tax together with taxes on other services was transferred from IRS to VATS. Other direct taxes apart from the above-mentioned include stamp duty, petroleum tax, Casino Revenue Tax, Internal Revenue (Registration of Business fees) Airport Tax, Gambling Machines Tax, the National Reconstruction Levy and National Fiscal Stabilization Levy (Adeyiga, 2013). Currently, direct taxes are charged on incomes, profits, and other gains and are either deducted at the source or paid directly to the tax authorities. With these taxes, the impact falls directly on the same person and cannot be passed on to others. According to Ghana Revenue Authority (GRA), direct taxes in Ghana are further classified as follows:

Pay as You Earn is a form of tax imposed on the income of workers (Abdallah, 2016). It is mostly a progressive type of tax where higher-income earners pay more tax than lower-income earners. Furthermore, corporate tax is also a type of direct tax where the tax is imposed on the profits of companies (Gadzo *et al.*, 2019). With this, the tax rate charged differs from one industry to another, and also depends on the location of the company. In addition, capital gains tax is a tax levied on the increase in the value of a chargeable asset between the time of purchase and its sale (Abdallah, 2016). It is however levied on a gain made on the sale of the chargeable asset after deducting an exempt amount of GH¢ 50.00

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Indirect Taxes

These are usually referred to as taxes on spending. They are charged when a tax payer buys an item and are paid to the vendors as part of their purchase price. Indirect taxes are taxes imposed on expenditures incurred on goods and services, and are paid only when such goods and services are bought or consumed (Attobrah, 2020). Indirect taxes are paid by individuals and organizations upon consumption of goods or services which are liable to tax. Indirect taxes are collected by the Customs, Excise and Preventive Service (CEPS) and Value Added tax Service (VAT) division of Ghana Revenue Authority (GRA). The main forms of indirect taxes are: Value Added Tax, Import duty and Export duty.

Value Added Tax is a consumption tax imposed on the expenditure incurred in buying goods or services (Attobrah, 2020). It is levied at each stage in the production and distribution chain. The taxes are usually collected on behalf of the VAT Service by registered businesses and are paid same to the VAT Service. It is a tax paid by the final consumer since the registered business is permitted to deduct any input VAT paid on taxable purchase from the Output VAT and pay the difference to VAT Service. It must be noted that some goods or services are exempted and others zero rated. For instance, agricultural products and inputs are exempted whiles goods manufactured for export is zero rated.

Furthermore, import duty is a tax imposed on all imports or goods brought into the country unless it is exempted by any legislation (Abdallah, 2016). The amount of tax to be paid depends on the value or volume of the items imported. Finally, Export duty is a tax imposed on goods leaving one country for another country. Some goods exported are exempted from this type of indirect tax.

2.4.3 Tax Audits

A tax audit looks at whether a taxpayer has accurately calculated and disclosed their tax burden as well as met any other duties (OECD, 2006). The definition of a tax audit, on the other hand, is an action or set of actions taken by tax auditors to ascertain a taxpayer's correct tax liabilities for a specific accounting or tax period (Ayalew, 2014). This is done by inspecting the organization's products and financial records of the taxpayer to determine whether tax laws have been complied with and to confirm the accuracy of tax returns and financial statements (Markos, 2010). Since greater audit rates are believed to improve tax compliance, tax audits are important elements of the self-assessment system regime's voluntary compliance mechanism (Bérgolo *et al.*, 2017). Tax audits have a distinct deterrent effect on audited taxpayers, but audits also generally inhibit taxpayers that aren't actually under audit (Isa & Pope, 2010).

2.4.4 Tax Audit Effectiveness

The effectiveness of a tax audit office, which is arguably determined by the interaction of five criteria, includes the frequency of tax audit; the use of information and communication technologies (ICTs); corporate taxpayer attitudes; organizational independence; and post-tax audit behaviour. As often as the tax authorities take steps to implement audits consistently, it is believed to have an enormous impact on the compliance level of taxpayers. This then helps the tax auditor to keep track of the associated audit risks level of various corporate entities and thereby, introducing the use of Information technologies plays a significant role of tracking easily under-reported financial statements. This may seem to go a long run to unravel unpaid taxes and the necessary penalties and sanctions that need to be adhered to. In the course of achieving an

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effective tax audit, the attitude, reactions and actions displayed by taxpayers plays a major role. Their willingness to accept and appreciate corrections and corporate with tax auditors all come together in achieving the expected results from a tax audit. Again when an organization has the ability to remain independent (that is not hindering both internal auditors and statutory auditors in the performance of their work), it leads to making the work of the tax auditor less burdensome and hopefully reduce all forms of threats and intimidation, translating into effective tax audit. After the incorporation of the first four factors, the behavior of the auditor is highly recommended to be observed as a reflection of the entire scale of measurement of tax audit effectiveness. The change in behaviour (i.e. either increasing or decreasing taxes filed or remaining constant in behavior before and after tax audit.

2.4.5 Types of Tax Audit

Comprehensive audit

A comprehensive audit entails a thorough investigation of all data necessary to determine a taxpayer's tax liability for a specific time period. According to Ebrill (2011), cited by Tefera (2021), this audit may include all tax liabilities throughout a number of tax periods, or it may be extended for several years up to the limit specified by law. A comprehensive audit covers all bases and involves a close study of all data necessary to determine a taxpayer's tax liability for all tax kinds for a specific time period.

Issue-based Audit

Issue-based audit focus exclusively on a specific area of potential non-compliance that can be identified through an analysis of a taxpayer's return. This is the examination of just one tax type such as examining only VAT or only Corporate Income Tax (CIT) or only

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Withholding taxes, among others. Issue-based audit also known as the single-issue audits are characterized by their limited focus, allowing for a more efficient execution and enabling the examination of a substantial number of taxpayers engaged in comparable schemes aimed at concealing non-compliance (OECD, 2006).

Invoice Invigilation

Invoice invigilation is a tax audit strategy perused by tax authorities to aid in examining Value Added Taxes (VAT) invoices and determine if tax payers have correctly documented and filed their tax obligations accurately and appropriately. In Ghana for example, the GRA introduced this exercise in September 2022 among VAT registered businesses which ensured that businesses were made to pay the right amount of taxes to the state. The implementation of this exercise has been widely recognized for its significant contribution to the state's income mobilization (Sabutey, 2023).

Refund Audit

A tax refund audit, alternatively referred to as a refund examination, entails a comprehensive evaluation conducted by a tax authority, such as the Internal Revenue Service (IRS) in the United States, to verify the accuracy of a taxpayer's submitted tax return and ascertain the legitimacy of the claimed refund (Sinaga & Hidayat, 2022). Tax authorities perform audits in order to mitigate the occurrence of fraudulent claims and inadvertent errors, which have the potential to lead to taxpayers collecting refunds that they are not legitimately entitled to. Throughout a tax refund audit, it is expected for the tax authority to solicit documentation and supplementary information in order to substantiate the items declared on the taxpayer's return. This may encompass several forms of documentation such as income statements, expense receipts, and additional

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supporting documents that serve to validate the deductions, credits, or exemptions declared on the tax return. The audit can be carried out using several methods, including mail, in-person interviews, or electronic means, such as an online portal.

Field Audit

This audit has a limited scope and may be restricted to particular issues in a tax return or to a single tax type. Grand colas (2005) asserts that it concentrates on a certain tax type and only covers one or two reporting seasons. Examining significant possible non-compliance risk areas is the goal here. Because it uses comparatively fewer resources than comprehensive audits and enables greater coverage of the taxpayer population, this sort of audit is advised. Typically, a specific tax type, time period, or item was the focus of the audit. If a field issue audit elevates the case into a comprehensive audit, the team coordinator's approval must be obtained, and the comprehensive audit processes must be followed.
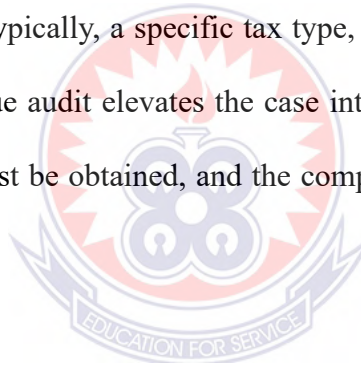
Desk Audit

Desk audits are used as an initial review of declarations to analyze correctness, completeness, ratios, and cross-check data to see if a more thorough audit or investigation is necessary. When the auditor is certain that all relevant information can be determined through in-office examination, it entails basic inspections carried out at the tax office. According to Makonnen's citation of Ebrill (2011), information technology (IT) systems ought to offer robust support for these verifications (2017).

Mail Audit

This is a type of audit where a revenue authority sends a letter to taxpayers and giving explanations why their tax return has been selected for examination and identifying the items under review. Here if the organization is able to feed the tax authorities on the information needed, the audit ends there. But if tax authorities are not satisfied, then a desk audit will be undertaken.

2.4.6 Taxpayer's rights and responsibilities

Tefera (2021), citing Elias Ayaliew (2014) and Laekemariam Abebaw (2020), official declarations of taxpayers' rights and obligations in auditing is to help taxpayers understand their rights and obligations at each stage of the administration. As the collection of the state and local taxes are controlled by the revenue office as their major function. The efficiency and fairness of the state and local tax systems depend on taxpayers being informed of their rights. The Ghanaian taxpayer has many rights and obligations to fulfil. Among these are; The right to information, right to have enquiries properly addressed, right to courtesy and consideration, right to fairness and transparency, right to independent appeal and review, right to claim refund of ascertained taxes overpaid, right to claim all personal relieves upon meeting all set conditions, and finally right to privacy and confidentiality. In as much as these rights are not overlapped, the Ghanaian taxpayer has the obligation of filling returns on time, paying taxes on stipulated dates (i.e. the 15th of every month). The duties of maintaining proper business records, the duty of making available business records for examination and auditing and finally, informing the Ghana Revenue Authority of any business changes. Ghana Revenue Authority (GRA, n.d., para.1).

2.4.7 Tax Education

Any program, whether formal or informal, put on by the tax authorities to help taxpayers file their returns accurately and raise awareness of their duties regarding the tax system is considered tax education (OECD, 2013). To raise the degree of tax compliance, having a solid understanding of taxes is crucial (Palil, 2010). Thus, having qualified and skilled taxpayers is crucial. The aforementioned facts point to tax education as one of the most successful techniques for encouraging taxpayers to comply more. In other words, if taxpayers are aware of the fundamentals of taxation, they will be more likely to comply (Ayalew, 2014). The Self-Assessment System in Ghana was introduced in January 2015 and has come to play an important role for taxation learning process to taxpayers. To promote the principles of voluntary compliance, activities such as public relation, tax education, tax consultation, guidance and examinations (Rani, 2005) and tax knowledge will also reduce the potential of evasion.

Whatever its form, tax education is crucial and affects how a country raises money. Tax compliance, tax accountability, and overall revenue mobilization are all related in a similar way to tax education. In light of this, Trawule (2017)requested that the Ghana Revenue Authority (GRA) ensure strong and ongoing government-funded assistance to assist informal area administrators in becoming tax compliant. He realized that by raising the necessary municipal revenues, tax-obligatory and self-assessment taxpayers would contribute to the growth of the economy. He also argued that GRA would need to make headway through tax education in order to bring many prospective citizens in the informal sector, which is thought to account for roughly 70% of the economy, into the tax net (Mbilla *et al*., 2020).

2.4.8 Tax Compliance

The degree to which taxpayers abide by the tax structure is typically used to define tax compliance in its most basic form. The notion of compliance, however, can be thought of as nearly a range of definitions, like many other similar ideas. This includes everything from a focused law enforcement strategy to broader economic definitions and even more thorough versions relating to taxpayer actions to comply with societal goals that are reflected in tax policy.

One idea is that the degree of non-compliance may be gauged in terms of the "tax gap". This is the gap between the amount of money that was actually made and what would have been made if they were absolutely compliant. Tax evasion and avoidance are two ways to view tax compliance. The two acts are typically separated based on their legality, with avoidance denoting lawful actions taken to lessen tax obligations and evasion denoting actions taken illegally. While some critics solely regard the issue of non-compliance as one of evasion, this does not seem to be a complete description of the issue. Tax evasion is undoubtedly a type of non-compliance. But, it's impossible to call it "compliance" if taxpayers use unreasonable measures to lower their obligation. Such measures could include making fictitious transactions to evade taxes, looking for every conceivable valid deduction, employing appeals and delaying strategies whenever doing so might slow the flow of tax payments, and so on. There are two sorts of tax non-compliance: intentional and unintentional. Understating the taxpayer's tax liability constitutes an infraction against the government and is punishable as intentional non-compliance.

It may result from attempting to gain from tax avoidance, taxpayers' individual attitudes toward compliance, contextual variables, the complexity of the tax code, a lack of contentment with the quality of government service, and other issues. One example of noncompliance is tax evasion. Sutherland (1983), described "white-collar crime" as "a crime perpetrated by a person of respectability and high social position in the course of his work," and social scientists have traditionally seen tax evasion as an example of this type of crime. Dealing with the revenue authority in every country is a severe task. It is further stated that unintentional understatement or overstatement of tax burden may occur for a variety of reasons, including ignorance and a lack of necessary diligence in the upkeep of the book of accounts and the preparation of returns.

2.5 Fear-appealing messages

Fear-appealing messages is a persuasive communication that aims to make taxpayers feel scared or anxious so that they will obey the rules and laws governing taxes. These correspondences frequently emphasize the potential drawbacks of non-compliance, such as fines, audits, legal repercussions, reputational harm, or even imprisonment.

2.6 Corporate Entities

A business unit with legal rights and obligations that are distinct from those of its owners is referred to as a legal entity. A legal entity can thus sign contracts, buy and own property, open bank accounts, bring legal action and be sued, recruit and fire personnel, and other activities. A legal entity must also abide by all current laws, including those pertaining to registration, licensing, tax filing, regulatory compliance, and other applicable laws (Câmara, 2022)

2.6.1 Taxation of Corporate Entities

According to the Ghanaian income Act, 2015 Act (896), subsection 58, clause 1-5:

1. A company is liable to tax separately from its shareholders.

2. An amount derived and expenditure incurred jointly or severally by managers or shareholders for the purpose of a company is deemed to be derived or incurred by that company even when that company lacks the legal capacity to derive that amount or incur that expenditure.

3. An asset owned and a liability owed jointly or severally by the managers or shareholders for the purpose of a company is deemed to be owned or owed by that company even when that company lacks the legal capacity to own that asses or owe the liability

4. Subject to the Act, all activities of a company are treated as conducted in the course of a single business of that company.

5. Subject to the Act, a person shall give effect to an arrangement between a company and a manager or shareholder of that company.

2.7 The Conceptual Framework

The study's conceptual framework is based on a thorough evaluation of theoretical and empirical literature, which explores the interrelationships among variables within the context of the researched situation. This study examines the relationship between tax audit, which serves as the independent variable, and tax compliance, which is considered the dependent variable. The implementation of tax education functions as an intermediary variable, whereas fear-appealing messages moderates the association between tax audits and tax compliance.

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This study contributes to the existing body of knowledge by examining the significance of tax education and fear-appealing messaging in the setting of tax audit and tax compliance, an area that has received limited empirical attention. Figure 1 presents the conceptual framework of the study indicating all hypotheses
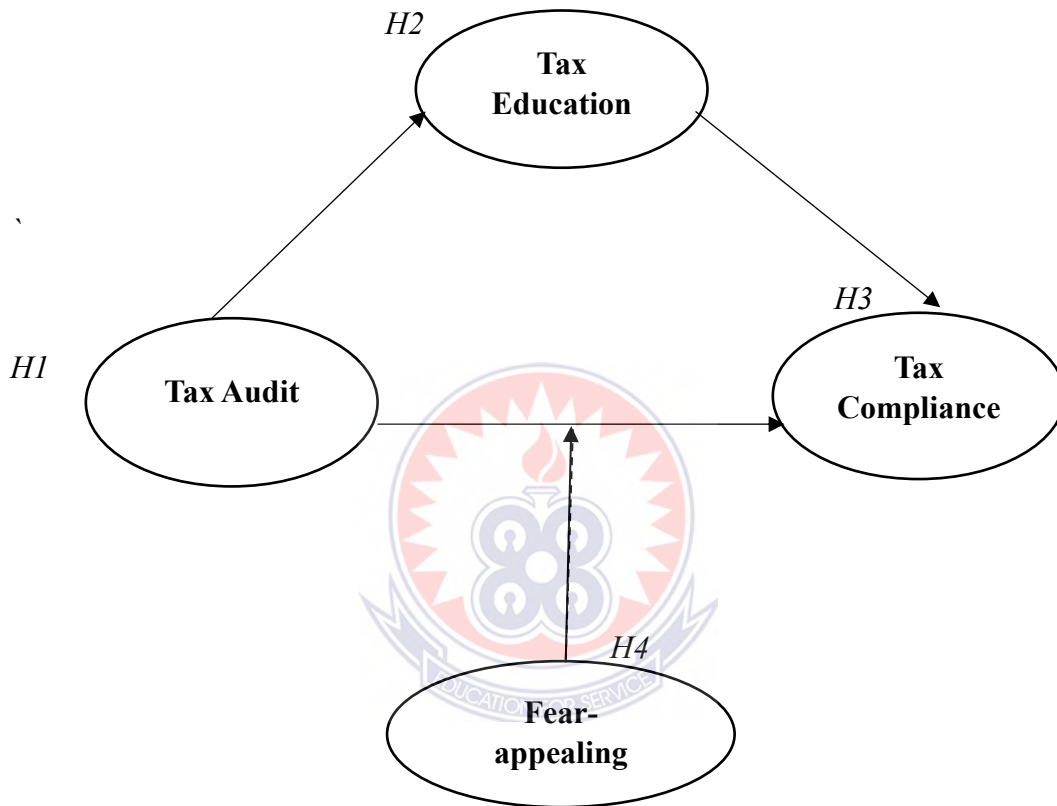
Figure 1: The Conceptual Framework

2.8 Chapter Summary

This chapter gave a general background to the study and the statement of the problem. Tax audits are one of the major deterrence measures in encouraging tax compliance. However, some literature contradicts the point since most governments, particular from developing countries, are faced with the problem of low tax compliance even in the course of implementing strategies into solving them. Tax compliance issues are usually dealt with among individual tax payers but this study seeks to focus on

corporate entities. Tax education is seen to be one of the most important factors that can affect the tax compliance behaviour of these corporate entities. This study is therefore to find out if there is any relationship between tax audit effectiveness and tax compliance among corporate entities in the Greater Accra region and also look out for the mediating effect of tax education on tax compliance. Some hypotheses have been formulated to be tested. It is expected that this study will be beneficial to academia or knowledge, policy formulators and the general tax paying public.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Overview

This study examines the role of tax education and fear-appealing messages (FAM) on the relationship between tax audit and tax compliance**.** This chapter outlines the methodology employed in conducting the research. The chapter is structured as follows: it commences with an overview of the research philosophy, followed by the research approach, and then the research design. It proceeds to detail the study's geographical area, the target population, the sample size, sampling procedures, and the instruments used for data collection. The chapter goes on to discuss the validation and reliability of constructs, testing conducted during pilot studies, data collection procedures, and the analytical method employed. Ethical considerations are also addressed, and the chapter concludes with a summary.
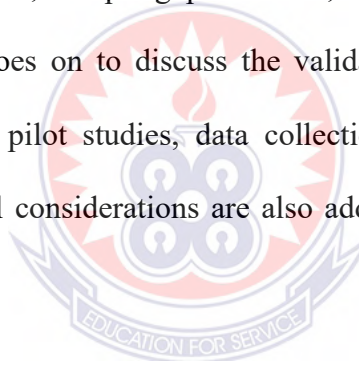
3.2 Research Philosophy

The post-positivist paradigm underpinned this study which demonstrates that, the knowledge gained is unbiased, independent of temporal impacts, and context-free. Research questions and hypotheses are developed by researchers, who then test them empirically, sometimes under strictly controlled conditions (Dobele *et al.*, 2006). Post-positivist scholars prioritize the establishment and pursuit of valid and reliable evidence pertaining to the existence of phenomena, as opposed to engaging in generalizations and embraces quantitative techniques like surveys and experiments (Sobh & Perry, 2006). This study adopted the post-positivist paradigm since it is the most compatible or

consistent for this research. The adoption of this paradigm made it possible to establish research objectives and questions. The researcher then used questionnaires to gather significant amounts of data from respondents in order to address the research questions. Additionally, as it relates to the other alternative paradigms, the study does not aim at generalizing propositions to conceptual frameworks nor explain a phenomenon's more profound significance.

3.3 Research Approach

In correspondence to the philosophical perspective of this research, the study adopted a quantitative approach. The Quantitative approach was employed because, each latent variable of this study is capable to be measured quantitatively which calls for the use of Likert scale items that helps to transform responses into quantitative data. Considering the study's objectives, the approach best fits since the researcher examined relationships and the impact that exist between the variables of the study. Closed-ended questionnaires were designed to collect accurate numerical data essential to address the study's objectives. These relationships would be well understood if the study adopts the quantitative approach other than the other approaches. According to Antwi and Hamza (2015), the results of quantitative research design are independent of the researchers since they involve meticulous processes and procedures that limit the impact of the researcher, hence defining the true findings. Quantitative approaches give room for flexible handling of data, in terms of comparative analyses, statistical analyses, and repeatability of data collection in order to affirm reliability.

3.4 Research Design

In line with the post positivist paradigm and the quantitative approach employed, the research utilized a correlational research design, aiming to assess the degree of association between two or more variables through the analysis of statistical data (Goginsky & Collins, 1996). As per Miller and Bertoline (1991) perspective, correlational research enables the exploration and interpretation of connections between various pieces of information. In pursuit of the study's goal, a survey was employed as a non-experimental investigative approach involving respondents. This method identifies trends and patterns in data but refrains from delving deeply into analyzing the underlying causes of these observed patterns. Instead, it focuses solely on studying and recognizing data, relationships, and variable distributions as they naturally occur, without any manipulation

3.5 Study Area

The Greater Accra Region is one of the sixteen administrative regions in Ghana, though the smallest in terms of area but is recognized as the regional capital of Ghana. It occupies a total land surface of 3,245 square kilometers and 1.4 per cent of the total land area of Ghana. With a population of 5,455,692 in 2021 or 17.7% of Ghana's total population, it is the most populous area. The Eastern Region, the Volta Region, the Gulf of Guinea, and the Central Region all border the Greater Accra Region to the north, east, south, and west, respectively. Greater Accra region has been selected because of its major representation as an avenue that contributes close to 31% of the annual tax revenues collected specified in the Quarterly Revenue Bulleting of the Ghana Revenue Authority (GRA, 2021).

3.6 Study Population

The study's population covers all companies in the Greater Accra region that have undergone tax audit at least once within the last thirteen years. However, the companies under focus were those in the Manufacturing, trading and service industries due to their line of transactions and periodic handling of their purchases and cash and most of these companies being withholding agents on behalf of GRA. The studys' population is limited to companies found in the five major Metropolis and Municipalities in the Greater Accra. These are the Accra Metropolis, Tema Metropolis, Ga Municipalities, Ablekuma Municipalities and the Weija-Gbawe Municipalities. These Metropolis and municipalities were selected because, they have been indicated as the places frequent tax audits are performed by the GRA in the Greater Accra region. As of March 2023, the total population of audited corporate entities in the Greater Accra region was 31,498 (GRA, 2023). However, in order to facilitate the study and account for time constraints, the researcher employed cluster random sampling to choose the Weija-Gbawe Municipality. The Weija-Gbawe Municipality's population served as the basis for selecting a sample of enterprises that underwent tax audits, resulting in a total of 766 companies representing the target population. The participants in this study consisted of individuals holding managerial positions inside the respective organizations, specifically accountants, internal auditors, or their designated representatives.

3.6.1 Eligibility Criteria

The inclusion criteria for selecting respondents were:

i. Companies must have experienced Tax audit by the GRA for the last thirteen years at least once.

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ii.   Companies must be in existence for at least the past three years.

iii.   Respondents must either be an accountant, an internal auditor a general manager or their representatives who have experienced tax audits.

3.7 Sample Size and Procedure

In determining the sample size, Taherdoost (2017) elaborated on many methods for determining the sample size for categorical data, using a variety of formulas. Specifically, the formular by Bartlett *et al.* (2002), stated as; $n^* = P(100 - P) Z^2 / E^2$ **where**,

n* is the estimated sample size, P is the percentage occurrence of a state or condition, E is the percentage maximum error required and Z is the value corresponding to the level of confidence required

The margin of error for this study was capped at 5% whiles the confidence level also remained at 95% or 1.96 (Bartlett *et al.*, 2002). Thereafter, n* will be substituted into the formula:

$n= n^*/1+(n^*-1)/ N$ where, n is the required sample size, n* is the sample size estimated and N is the population size.

Coupled by a sample determination table by Gill *et al.* (2010) as cited in (Taherdoost, 2017), the researcher after using the formula and the sample determination table, arrived at 256 companies as respondents to the survey. The study adopted a non-probability sampling procedure where companies were purposively selected (purposive sampling) and respondents were accessible through convenience (convenience sampling).

The study used purposive sampling in reaching the companies since the researcher was not privy to the list of companies that have undergone tax audit from the Ghana Revenue Authority. Within each company, at least three possible respondents that could provide the needed data; accountants, internal auditors, and general managers. Selecting among them, the researcher used the convenience sampling non-probability technique. The hierarchy or organizational culture of some companies makes it very difficult to access some key stakeholders and made the researcher conveniently select respondents at the organizational level by contacting eligible respondents. The responses each time depended on the participants' availability, accessibility and eagerness. The researcher experienced reluctance among some potential participants leading to the adaptation of the convenience non-probability sampling technique.

3.8 Data Collection Instrument

The data for the study were collected using questionnaires as the data collection instrument. Close ended questionnaires were prioritized due to its suitability and quicker responses from respondents, serving as an effective tool to enhance the researcher's ability to quickly access and collect data from a wide sample within a limited time (Alam, 2021; Sam-Mensah, 2018).

Questionnaires are known to be less expensive as a data collection tool (Sam-Mensah, 2018). The study's questionnaire had 6 sections labelled: Section A which measured the socio-demographic characteristics that sought to address the type of industry that respondents found themselves in, the position or office held by them, gender, age range, academic qualification and years of working experience accumulated. Section B measured the general tax audit experiences that respondents had with the tax auditors or

the GRA. Section C measured respondents tax compliance behaviour whiles Section D addressed the personal experiences respondents had achieved regarding tax audit and assurance engagements. Section E highlighted questions that sought to project the need and forms of tax education given after tax audit. Finally, section F which sought to take feedback on the effect of fear-appealing messages or the threats of punishments after tax audit. The following are sample items of the questionnaires measured on a 7 point Likert-scale (Tarka, 2017).

3.8.1 Measurement of scale of variable

Tax Audit (TA)

Tax audit was measured using a modified 10-item on a seven-point Likert scale by Chalu and Mzee (2018) ranging from "1 =Strongly disagree" to "7 =Strongly agree". The Likert scale was chosen as a suitable measurement tool because the research focused on examining the viewpoints of tax auditors and taxpayers. It has a well-established history of use in studies related to tax compliance and the effectiveness of tax audits, as demonstrated by previous research (Engida & Baisa, 2014; George & Diavastis, 2015; Niemirowski & Wearing, 2003; Oladipupo & Obazee, 2016) The Cronbach Alpha coefficients run in between 0.646 to 0.830 (Chalu & Mzee, 2018). The researcher conducted a preliminary test of 15 eligible responses with a Cronbach Alpha of 0.771.

> Samples of the items were: "*During a visit by GRA officials to our company, they audit all tax types including VAT, withholding tax, PAYE, Corporate Income Tax, etc*"; "*Management willingly provides information and other details requested by the tax auditors in the course of tax audit engagements*"; "*Tax auditors are likely to track differences between the net profits submitted in tax documents and net profits supposed to be filed*".

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Tax Compliance (TC)

The tax compliance section of the questionnaire measured with a modified 17-item seven-point Likert scale by Olusegun (2021) from the Fischer's module for tax compliance. The Likert scale ranged from "1 =Strongly disagree" to "7 =Strongly agree". The choice of this scale was influenced by the fact that Fischer's model is widely recognized as one of the most practical and widely accepted conceptual frameworks for comprehending tax compliance behavior. The Cronbach Alpha from the literature was 0.797. The Cronbach Alpha revealed from the pilot testing was 0.728 which served as assurance of validity and reliability of the measurement scale.

Sample items were as follows:

> *"My company should be charged a penalty if the tax filed differs from the tax they are supposed to file."; "Companies with high profits should be made to pay a higher tax rate than companies with low profits."; "Preparing the corporate income tax return is difficult and ambiguous."; "To successfully render complete tax returns, my company requires the services of external consultants"; "The self-assessment system has increased fairness and made the entire tax process easy, accessible, and convenient."; "The amount of information available is simple and clearer enough to render self-assessment returns without the services of external consultants."*

Tax Education (TE)

The section under tax education had its questions measured by Alemu (2020). This is a 7-item with little modifications measured with a seven-point Likert scale ranging from "1 =Strongly disagree" to "7 =Strongly agree". The measurement scaled based on (Palil, 2010; Troutman, 1993). The pilot test's composite reliability was 0.767, which was good for the main study. Sample items were as follows:

> *"Entrance conferences are held to educate management on the expectation gap."; "The form of education relayed after tax audits best*

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handles/ reduces future tax evasion or avoidance practices and leads to voluntary compliance"; "I am aware of the company's right to object to a review of additional tax imposed after tax audit engagements."

Fear-appealing messages (FAM)

Fear-appealing messages (FAM) was the last scale measured. The questionnaire entailed 6-items measured on a seven-point Likert scale with slight modifications by (Alemu, 2020; Trawule *et al.*, 2022). The scale ranged from "1 =Strongly disagree" to "7 =Strongly agree". These scales were tested after a pilot test by the researcher. The value coefficient of the Cronbach alpha was 0.754 confirming the measurement scale's validity.

Sample items were as follows:

"The prospect of tough penalties and fines deters the entity from evading taxes in the future."; "The threat of the company facing legal charges due to discrepancies detected after tax audits plays a role in increasing future tax obligations and vice-versa"; "The fear of imprisonment, delayed salary payment, or losing my job for discrepancies tracked by the GRA makes me file and pay accurate returns"

All variable indicators were modified to fit the objectives of the study. The indicators are summarized in table 1.

Table 3.1: Measurements of the Constructs

Construct	Indicator	Source
Tax Audit	• Inspection of Invoices (TA1) • Audit of all tax types (TA2) • Audit attracting refunds (TA4) • Management's willingness to provide all information (TA6) • Tracking of differences in expenses (TA8) • Tracking of diff in net profit submitted (TA9)	Chalu and Mzee (2018)
Tax	• Company charged penalty for incorrect payment	

Compliance	of taxes (TC1)	
	• Pressing of criminal charges against company for deliberate failure of filing right taxes (TC2)	
	• EOCO must deal with tax payers who bribe tax officials (TC3)	
	• Companies with high profit should pay higher tax rates (TC7)	
	• Company is easily traceable for tax compliance (TC 9)	
	• Companies must pay lesser taxes during economic crises (TC10)	
	• Available tax needed information enhances tax payment (TC13)	Olusegun (2021)
	• Companies pay taxes because others do (TC17)	
Tax Education	• Entrance Conferences (TE1)	
	• Education on tax laws takes effect after tax audit (TE2)	
	• Tax Education enhances future compliance (TE3)	Palil (2010),
	• Form of education influences future compliance (TE4)	Troutman
	• Tax audit awareness influences satisfactory returns (TE5)	(1993) and (Alemu, 2020)
	• Tax audit engagement serves as a platform for tax education (TE6)	
	• Awareness of company's right to object for review of additional taxes imposed (TE7)	
Fear-appealing messages	• Entities possessing an awareness of penalties and fines are compliant and vice-versa (FAM 2)	
	• Absence of penalties and fines leads to future non-compliance (FAM3)	
	• Threat of facing legal charges detected after tax audit increase future tax compliance (FAM4)	
	• Fear of imprisonment and other punishment as a result of discrepancies detected makes taxpayers file right taxes (FAM 6)	Alemu (2020); Trawule *et al.* (2022)

Source: Field Study, 2023

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3.9 Method for Data Analysis

The Partial Least Squares -Structural Equation Modeling (PLS-SEM) was used to assess the study's hypotheses. Due to its ability to measure abstract, complex and multifaceted latent variables and evaluate connections between several latent variables at once, SEM, a more effective analytical technique, has proven to be more robust than other analytical tools (Hair *et al.*, 2012). The SEM is a system of relationships that analyses multiple variables to be simultaneously rather than a dependent variable with a set of independent variables. SEM can estimate the direct and indirect effects of variables including mediation and moderation variables simultaneously unlike regression (Bollen, 1989), which only tests one at a time (Gefen *et al.*, 2000).

3.9.1 Mediation Analysis

The study examines the mediating role of tax education between tax audit and tax compliance. The mediation analysis was performed using the bootstrapping approach guided by (Zhao *et al.*, 2010), a selection over (Baron & Kenny, 1986) mediation analysis. The mediation analysis is appropriate for this study because, tax education represents the generative mechanism through which tax audit is able to influence tax compliance (Baron & Kenny, 1986). The preference of (Zhao *et al.*, 2010) mediation is due to (Baron & Kenny, 1986) claim of no full mediation if there isn't any direct effects between the independent and dependent variable. Baron and Kenny (1986) established that, such mediations can only be defined as partial. Unfortunately, this empirical underpinning has led to most many research concluding a partial mediation instead of a full mediation. The reconsideration by (Zhao *et al.*, 2010) confirmed that following establishments: "In a no recursive three-variable causal model, three patterns were

consistent with mediation and two with non-meditation" Where mediation effects are grouped as: Complementary mediation which involves establishing both mediated effect and direct effect between the independent and dependent variables in the same direction. Competitive mediation explained as both mediated effect and direct effect both exist and point in opposite directions. Indirect-only mediation which involves the existence of mediation but no direct effect. And the non-mediations treated as Direct-only non-meditation where Direct effect exists, but no indirect effect and No-effect non-mediation where neither direct effect nor indirect effect exists.

3.9.2 Moderation Analysis

This study explores the moderating role of FAM between tax audit and tax compliance. A moderator is a qualitative or quantitative variable that affects the direction and strength of the relationship between a predictor variable and a response variable (Baron & Kenny, 1986). Unlike the relationship between a mediator and a predictor, where the predictor comes before the mediator in a causal sense, moderators and predictors both exist at the same level when it comes to their role as causal variables. In other words, moderator variables consistently act as independent variables, whereas mediating events can switch between being effects and causes, depending on the specific focus of the analysis. FAM as a moderator is therefore appropriate for the study because, it is used as a third variable to test for the influence it has on the relationship between tax audit and tax compliance. This study aimed at establishing the role of FAM between the independent and dependent variables and to examine the extent of association between the variables and its direction, strength and level of significance.

3.10 Validity and Reliability

For a scale to be used with confidence, it must possess validity. Validity is the condition in which a data collection instrument measures what it purports to measure (Sürücü & Maslakci, 2020). For content validity, the use of expert's judgement has consistently been used and proven to be an acceptable widespread practice (Sam-Mensah, 2018). In this study, face and content validity were guaranteed with the help of professional judgements. Experts in the field were given access to the instrument so they could use their knowledge to assess the questions. In order to identify the item that loads well onto its associated construct, confirmatory factor analysis was also performed to assess the construct validity of the data collection instrument from the results presented in figure 2 in the next chapter. Validity tests for discriminant and convergent were performed from the results presented in Table 6.

Reliability is known to have been achieved when a measuring device provides consistent, unchanging results or data after repeated use in various settings and circumstances, reliability is known to have been achieved. Internal consistency is typically measured using the scale's Cronbach's alpha value to determine this (Hair *et al.*, 2006; Nandal *et al.,* 2021) According to Dikko (2016), Cronbach's alpha can be defined as an indicator of the interconnections between the distinctive objects used to measure the construct. A Cronbachs alpha value of 0.70 or higher is typically regarded as satisfactory. As opposed to Cronbach's alpha, which assumed that all indicators were equally reliable, Hair *et al.* (2011) advised that composite reliability is a better indicator of internal consistency because it is less dependent on the number of items than Cronbach's alpha. For the purposes of measuring internal consistency, both the Cronbach's alpha values obtained

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during the pre-testing and the composite reliability values determined by the confirmatory factor analysis were used as reported in Table 5.

3.11 Pilot Testing

Before beginning the main survey, the researcher conducted a pilot study with fifteen (15) respondents to determine the validity of the chosen and adjusted measuring scale as well as to ensure the rectification of questionnaire errors. While certain small errors found in the questionnaires were appropriately fixed before the main study, the respondents utilized in the pilot survey were not included in the main survey. All the variables employed in the study had Cronbach's alpha values over 0.70, which is the acceptable benchmark according to Considine *et al.* (2005), according to the reliability analysis of the scales assessed using Cronbach's alpha values. Table 2 gives a summary of the Cronbach alpha of the scales of measurement of study variables.

Table 3.2: Summary of Cronbach Alpha values of the scales of measurement

Item	Source	Previous studies	Pilot Testing	Actual Study
Tax Audit	Chalu and Mzee (2018)	0.830	0.771	0.897
Tax Compliance	Olusegun (2021)	0.797	0.728	0.927
Tax Education	Palil (2010), Troutman (1993) and (Alemu, 2020)	0.724	0.767	0.943
Fear-Appealing Messages	Alemu (2020); Trawule et al. (2022)	0.695	0.754	0.878

Source: Field Study, 2023

3.12 Data Collection Procedure

The researcher selected companies that have undergone tax audit in the Greater Accra region, and acquired an introduction letter from the Department of Accounting of the University of Education, Winneba Business School (UEWBS). The questionnaire used in the inquiry, which was supported by supervisor's assistance, was administered by providing introduction and clarification for chosen respondents concerning the motivations of the examiner. The researcher distributed questionnaires to eligible respondents of each company visited, and ensured that, questionnaires are streamlined as much as is reasonably possible to make each respondent understand the purpose of each question.

3.13 Ethical Consideration

The entire process of data collecting in this study, in particular, was ethically considered. Accountants, Internal Auditors, General managers or their representatives of companies (mainly trading, manufacturing and service) from the Greater Accra Region of Ghana were given the questionnaires in accordance with the required administrative procedures and protocol. To prevent unethical behavior, the surveys' numerous questions were examined. The participants in this study were asked to assent, and they were made fully aware of its aim. All responders received guarantees of anonymity, secrecy, and non-disclosure. Before and after participating, the respondents had the option to inquire further about the study. The respondents have the option of declining or accepting to participate.

3.14 Chapter Summary

This chapter discussed the entire approach toward the research. The post-positivist paradigm underpinned the focus of this research in line with the adaptation of the quantitative research approach that gives room for flexible handling of data, in terms of comparative analyses, statistical analyses, and repeatability of data collection to affirm reliability. The descriptive research design was adopted, and populations were discussed as companies that have experienced tax audit within the confinement of the Greater Accra region where respondents were limited to Accountants, Internal Auditors, General Managers or their representatives. Respondents' data were collected using close-ended questionnaires with validity and reliability of questionnaires duly checked after pilot testing and the assurance of ethical considerations. Statistical Package for Social Sciences (SPSS) version 20 was used for data coding to check for mistakes and omissions It was later subjected to the Smart PLS using Partial Least Squares- Structural Equation Modeling as the analytical tool.
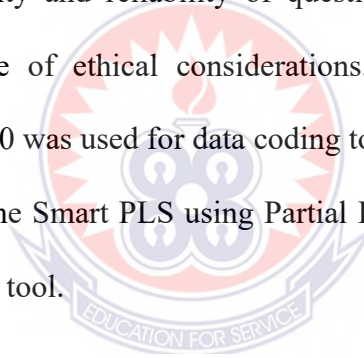
CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Overview

This chapter gives a presentation of the results obtained from the analysis of data and outlines the findings from the study concerning its objectives. The study is organized as follows: The results from the demographic characteristics of respondents, the preliminary analysis of SEM,

4.2 Demographic Characteristics of Respondents.

4.2.1 Response Rate

The researcher retrieved a total of 205 questionnaires out of 256 questionnaires representing an 80% response rate. The retrieved responses were deemed fit for the analysis of the study (Di Guardo *et al.*, 2020; Onoyase, 2010).

4.2.2 Summary of Demographic Characteristics of Respondents

In this section, the researcher provides an overview of the respondents' background and share descriptive statistics of the dataset. We employed both purposive and convenience sampling methods as our data collection method. Table 3 presents a detailed description of the demographic survey of respondents.

Table 4.1: Summary of Demographics Characteristics of Respondents

Variables	Frequency	Percentage (%)
Industry		
Commerce/ Trading	46	22.4
Service	134	65.4
Manufacturing	25	12.2
Position Held		
Accountant/ Finance Officer	110	53.7
Internal Auditor	52	25.4
General Manager	27	13.2
Any other	16	7.8
Gender		
Male	157	76.6
Female	48	23.4
Age		
25-30 years	62	30.2
31-39 years	95	46.3
40-49 years	36	17.6
Above 50 years	12	5.9
Academic Qualification		
HND/ Bachelor's Degree	107	52.2
Master's Degree	61	29.8
Doctorate's Degree (Ph.D.)	1	.5
Professional Certificate	36	17.6
Working Experience		
1-5 years	68	33.2
6-10 years	68	33.2
11-15 years	43	21.0

Above 15 years	26	12.7
No. of visits by GRA		
1-2 times	71	34.6
3-5 times	43	21.0
More than 5	91	44.4
Activities GRA performs		
Invoice Invigilation	65	31.7
Issue Based Audit	36	17.6
Comprehensive audit	77	37.6
Refund Audit	14	6.8
Any other	13	6.3

Source: Field Data (2023)

Industry Distribution

The demographic representation of the industry respondents disclosed that 46 respondents representing 22.4% of the entire sample retrieved, worked in the trading or commerce industry, 25 respondents representing 12.2 % worked in the manufacturing industry while an appreciable number of respondents (134) worked in the service industry being represented by 65.4%. This is an indication that many companies in the Greater Accra Region are service companies that provide services such as consultations, teaching, medical, hospitality services and many others. A minimal representation of them is involved in the manufacturing of raw materials and work in progress like cement, salt, plastics, and disinfectants among others. While an appreciable number of them engaged in the trading of groceries, lubricants, appliances, hardware, furniture among others.

Position or Office Held

The position held or office occupied by the respondents was a critical factor relevant to this study due to the level of technicalities involved when it comes to the issues of accounting, auditing and taxation. According to the responses retrieved, 110 respondents, representing 53.7% held the positions of either an accountant or a finance officer. Followed by 52 internal auditors and 27 General managers, representing 25.4% and 13.2% respectively. 7.8 % reflecting 16 respondents were neither internal auditors, accountants nor general managers. The latter opened up as their representatives or assistants who have been engaged in the entire process of tax auditing and were deemed fit as respondents. This distribution provides the confidence that the responses collected from these taxpayers is a representation of their various companies that gives a fair opinion of their engagements in the tax audit process as corporate taxpayers.

Gender and Age

Age is a contributing factor that leads to the employment of human resources together with Gender and other qualifying factors. Examining the age ranges of respondents became crucial for this analysis to help the researcher understand and determine the number of youths, young or old adults who are likely to experience these tax audits and their approach towards handling issues with the GRA. As well as the number of males and females involved with the tax audit and compliance process and possibly how these factors determine or impact compliance. Per the summary distribution table, the dominant age group was represented by the age bracket (30-39), followed by (25-29), then to (40-49 years) then finally those above 50 years. These were represented by 46.3% (95 respondents), 30.2% (62 respondents), 17.6% (36 respondents) and 5.9% (12

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respondents) respectively. These distributions and frequencies have it conclusive that, the majority of the corporate officers responsible for filing and reporting taxes were young adults, being complimented with those in their youthful days. These respondents are also considered mature and capable enough to render services in line with the filing and reporting of taxes. This is also an indication that, in the next ten to twenty years of corporate life, there will be enough resource personnel to train the upcoming ones to keep up with the tax agents or authority's expectations. Gender according to the distribution table showed a representation of 157 (76.6%) males and 48(23.4%) females. This is a reflection of the domination of males in the accounting, taxation and auditing field over females.

Academic Qualification and Working Experience

With regards to the academic qualification of respondents, these corporate officials have at least a Higher Diploma Degree or a Bachelor's Degree. The summary distribution in table 3 indicated that the majority of the respondents (52.2%) were HND or Bachelor's degree holders while 29.8% of the respondents held a Master's degree. Only a handful (17.6%) have had their professional certificates and just one Doctorate degree holder. Meanwhile, more than half of the sampled respondents (66.4%) have collectively gained working experience within their first ten years with the remaining 33.6% having a headway of more than 10 years' experience. This is convincing that most of these respondents have practiced the filling and reporting of taxes and have also been engaged with tax audits at least more than once.

Number of Visits by the GRA and the activities performed

According to the distribution table, 34.6% confirmed that they have been audited at least once or twice. While 43 of them representing 21.6% indicated that they have been audited between three to five times. A significant proportion of the participants (44.4%) indicated that they have undergone audits on more than five occasions. The observed distribution might be attributed to the proactive measures undertaken by the Greater Accra Region's Ghana Revenue Authority (GRA) to enhance corporate tax compliance. In all, over 80% of the replies indicated that the Ghana Revenue Authority (GRA) was frequently present to review and assess the taxes that were filed and reported. This suggests that there exist a few organizations that warrant the attention of tax authorities for the purpose of conducting tax audits.

Among the respondents, most of the corporate institutions (37.6%) experienced comprehensive audits where the tax auditors examined more than one tax type. For instance, Valued Added Tax (VAT), Corporate Income Tax (CIT, Withholding taxes, among others. Followed by 31.7% of the respondents who have only experienced invoice invigilation: a tax audit process of only examining invoices of the organization. Then 17.8% experienced issue-based audits that arose as a result of inconsistencies with only one tax type. This can either be CIT or VAT or Withholding taxes among others. Finally, a minute number of them experienced refund audits. This audit usually arises as a result of seeking a refund or tax credit from tax authorities.

4.3 Preliminary Analysis

Before employing Structural Equation Modelling (SEM) to evaluate the correlations, basic data analysis was carried out to make sure the data was normally distributed.

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Test of Normality

SEM analysis makes it crucial for the normality of the data to be verified to avoid instances of inflated numbers of model fit measurements. This is important because it demonstrates a commitment to ensuring the reliability and validity of the modeling process. It also helps researchers identify potential issues that may arise due to non-normality and take appropriate corrective measures, such as using robust estimation methods or transforming variables if necessary. Using skewness and kurtosis values, the normality of the data was determined. The absolute values of the variables' skewness and kurtosis must be between +1 and -1 for the data to be considered normally distributed (G. M. Y. Owusu et al., 2020). The results are summarized in Table 4.

Table 4.2: Summary of the test of normality

Variable	Skewness	Kurtosis
TC	-.408	-.746
TA	-.321	-.856
TE	-.596	-.901
FAM	.324	.371

Note: TC= Tax Compliance; TA= Tax Audit; TE= Tax Education and FAM= Fear-appealing messages.

Source: Field Data (2023)

The results displayed in Table 4 show that all of the latent constructs employed in the study had absolute skewness and kurtosis values that fell between -1 and +1, which is indicative of a normality.

4.3.1 Correlation Analysis Variables

The researcher carried out a correlation study to evaluate the appropriateness, strength, and direction of the link between the variables as well as to check the construct for multicollinearity. Table 5 shows a summary of the correlation analysis of the variables measured.

Table 4.3: Summary of Correlation Analysis of the Measured Variables

		Mean	Std. Deviation	1	2	3	4
1.	TC	3.8466	1.36704	-			
2.	TA	3.9337	1.40388	.861**	-		
3.	TE	4.5749	1.79130	.787**	.758**	-	
4.	FAM	4.4368	1.77974	.670**	.703**	.688**	-

Correlation is significant at the 0.05 level (1-tailed).

Note: TC= Tax Compliance; TA= Tax Audit; TE= Tax Education and FAM= Fear-appealing messages.

Source: Field Data (2023)

The correlation coefficient's findings revealed that the independent variable and the dependent variable exhibited a significant and positive correlation. The researcher looked at the correlation matrix among the predictors to evaluate the construct for multicollinearity, which is caused by a strong relationship between two or more predictor variables in a regression model (Crothers *et al.*, 2009; Henseler *et al.*, 2014). A correlation coefficient of 0.90 or above indicates that there is significant multicollinearity present. From the statistics, the correlation table showed a strong positive correlation

between the variables, Tax Audit, Tax Compliance, Tax Education and Fear-appealing messages. All correlations are statistically significant ($p < 0.001$), indicating a high degree of association between them. The results from Table 5 of this study showed that there was no collinearity and that the maximum inter-correlation coefficient among the predictors was 0.861.

From the observations of responses, the highest rating is 7 indicating a strong agreement to the questions answered by the respondents. Each variable has a minimum rate of 1 which indicates a strong disagreement to questions asked. From Table 5, a greater variation in responses is shown from the respondents. Generally, most respondents fairly disagreed to issues relating to tax compliance and tax audits whiles issues on tax education and FAM were moderately agreed on. The degree of variability between responses of tax compliance and tax audit are lower than that of tax education and FAM. The responses from the former are a bit closely related than that of the latter.

4.3.2 Measurement Model Evaluation

The research under study examines the impact of tax audit on tax compliance: The role of tax education and fear-appealing messages. The Partial Least Square – Structural equation modelling (PLS-SEM) was used to analyze the study empirically.

The loadings of factors along with the values of Cronbach's alpha, composite reliability, and average variance retrieved were shown in Table 7 as part of the researcher's Confirmatory Factor Analysis (CFA) to assess the validity of scales. According to Schreiber *et al.* (2006), CFA is used as a technique to support theories and is necessary to ensure that there are no errors when analyzing the factor structure of constructs (Hsu,

2010). In this study, the first CFA was established based on the item loadings and consisted of the latent constructs, namely; Tax Audit (TA), Tax Compliance (TC), Tax Education (TE) and Fear-appealing messages (FAM). To improve the model, fit measures are mutually taken into account according to Hair *et al.* (2012), where at least two out of the observable variables should be preserved for each of the unobserved variables after deletion, as proposed by Kenny (2016) as cited in Ramayah *et al.* (2018). The Smart PLS approach produced realistic correlations, coefficients, and loading values, which are shown in the route model in Figure 2.

4.3.3 Test of Fitness of Model

The model fitness test was carried out to gauge how well the model fits the data. Although there are many fit indices, researchers typically state that a combination of some of these indices can only be utilized to determine the model's fitness if the acceptable threshold is satisfied. The Standardized Root Mean Square Residual (SRMR) and the Normed Fit Index (NFI) were the fit indices used in this investigation. Together with the Squared Equalidean Distance (d_ULS) and the Geodesic Distance (d_G) as the bootstrap-based test for the exact model-based test.

First, Smart PLS was used to analyze and evaluate the measurement model's fitness. Other fit indices, such as standardized root mean square residual and normed fit index, were also taken into consideration to test model fitness to the data obtained due to the sensitivity of the chi-square value to large samples. According to (Henseler *et al.*, 2014; Hu & Bentler, 1999), SRMR values less than 0.08 should be regarded as the best fit and a sign that the model is correctly specified. The NFI yields a value between 0 and 1, according to (Bentler & Bonett, 1980), and the closer the NFI value is to 1, the better the

fit. NFI values above 0.7 indicate a satisfactory fit, which verifies the measurement model's suitability (Dijkstra & Henseler, 2015). The d_ULS and d_G assesses the statistical (based on bootstrapping) evaluation of the difference between the observed covariance matrix and the covariance matrix predicted by the composite factor model. Below is displayed the summary of the results of the model of fitness indices:

Table 4.4: Model Fitness Indices

Fit Indices	Threshold	Reference	Final CFA Model
SRMR	<.08,excellent; .08-.10, acceptable	Hu and Bentler (1999) Henseler *et al.*, (2014)	0.064
d_ULS	>0.05, excellent	Schuberth *et al.*, 2022 Dijkstra and Henseler (2015)	1.317
d_ G	>0.05, excellent	Bollen-Stine (1992)	1.022
NFI	>0.7, excellent; 0.7-1, acceptable	Bentler and Bonett (1980) Dijkstra *et al.*, (2015)	0.803

Note: The bolded figures represent the fit results of the final CFA model for the current study SPMR = Standardized Root Mean Square Residual; NFI = Normed Fit Index; d_G = Geodesic Distance; d_ULS = Squared Equalidean Distance

Source: Field Data (2023)

The findings of the CFA indicate that the conceptualized model had a better fit for the data based on the sampled data of 205 respondents. The NFI is 0.803, while the SRMR is 0.064. These indices show that the conceptualized model fits the data better than the competing models, as demonstrated in Table 3. The results of the bootstrapping analysis for d_LS and d_G indicate that there is a 13.17% probability of accepting the null hypothesis, which suggests no difference between the correlation matrix implied by the hypothesized model and the actual empirical correlation matrix. Similarly, for d_G, there is a 10.22% probability of accepting the null hypothesis.

4.4 Outer model Assessment

When evaluating our model, we paid close attention to three key aspects: the consistency of construct indicators, the validity of these constructs, and their reliability. The outcomes of the assessments for consistency, validity, and reliability are presented in Table 7.

4.4.1 Internal Consistency, Validity and Reliability

Internal Consistency

Evaluating the internal consistency of a construct involves determining whether multiple indicators, which are meant to measure the same underlying concept, yield consistent results. To assess this consistency, we employed Cronbach's alpha, following the recommended guideline from Peterson (1994) which suggests a minimum acceptable score of 0.70 to indicate that the construct is internally consistent. From Table 7, all variables of the study had a score of more than 0.70 (the acceptable level of internal consistency) using the Composite reliability (CR) index. The results displayed in Table 7 represented a higher internal consistency in Tax Compliance (0.941), Tax Audit (0.921), Tax Education (0.954) and Fear-appealing messages (0.916).

Validity and Reliability

As part of the Confirmatory Factor Analysis (CFA), we conducted tests to determine the validity and reliability of the model proposed in Figure 2. The findings are presented in Table 7. The researcher evaluated two types to test validity. First, the convergent validity and then the discriminant validity were both evaluated. The degree of relationship between the observed variables and study items is what is meant by convergent validity. The bootstrapping analysis shows that the obtained loadings were statistically significant at a 5% significance level in the final iteration. This is proven by looking at the average extracted variance, factor loadings, and composite reliability (Gholami *et al.*, 2013). Each construct has achieved loadings above 0.7, the composite reliability (CR) values of the constructs were all greater than 0.7, and the average variance extracted (AVE) values were also above 0.5, meeting the threshold of 0.5 or above as advised by (Henseler *et al.*, 2014). Which means that, on average, all the constructs in the proposed model can explain more than half (with an AVE above 0.50) of the variance observed in their respective indicator items. For instance, among the constructs, Tax Education exhibited the highest AVE, indicating that it could explain approximately 74.7% of the variation observed in all its associated indicator items. These results are shown in Table 7.

Table 4.5: Measurement scale and model indicators

Latent Variable	Indicators	Factor Loadings	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)	Construct Reliability (rho_a)
Tax Audit						
	TA1	0.845				
	TA2	0.847	0.897	0.921	0.662	0.900
	TA4	0.770				
	TA6	0.860				

	TA8	0.812				
	TA9	0.741				
Tax Compliance						
	TC1	0.849				
	TC10	0.827				
	TC13	0.764	0.927	0.941	0.666	0.931
	TC17	0.730				
	TC2	0.909				
	TC3	0.878				
	TC7	0.720				
	TC9	0.832				
Tax Education						
	TE1	0.793				
	TE2	0.844	0.943	0.954	0.747	0.948
	TE3	0.922				
	TE4	0.924				
	TE5	0.865				
	TE6	0.909				
	TE7	0.781				
Fear-appealing messages						
	FAM2	0.892				
	FAM3	0.879	0.878	0.916	0.732	0.884
	FAM4	0.844				
	FAM6	0.806				

Note: TC= Tax Compliance; TA= Tax Audit; TE= Tax Education and FAM= Fear-appealing messages.

Source: Field Data (2023)

Discriminant Validity

We conducted a discriminant validity assessment using the methods outlined by (Henseler *et al.*, 2014). We used the heterotrait monotrait (HTMT) ratio of correlations to evaluate the discriminant validity and cross-loadings of our constructs, which indicates the establishment of discriminant validity for HTMT values below 0.90 (Henseler *et al.*,

2014). The degree to which measurements of non-identical concepts are definite or distinct is referred to as discriminant validity.

Table 4.6: Heterotrait-monotrait ratio (HTMT) – Matrix

	1	**2**	**3**	**4**
1. Fear-appealing messages				
2. Tax Audit	0.673			
3. Tax Compliance	0.532	0.574		
4. Tax Education	0.467	0.548	0.614	

Note: TC= Tax Compliance; TA= Tax Audit; TE= Tax Education and FAM= Fear-appealing messages.

Source: Field Data (2023).

This study's HTMT criteria demonstrate that discriminant validity is confirmed. The strongest correlation discovered is 0.673, between Tax Audit, Tax Compliance, and Tax Education which falls within the accepted range, is below 0.90 as demonstrated in Table 8 (Henseler *et al.*, 2014) and is significant at 5% after the conduct of bootstrapping. As a result, the study's validity has been proven and well-established.

The last method used to evaluate discriminant validity involves analyzing the cross-loadings of the indicators, which can be found in Table 9. In assessing discriminant validity, it is expected that each indicator loads more significantly on its associated construct compared to all other constructs (Chin, 1998; Henseler *et al.*, 2014). Examining Table 9 reveals that the indicators of each construct exhibit higher loadings on their respective construct than on any other construct, supporting discriminant validity.

Table 4.7: Cross-loading on Construct indicators

	FAM	TA	TC	TE
Fear-appealing Messages				
FAM2	**0.892**	0.763	0.770	0.790
FAM3	**0.879**	0.773	0.778	0.785
FAM4	**0.844**	0.762	0.667	0.775
FAM6	**0.806**	0.660	0.658	0.669
Tax Audit				
TA1	0.699	**0.845**	0.759	0.725
TA2	0.656	**0.847**	0.760	0.677
TA4	0.699	**0.770**	0.681	0.730
TA6	0.808	**0.860**	0.790	0.778
TA8	0.722	**0.812**	0.699	0.708
TA9	0.629	**0.741**	0.651	0.641
Tax Compliance				
TC1	0.694	0.778	**0.849**	0.727
TC10	0.666	0.755	**0.827**	0.672
TC13	0.629	0.658	**0.764**	0.645
TC17	0.661	0.629	**0.730**	0.624
TC2	0.712	0.789	**0.909**	0.735
TC3	0.722	0.745	**0.878**	0.771
TC7	0.659	0.623	**0.720**	0.614
TC9	0.748	0.810	**0.832**	0.790
Tax Education				
TE1	0.628	0.658	0.638	**0.793**
TE2	0.693	0.695	0.683	**0.844**
TE3	0.836	0.796	0.789	**0.922**
TE4	0.847	0.837	0.803	**0.924**
TE5	0.764	0.761	0.758	**0.865**
TE6	0.812	0.821	0.807	**0.909**
TE7	0.738	0.697	0.693	**0.781**

Note: TC= Tax Compliance; TA= Tax Audit; TE= Tax Education and FAM= Fear-appealing messages.

Source: Field Data (2023)

Construct Reliability

To evaluate the reliability of the indicators in measuring each construct, we examined the standard loadings of these indicators. A standard loading of at least 0.70 was set as the threshold for considering an indicator to be reliable. Each construct's reliability scored higher than 0.70 which makes the indicators of the variables highly reliable.

In summary, the findings demonstrate that the measurement model utilized in this study exhibits strong internal consistency, reliability, convergent validity, and discriminant validity. These outcomes regarding the validity and reliability of the instruments used support the credibility of this study.
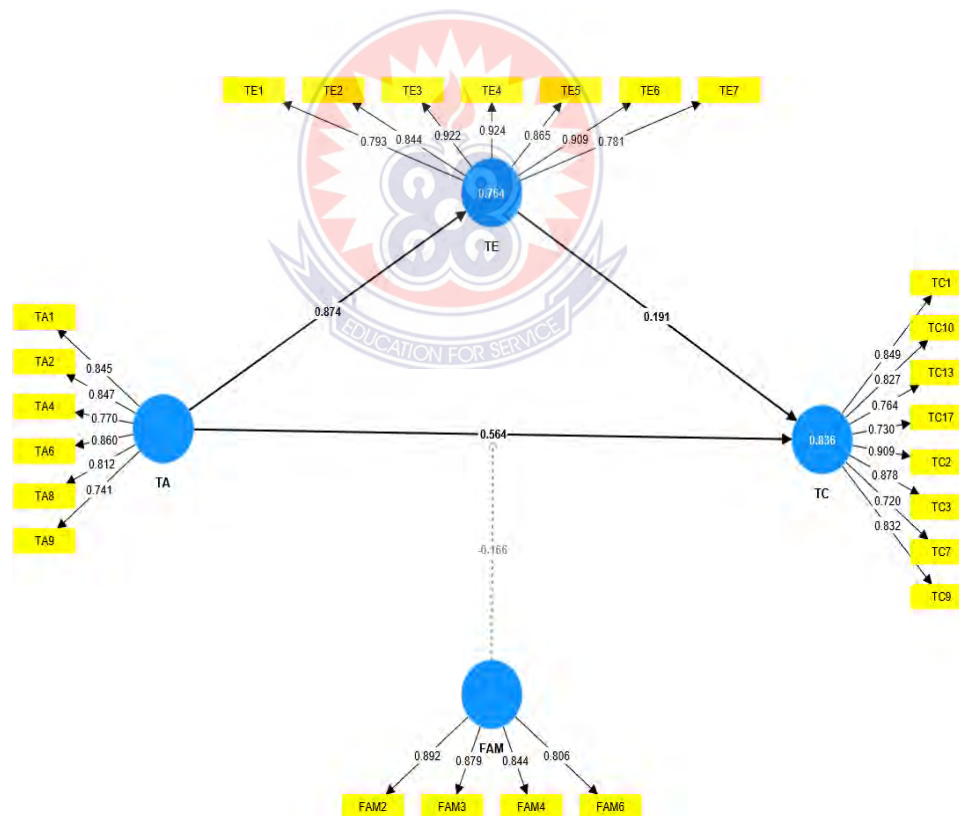

Figure 2: The CFA (Measurement and Path) Model with standardized Loadings
Source: Field Data (2023)

4.5 Structural Model Analysis

After evaluating the measurement's validity and dependability, the structural model shown in Figure 2, which illustrates the relationships between the constructs assumed in the theoretical model, was evaluated. The estimations for the complete structural model are displayed in Figure 2 and Table 6. The amount of variance in the dependent variable that is accounted for (R^2) is shown in Figure 2. Standard errors and t-statistics needed to determine the precise pathways impact level in the structural model were created and was consistent with Chin (1998) bootstrapping analysis. The researcher used the bootstrapping resampling method (Tibshirani & Efron, 1993), which is a non-parametric approach for assessing the accuracy of the PLS benchmark and allows us to assess the factual significance of the path coefficients. A five per cent level of significance ($p<0.05$) was set as the measure of statistical conclusion. The significance level using the degree of the homogeneous factor estimates between the relevant variables was calculated as specified in the aftermath t-value.

Table 4.8: Path Coefficients along with their bootstrap values and 'T' Values

Model	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
TA -> TC	0.564	0.568	0.095	5.972	0.000
TA -> TE	0.874	0.875	0.019	46.422	0.000
TE -> TC	0.191	0.185	0.094	2.033	0.042
FAM x TA-> TC	-0.166	-0.168	0.057	2.934	0.003
TA -> TE -> TC	0.167	0.162	0.083	2.017	0.044

Note: TC= Tax Compliance; TA= Tax Audit; TE= Tax Education and FAM= Fear-appealing messages.

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Source: Field Data (2023)

From Figure 2, the results from the PLS-SEM reported that the coefficient of determination, also known as the R^2 is 0.836 for the dependent variable, tax compliance. This is a reflection of the level of extent the other latent variables; tax audit, tax education and fear-appealing messages explain the endogenous variable. It demonstrates that 83.6% of tax compliance variances are a result of the other latent variables. Again, to test the association of the structural model, the significance level is capped at $p < 0.05$ (2-tailed) (Hair *et al.*, 2018). The strength of the path according to Table 7 is highly significant among all the latent variables.

4.6 Predictive Analysis

The determination of predictive relevance holds significant importance within the context of Structural Equation Modelling (SEM) statistical analysis. This analytical approach enables the assessment of the degree to which independent variables possess predictive value or power over dependent variables, hence providing constructs with a measure of confidence (Hair et al., 2012). Table 11 gives a summary of the predictive relevance or model of our constructs.

Table 4.9: Predictive Analysis Model

	Q²predict
TC	0.799
TE	0.759

Note: TC= Tax Compliance; TE= Tax Education.

Source: Field data

The Q2 value of the endogenous variables, namely tax compliance and the mediating variable, tax education, exhibits a substantial level of predictive efficacy, surpassing the threshold of 0.35 (Hair et al., 2012). The results demonstrate that the independent variables of tax audit, tax compliance, and tax education have a significant predictive value. Specifically, tax audit substantially predicts tax compliance with a predictive power of 79.9%, while tax education predicts tax compliance with a predictive power of 75.9%.

4.7 Mediation Analysis

Many scholars have had some acceptable approaches towards handling mediation (Hair *et al.*, 2018; Preacher & Hayes, 2004; Zhao *et al.*, 2010). Nevertheless, for this study, the researcher adopts the concept of mediation by Zhao *et al.* (2010) which encourages researchers to see mediation as either complementary, competitive and indirect-only or direct only non-mediation and no effect non-mediation. The direction of both mediation and the direct effect coupled with its significance identifies the findings with either of the type of mediation identified. The researcher must first look at the significance and direction of the indirect effect of the study (the impact of tax education between tax audit and tax compliance). The researcher then looks at the direct effect of the independent variable and dependent variable (tax audit and tax compliance) whether significant or not. The mediator is able to be detected as either complementary mediation, competitive mediation or indirect only mediation depending on the significance of the direction within the first two steps.

Mediation analysis was performed to examine the role of tax education in the relationship that exists between tax audit and tax compliance among corporate entities in Ghana. Table 10 displays the specific indirect effect and reports that the mediator, tax education has a significant and positive relationship on the relationship between tax audit and tax compliance (β= 0.167, |t| = 2. 017, p = 0.044< 0.005). The result from Table 10 showed that, the direct effect of tax audit on tax compliance is positive and significant at 5% (β= 0.568, |t| = 5.972, p < 0.005) and tax audit has a strong positive significant relationship with tax education (β= 0.875, |t| = 46.422, p < 0.005) whiles tax education has a positive but weak significant relationship with tax compliance (β= 0.185, |t| = 2.033, p < 0.005). This shows that the relationship between tax audit, tax education and tax compliance is complementarily mediated.

4.8 Moderation Analysis

Moderation is known to be present when the introduction of another variable causes the association that exists between the independent and dependent variables to change (Baron & Kenny, 1986). This research introduced fear-appealing messages as a moderator to test if its presence would change the association of the direct effect that tax audit has on tax compliance. Extant studies have proposed that it is prudent and proactive to conduct moderation analysis even when it displays no statistically significant effect with mainly the independent variable. The reason behind this proposal is that it aids in differentiating the state where a variable is considered a moderator from a state where a variable is considered a mediator (Baron & Kenny, 1986; Bennett, 2000; Gogineni *et al.*, 1995).

Mediation, however, is anticipated to have a relationship, both with the independent variable and dependent variable (Baron & Kenny, 1986). The results displayed in Table

10 and Figure 3 indicate that the presence of FAM as a moderator signifies a negative impact on the association between tax audit and tax compliance (β= -0.168, |t| = 2.934, p = 0.003 < 0.005).

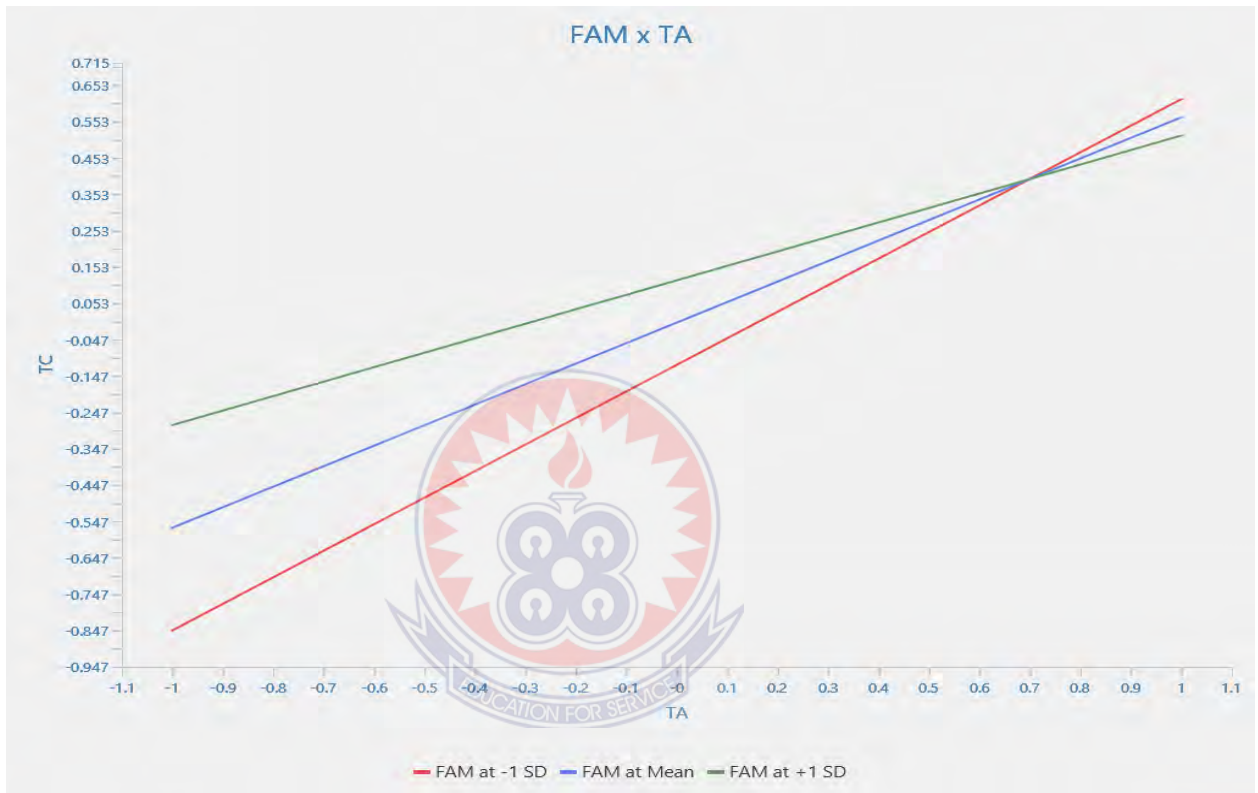**Figure 3: Moderation Graph**

Source: Field data, 2023

4.9 Hypothesis testing

H1: *Tax audit positively and significantly predict tax compliance*

Hypothesis one was tested as tax audit (TA) enhance tax compliance (TC) among corporate entities in Ghana. From the analysis in Table 10, TA had a significant relationship on TC with the original sample (β = 0.564), T- Statistics of (/t/ = 5.972) and

a significant value of (p = 0.000 < 0.005). This reveals that tax audit engagements directly and positively enhance future tax compliance among corporate entities in the Greater Accra Region. Therefore, the study fails to reject (accepts) the hypothesis

H2: *Tax audit positively and significantly affect tax education relayed to corporate taxpayers.*

Hypothesis two tested the impact of tax audit on the type of tax education received by corporate taxpayers. The relationship that existed between tax audit and tax compliance was reported to be significant where the original sample ($\beta = 0.874$), t- statistics of ($/t/ = 46.422$) and a significant value of (p = 0.000 < 0.005). This indicates that tax audits influence the type of tax education relayed to corporate taxpayers. H2 must fail to be rejected.

H3: *Tax education mediates the relationship between tax audit and tax compliance.*

The third hypothesis tested the mediation role of tax education between tax audit and tax compliance among corporate entities in the Greater Accra Region. The moderation role existing between tax audit engagements and tax compliance (the indirect effect) was found significant with the original sample ($\beta = 0.167$), T- Statistics of ($/t/ = 2.017$) and a significant value of (p = 0.044 < 0.005). This indicates a significant relationship that exists between the mediator (Tax Education) and tax audit and tax compliance. Therefore, the researcher fails to reject Hypothesis Three (H4).

H4: *Fear-appealing messages significantly moderate the relationship between tax audit and tax compliance.*

The role of Fear-appealing messages (FAM) as a moderator between the latent variables, tax audit and tax compliance were last tested. The results of the findings portrayed that, the moderation role was found significant but in a negative direction original sample (β = -0.166), T- Statistics of (/t/ = 2.934) and a significant value of (p = 0.003 < 0.005). This indicates that the extent of FAM on the relationship between TA and TC influences its direction and strength. Therefore, the researcher fails to reject hypothesis four (H4)

4.10 Discussion of Research Findings

This study aimed at determining the relationship between tax audit and tax compliance, and further assessed the mediating role of tax education and moderating role of fear-appealing messages on the aforementioned variables. The mediator sought to link and become a conduit between tax audit and tax compliance. The presence of the moderator sought to confirm whether it had any association with tax compliance, the extent of its enhancement to tax compliance and how it could influence the strength and direction of the independent and dependent variables. This research specifically focused on the issues of tax audit and compliance among companies or corporate entities in the Greater Accra Region of Ghana. This section discusses the results and findings of the data analysis in line with the study's objective and theoretical framework.

Discussion of the effect of tax audit on tax compliance

The study's first objective was to assess the effect of tax audits on tax compliance among corporate entities in Ghana. The study's findings indicate that there is a strong relationship between tax audit activities and the level of future tax compliance among

corporate entities in Ghana. Specifically, a unit change or rise in tax audit activities corresponds to a considerable unit increase or change of 0.568 in the level of future tax compliance, and vice versa.

The initial recognition of the possibility of a tax audit among corporate taxpayers gives rise to the notion that tax authorities have the capacity to detect inaccuracies and then apply supplementary penalties or consequences. This phenomenon leads corporate taxpayers to accurately file their tax returns and promptly disclose their payments. The process of randomly selecting corporate taxpayers for audit appears to have a notable impact on these taxpayers. Corporate entities tend to prefer having their tax paperwork prepared in advance, without any external pressures or unexpected written notices of tax audits. In addition, many corporations derive satisfaction from complying with governmental requirements as a demonstration of goodwill. The general consensus is that individuals have a responsibility to fulfil their tax obligations in order to contribute to the economy and participate in commercial activities. The probability of being publicly identified as a corporation that evades tax obligations generates a perception of irresponsibility, potentially resulting in customer attrition and stakeholder disengagement, as well as discouraging prospective stakeholders from making investments.

The significant effect of tax audit on tax compliance among corporate entities in Ghana is consistent with the findings of some previous studies (Beer *et al.*, 2020; Chalu & Mzee, 2018; George & Diavastis, 2015; Kasper & Alm, 2022; Olaoye *et al.*, 2018; Saw, 2017) which established that tax audit engagement influences the level of compliance by the corporate taxpayer. These consistencies indicate that when tax audits are organized frequently, the tax audit unit is adequately and carefully selected, and information

systems are used in the course of tax audits, they cumulatively aid in making the tax audit process effective and therefore contribute to enhancing tax compliance significantly and positively (Chalu & Mzee, 2018; George & Diavastis, 2015; Kasper & Alm, 2022). In addition, since corporate entities play a crucial role in the nation's economy in terms of capital investment and economic growth (Zafar & Mustafa, 2017), their likelihood of complying is very high. The analysis from the study confirms the input and contributions of taxes made from corporate taxpayers in Ghana compared to other sources of tax revenue such as VAT, indirect taxes, taxes from the customs and excise duties (Iddrisu *et al.*, 2021) while the frequency of tax audits is likely to increase future tax compliance as reflected in Table 3.

However, the study contradicts research by (Ayalew, 2014; and Bedi, 2016) whose findings stated no significant relationship and a negative significant relationship respectively between tax audit and tax compliance. From the findings of Bedi,(2016) conducted here in Ghana, he argued that tax audit quality in Ghana was questionable. This argument was based on the demand for bribes by some tax officials which most taxpayers negotiate to pay them off as well as the inconsistencies in the frequency of tax audit engagements organized by the tax authority. This contradiction is reflected in the headway of some new strategies implemented by the GRA to improve the performance of tax audits after seven years. Some corporate taxpayers attested to the fact that the GRA has adopted some new measures such as frequent visitations, the introduction of invoice invigilation usually conducted in an entire month to track the progress of transactions in some companies which has enhanced their quality of work and made taxpayers alert at all times. This response to the call/ request made by the Honorable Minister of Finance, Ken

Ofori-Attah in 2020 that the act of transparency and consistency in the application of debt recovery actions must be paid attention to (Finance, 2020)

Finally, the deterrence effect of tax audit on tax compliance in this study reflects a positive and significant relationship due to the possible risk of detection and penalties to be raised after tax audit engagements if taxpayers do not comply. This theoretical effect is in line with (Beer *et al.*, 2020) from the U.S. who demonstrated that operational tax audits induce taxpayers to increase their reported taxable income by roughly 15% a year after the examination. For taxpayers who had additional tax assessment after tax audit engagements, they reported a tax income of about 64% after the first year's audit and maintained a 44% increase in taxes reported three years after the audit and vice versa.

Hence, the enable the economy to achieve the government's tax-to-GDP ratio target of 20% by 2023 (Finance, 2020; Iddrisu *et al.*, 2021), tax authorities in Ghana must continue to keep up with their new strategies that have helped in reflecting changes as compared to results found by (Bedi, 2016) and employ other beneficial strategies that will aid in unveiling additional tax assessments evaded by some corporate taxpayers to help contribute more than 25% to the entire annual tax income to the government.

Discussions of results and findings of the effect of tax audit on tax education

Following the initial objective is the examination of the relationship existing between tax audit and tax education. The second hypothesis which relates to the second objective of the study revealed that a percentage increase in tax audit engagements leads to an 87.4% positive significant increase in tax education given to corporate taxpayers after audit engagement. This indicates that tax audit engagements influence the type of tax education

relayed to corporate taxpayers. Conceptually, tax audit gives way for tax auditor's opinions, management letters and recommendations right after the entire audit process just like the statutory audit process. Even in the course of tax audit engagements, the tax auditor has the right to interact with necessary stakeholders (which could either be the accountant or finance officer, internal auditor, general manager or their representatives) in charge of the filling and reporting of tax documentations as suggested by (Hayes & Baker, 2014).

Mistakes, corrections, omissions and suggestions are initially brought to the notice of these stakeholders before the entire process ends. In the course of correcting those mistakes identified, tax officials use that as an opportunity to insight taxpayers on how some relevant and new tax laws are applied to prevent the repetition of similar errors in the future. They proceed to give thorough justifications for the problems found and outline the type, extent, and potential effects of the issues on the entity's ability to comply with tax laws and maintain accurate financial records.

Such would not have been possible if tax authorities solely relied on the organization of general tax knowledge forums. These forums at times make it a bit difficult for most corporate taxpayers to attend not to talk about giving the GRA the chance to address some specific organizational problems in terms of specialties. More often than not, time constraints deprive some corporate taxpayers of the opportunity to have their requests and confusion about some tax laws resolved. At times, these general tax education forums hardly permit taxpayers to practice on the job and may subsequently repeat some mistakes during the filing, reporting, and payment of taxes.

Though studies on the relationship between tax audit and tax education have not been clear and empirically stated, studies on statutory audit have embraced audit opinions, management letters and recommendations as some crucial steps to increase a company's valuable knowledge and direction on how to enhance internal controls and tax compliance (Bott *et al.*, 2020). Since these management letters and recommendations seek to improve internal controls, financial statement procedures and tax compliance as a whole (Furnham & Gunter, 2015; Kaka, 2021), the study adopted concepts of statutory audit to help bridge the gap that exists in tax audit and tax education for which many studies have yet not delved their focus into.

Theoretically, the theory of planned behaviour sought to have a positive significant effect on the consistent information and education relayed to the corporate taxpayers. The intention to achieve and maintain some behavioral change necessitates the need to stop engaging in bad behaviour or begin to engage in a good one (Ajzen, 2005). In light of the connection tax audit has on the approach of education given to taxpayers, people being educated right after tax audit procedures tend to increase the awareness of corporate taxpayers and result in the enhancement of tax compliance in the future.

Discussions of findings of the mediating role of tax education

The third objective of the study examined the mediating role of tax education in the relationship between tax audit and tax compliance among corporate entities in Ghana. The results displayed in Table 10 represents that, the role played by tax education as a conduit between tax audit and tax compliance reflects a 0.167 increase in unit change of tax compliance by entities when there is a 1 unit change increase in tax education

activities after tax audit and vice versa. Comparing both direct and indirect effects from Table 10, tax education plays a complementary mediation role since both effects are significant (Baron & Kenny, 1986; Hair *et al.*, 2019; Zhao *et al.*, 2010).

Though effective tax audit measures and strategies lead to an enhancement of future tax compliance behaviours, engaging corporate taxpayers during and after-tax audit engagements to educate them is evident to increase their compliance behaviours. This is in agreement with (Berhane, 2011) who emphasized the taxpayer's ability to embrace any new system if they have sufficient knowledge to comprehend them. He added that to achieve the goals of voluntary compliance, taxpayers must be knowledgeable, and well-educated (especially in tax matters), and their level of tax literacy must be current, continuously improved and reinforced to maintain it, and must be capable of applying them at relevant points in time.

This research sought to have responded to the call from the studies of (Berhane, 2011; Mascagni & Santoro, 2018) which concluded that Rigorous evaluation must be done by revenue authorities to shed light not only on new initiatives but those that have a significant impact to develop strategies on how existing initiatives can be improved in enhance their effectiveness. The level of significance determined by the introduction of the consistent application of educating taxpayers after audit engagements aid in serving as a positive influence to translating the effectiveness of tax audit to tax compliance. In line with the research by Dwianika *et al.* (2022), which explicitly revealed that tax socialization/ education such as tax seminars does not affect taxpayer compliance but rather, tax incentives and online-based tax information systems submitted by tax volunteers. This current study partially agrees but projects the effectiveness of educating

taxpayers right after tax audits to reflect a significant impact of increasing future tax compliance.

Furthermore, findings from (Ayalew, 2014) projected the relevance of tax education after tax audit instead of the imposing punishments and penalization on taxpayers. He added that penalizing them tends to increase their level of reluctance. Instead, tax authorities are entreated to educate taxpayers on the needed information immediately after tax audits bearing on its significant influence and impact on future tax compliance.

From the theory of planned behaviour (Ajzen, 1991), intention are known to be influenced by perceptions of social norms (the strength of others' opinions about the behaviour and the individual's desire to follow such significant others), as well as by attitude toward the behaviour and the degree of perceived behavioural control. The relevance of this theory gives room for the acceptance of the idea that tax education right after tax audits increases tax awareness and enhances better results in terms of future tax compliance.

Discussion of the results and findings of the moderating role of fear-appealing messages

The fourth objective aimed at examining the moderating role of fear-appealing messages in the relationship between tax audit and tax compliance among corporate entities in Ghana. As displayed in Table 10 and Figure 3, the results of the beta presented that a unit increase in the delivery of FAM leads to a -0.168 decrease in the compliance level of corporate taxpayers after tax audit and vice-versa. This result is the projection of a negative significant effect on tax compliance if the tax authorities or GRA continues to

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threaten corporate taxpayers with punishments, fines, penalties and imprisonment due to related inconsistencies and misapplications of the tax laws in the course of tax filing and reporting process.

The deterrence theory's orientation of detection of tax evasion and penalties implemented to deter taxpayers into compliance (Yong *et al.*, 2019), contrasts the findings of this study. In the Ghanaian context according to this research, the more tax authorities impose and intensify the penalties of non-compliant corporate taxpayers, the less reluctant they become.

A study by (Dulleck *et al.*, 2016) reported their findings that the introduction of fear-appealing messages had a favorable effect on the degree of tax compliance among investors and real estate industries. Also in agreement with Osebe (2013) whose findings advised that penalties and fines should be strictly adhered to.

However, the current study confirms the findings of other empirical studies (Alemu, 2020; Trawule, 2017; Trawule *et al.*, 2022) which revealed a negative relationship with tax compliance and suggested that the willingness to pay taxes can be achieved without the need of some fear tactics and penalization. Although the application of FAM could practically influence tax compliance actions, it is not a good predictor of tax compliance behaviours (Gadzo *et al.*, 2019; Trawule *et al.*, 2022). It also confirms the findings of (Ayalew, 2014) that, when tax auditors penalize taxpayers instead of educating them, it leads to a high degree of unwillingness of some honest taxpayers in terms of payment while others deliberately fail to support tax auditors with the required information during

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the audit. Hence strengthening negative actions and attitudes towards tax compliance that could cause defaulters to ally with unscrupulous officials to massage the figures.

The differences found in the findings of other studies such as (Dulleck *et al.*, 2016; Osebe, 2013) may be a result of culture, environment, level of understanding and patriotism as well as the commitment level of tax authorities in line with strict adherence to the punishment of the offences as stipulated in their tax laws. Unfortunately, the results of the study in the Ghanaian setting reflect a significant negative association that the FAM construct has between tax audit and tax compliance.

4.11 Chapter Summary

This chapter presented, analyzed and discussed the descriptive and inferential statistics of the data retrieved from the study. The conclusion of the results are as follows:

The first objective concluded that, tax audit engagements significantly predict increasing tax compliance level among corporate entities in the Greater Accra Region. In addition, it was revealed that, the GRA has implemented new strategies such as repetitive tax audits, audit unit adequacy and the introduction of information technologies to improve the performance of tax audits after seven years. Some corporate taxpayers attested to the fact that the GRA has adopted some new measures such as frequent visitations, the introduction of invoice invigilation usually conducted in an entire month to track the progress of transactions in some companies which has enhanced their quality of work and made taxpayers alert at all time.

The second objective significantly predicted a positive relationship that exist between tax audit and tax education. Analysis of this objective indicated that tax audit engagements

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influence the type of tax education relayed to corporate taxpayers. The tax auditors are able to point out easily some inconsistencies, errors and omissions and appropriately address them before taxpayers. Hence, adopting the theory of planned behaviour revealed that, the intention to achieve and maintain some behavioural change necessitates the need to stop engaging in bad behaviour or begin to engage in a good one (Ajzen, 2005).

The third objective analyzed and discussed the mediating role of tax education between tax audit and tax compliance among corporate taxpayers in the Greater Accra Region. The study reported that, tax education played a positive significant role as a conduit between tax audit and tax compliance. This is an indication that, the indirect effect of tax education between the predictor and the response variables was significant but lead to a complementary mediation due to the significance level of the direct effect of tax audit and tax compliance in objective one. It therefore implies that; the presence of tax education influences the tax compliance behaviours of tax payers after tax audit. However, its absence may significantly contribute to the decline of tax compliance behaviour especially among corporate entities in Ghana.

Finally, the last objective examined the moderating role of fear-appealing messages between tax audit and tax compliance. The moderator was revealed to play a negative significant role between the endogenous and exogenous latent variables. This result reflects that, though FAM seeks to deter taxpayers from evading taxes, the increase in the growing use of FAM subsequently provokes taxpayers and could cause honest ones to reluctantly file and report the right taxes and vice versa. Some taxpayers may also take

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steps to negotiate with some tax officials who might be willing to compromise and accept bribes to cancel taxes owed.

In summary, it can be concluded that, tax audit engagement significantly influences the level of tax compliance among corporate entities in Ghana with or without the introduction of tax education. But since the relationship of the mediating variable revealed a positive significant influence on tax compliance, it is encouraged that tax auditors educate taxpayers before, during and after tax audit engagements. FAM may not be the best approach towards enhancing tax compliance levels after tax audit engagement since its relationship with the independent and dependent variables was negative but significant. Instead, tax education could effectively play the role by influencing taxpayers' intentions to file, report and pay the right taxes.
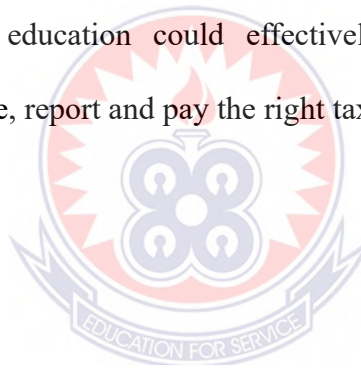
CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Overview

This chapter of the study presents the summary of the research findings in relation to the research questions and objectives. In addition, it discusses the conclusion of the study and recommendations for tax payers, tax authorities, policy makers and suggestions future researchers. The summary section serves as a comprehensive introduction to the study, outlining its overall scope and primary areas of interest, elucidating the principal research methods applied, and summarizing the key findings obtained. Subsequently, in the conclusion section, detailed comments are provided regarding each of the predefined objectives, assessing whether these objectives have been successfully accomplished and presenting the resultant conclusions. The chapter then proceeds to offer precise recommendations that emerge from the study's findings, with a focus on identifying specific stakeholders or institutions to which these recommendations are applicable. Lastly, the fourth and final section of the paper offers guidance regarding potential avenues for future research endeavors.

5.2 Summary of Findings

The study aimed at establishing the relationship that exist between tax audit engagements and tax compliance and examining the mediating and moderating roles of tax education and fear-appealing messages respectively among corporate entities in the Greater Accra Region of Ghana. The study was premised on four specific objectives. The first objective examined the effect of tax audit on tax compliance. Objective two sought to address the

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relationship that existed between tax audit and tax education. The third objective assessed the mediating role of tax education on the relationship between tax audit and tax compliance and finally, the fourth objective investigated the extent of association or the moderating role of fear-appealing messaged (FAM) on the relationship between tax audit and tax compliance. Research hypotheses were formed to aid in addressing the specific objectives of the study.

A sample of 256 respondents were selected from the clustered population of 766 companies from the Weija-Gbawe Municipality. The inclusion criteria were first, companies that have been tax audited at least once in within the last thirteen years. Respondents or representatives were limited to accountants, internal auditors, general managers or their representatives. The study adopted the sampling size determination model from (Bartlette *et al.*, 2002) coupled with the sample size determination table by (Gill *et al.*, 2010) from the studies of (Taherdoost, 2017). Cluster sampling was first used to select companies from the Weija-Gbawe Municipality as the study's target population from an entire population of 31,498 companies that have been tax audited in the Greater Accra Region (GRA, 2023). Purposive and convenience sampling was used thereafter to reach the respondents of the study from the companies selected. A self-administered questionnaires were used as the main data collection instrument after a successful pilot study test.

The data collected were first coded using IBM SPSS version 23.0 (Kirkpatrick, 2015) and was used to analyze the demographics and the general tax experiences of respondents. These analyses were done using descriptive statistics such as frequencies and percentages. The analysis on the relationship between tax audit and tax compliance, tax

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audit and tax education, the mediating role of tax education and the moderating role of FAM were done using the Partial Least Squares – Structural Equation Modeling (PLS-SEM) with the help of the software Smart-PLS 4.0 (Ayanwale *et al.*, 2023; Khan *et al.*, 2021). The tax audit represented the independent variable while tax compliance was the dependent or the response variable. Tax education and fear-appealing messages were the mediating and moderating variables respectively.

The researcher retrieved an 80% response rate which corresponds to 205 questionnaires out of 256. The demographic section of the survey questionnaires administered reported that, more than half of the respondents (134 representing 65.4%) worked in service industries. These companies were mainly consultations, educational, medical, hospitality services, financial and credit facility services and many others. In addition, 53.7% of respondents held the position of accountant or the finance officer with about 76.5% of the respondents within the age bracket (25-39 years). This confirms that most corporate officers responsible for filing and reporting taxes were young adults, being complimented with those in their youthful days. And that, most corporate entities in the next ten to twenty years will have enough resource personnel to train the upcoming ones to keep up with tax agents or authority's expectations. Also, more than half of the respondents had at least an HND or Bachelor's degree with about 65% of the responses gaining working experience within their first ten years.

With regards to their general tax experiences, about 65% of responses indicated that they have been audited at least three times within the last 13 years. This is a reflection of GRA's improved engagement in tax audits over time out of which most companies reported to have experienced comprehensive audits.

From the research question one: *To what extent does tax audit influence tax compliance among corporate entities in Ghana?*

In addressing this question, an analysis involving path coefficients and their corresponding bootstrap values was carried out to investigate whether tax audits exerted an influence on tax compliance. Results from the correlation coefficient showed that, tax audit engagements and tax compliance are significantly and positively related. This means that when the GRA increases their tax audit engagements it results in an increase in the level of tax compliance and vice versa. A further analysis using bootstrap values and paths coefficients were done which indicated that, tax audits predict tax compliance ($\beta = 0.564$, $p = 0.000 < 0.05$). This shows a 56.4% variation of increase in tax compliance when tax audits among corporate entities increase by 1%. The results accounted from the path loadings of tax audits namely: $TA1 = 0.845$, $TA\ 2 = 0.847$, $TA\ 4 = 0.770$, $TA\ 6 = 0.860$, $TA\ 8 = 0.812$ and $TA\ 9 = 0.741$. Out of these above-highlighted aspects, $TA\ 6$ influenced the tax audit variable the most with $TA\ 9$ influencing it the least.

Research question two stated: *What is the impact of the relationship that exist between tax audit and tax education?*

In answering the question, the path coefficients and bootstrapping value analysis were conducted to examine the relationship between tax audit and tax education among corporate entities in Ghana. The correlation coefficient showed a significant and positive relationship between tax audits and tax education. This means that the more and more tax audits are performed, it serves as an opportunity to educate corporate tax payers on the tax laws and other expectations by the tax authorities.

Further analysis from the bootstrap values and path coefficients revealed that, tax audit engagements strongly predict the type of tax education relayed on corporate entities depending on the problems identified in the course of the tax audit. It further predicts a mean and p value of (β = 0.874, p = 0.000< 0.05) which explains 87.4% variations in the kind of tax education relayed. The results accounted from the path loadings of tax audits are namely: TA1 = 0.845, TA 2 = 0.847, TA 4 = 0.770, TA 6 = 0.860, TA 8 = 0.812 and TA 9 = 0.741.

Research question three sought to investigate: *What role does tax education play between the relationship between tax audit and tax compliance?*

In answering this question, path coefficients, bootstrapping and correlation analysis were conducted to investigate the mediating role of tax education between tax audits and tax compliance. The results from the correlation coefficient revealed that, tax education serving as a conduit between the two variables significantly and positively enhances future tax compliance levels. This posits that, the presence of tax education after tax audits aids in addressing specific corporate issues that contributes to a reduction in taxpayers' errors and enhances their knowledge in the new tax laws and the application of old laws. In a long run, the introduction of tax education after tax audits aids in enhancing tax compliance.

A further analysis using the bootstrap values and path coefficients indicates that, tax education significantly and positively mediates the relationship between tax audits and tax compliance (β = 0.167, p = 0.044< 0.05). However, the direct effect of tax audit on tax compliance is positive and significant at 5% (β= 0.568, p < 0.05) and can be

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concluded that, tax education complements the direct effect of tax audit on tax compliance. The results accounted from the path loadings of tax education are namely: TE 1 = 0.793, TE 2 = 0.844, TE 3 = 0.922, TE 4 = 0.924, TE 5 = 0.865, TE 6 = 0.909 and TE 7 = 0.781. Out of these above-highlighted aspects, TE 4 influenced the tax education variable the most with TE 7 influencing it the least.

The last research question sought to know: *How does Fear-appealing messages (FAM) moderate the linkage between tax audit and tax compliance among corporate entities in Ghana?*

In answering this question, path coefficients, bootstrapping and correlation analysis were conducted to investigate the moderating role of fear-appealing messages between tax audits and tax compliance. From the correlation analysis, it indicates that, FAM influences the relationship between tax audit and tax compliance significantly and negatively. This means that, when tax auditors choose to threaten corporate taxpayers with punishments, fines, penalties and imprisonment due to related inconsistencies and misapplications of the tax laws during the tax filing and reporting process, it tends to have a negative effect or reduces the level of tax compliance among corporate entities in Ghana.

The bootstrap and path coefficient values revealed that fear-appealing messages significantly and negatively affect the relationship between tax audits and tax compliance (β= -0.166, p < 0.05) and concluded that, when tax auditors penalize taxpayers instead of educating them, it leads to a high degree of unwillingness of some honest taxpayers in terms of payment while others deliberately fail to support tax auditors with the required information during the audit. Hence strengthening negative actions and attitudes towards

tax compliance which could cause defaulters to ally with unscrupulous officials to massage the figures. The results accounted from the path loadings of fear-appealing messages are namely: FAM 2 = 0.892, FAM 3 = 0.879, FAM 4 = 0.844 and FAM 6 = 0.806. Out of these above-highlighted aspects, FAM 2 influenced the fear-appealing messages variable the most with FAM 6 influencing it the least.

5.3 Conclusions

The study sought to evaluate the role of tax education as a mediator and fear-appealing messages as a moderator between tax audit and tax compliance among corporate entities in the Greater Accra Region of Ghana. From the evidences presented, the following conclusions can be made according to the objectives of the study:

Research objective one concluded that, tax audits affect tax compliance. The elevation in frequency of tax audit engagements by the GRA leads to a corresponding rise in the level of tax compliance, and conversely, a decrease in tax audits results in decreased tax compliance. These findings suggest that regular organization of tax audits, thorough selection of the tax audit unit, and the utilization of information systems during tax audits collectively contribute to the effectiveness of the tax audit process. Consequently, this contributes significantly and positively to the improvement of tax compliance.

Research objective two concluded that, there is a relationship between tax audit and tax education. As an increasing number of tax audits are conducted, it presents an opportunity to provide corporate taxpayers with education regarding tax laws and the expectations set forth by tax authorities. Considering the impact of tax audits on the educational approach directed towards taxpayers, individuals who receive education

immediately following tax audit procedures tend to raise the awareness levels among corporate taxpayers. This, in turn, leads to improved tax compliance in the future.

The third objective of the study concluded that, tax education serving as a conduit between the tax audit and tax compliance enhances future tax compliance. The inclusion of tax education following tax audits helps tackle specific corporate issues, leading to a decrease in taxpayers' mistakes and an improvement in their understanding of both new tax regulations and the implementation of existing ones. Taxpayers' capacity to adopt and adapt to new systems is contingent upon their adequate comprehension. In order to attain the objectives of voluntary compliance, taxpayers need to possess up-to-date, continuously enhanced, and reinforced tax literacy, particularly in matters related to taxation.

The fourth objective of the study concluded that, fear-appealing messages influences the relationship between tax audit and tax compliance inversely. The presence of such messages leads to a high degree of unwillingness of some honest taxpayers in terms of compliance while others deliberately fail to support tax auditors with the required information during the audit. While the use of fear-appealing messages (FAM) aims to discourage tax evasion, their increasing prevalence can involuntarily provoke taxpayers and potentially lead honest individuals to reluctantly report their taxes accurately, and on the other hand, deter dishonest behavior.

5.4 Recommendations

Based on the observed key findings and conclusions drawn above, the following recommendations are made:

The Ghana Revenue Authority (GRA) should continue increasing the frequency of tax audit engagements to improve tax compliance among corporate entities in Ghana. The study found that regular organization of tax audits, thorough selection of the tax audit unit, and the utilization of information systems during tax audits are all important factors that contribute to the effectiveness of the tax audit process. These strategies have been shown to enhance the quality of work and make taxpayers more alert at all times, which can lead to increased tax compliance.

Tax authorities in Ghana must take advantage of the opportunity presented by tax audits to provide corporate taxpayers with education regarding tax laws and expectations and as much as possible, consciously include it as part of the tax audit procedures. The study found that individuals who receive education immediately following tax audit procedures tend to raise awareness levels among corporate taxpayers, leading to future improved tax compliance. This education should be tailored to the specific needs of each taxpayer and should focus on areas where improvements can be made to enhance tax compliance. Tax authorities should also consider adopting the theory of planned behavior to guide the educational approach directed towards taxpayers.

Tax authorities in Ghana should exercise caution when using fear-appealing messages (FAM) in their communication with taxpayers. The researcher encourages GRA to utilize more balanced approach to their communication with taxpayers. Tax authorities should

consider supplementing their use of FAM with other communication strategies that focus on educating taxpayers about the benefits of tax compliance and the negative consequences of tax evasion. This approach is likely to be more effective in promoting voluntary compliance among taxpayers.

Furthermore, tax authorities should consider conducting research to identify the most effective communication strategies for promoting tax compliance among different segments of the taxpayer population. This will allow tax authorities to tailor their communication efforts to the specific needs and preferences of different groups of taxpayers.

5.5 Suggestions for future studies

The study acknowledges some limitations that could be addressed in future research. Based on these limitations, some suggestions for future research are:

The study focused on corporate entities in Ghana, specifically the Greater Accra Region. Future research could expand the scope to investigate the role of tax education and FAM in other jurisdiction of the country for comparative analysis on the impact of tax audits on tax compliance. Future research could also adopt a qualitative research design to provide an in-depth understanding of the factors that influences the relationship between tax audit and tax compliance among taxpayers in Ghana. The study concentrated only on the taxpayers' views to make inferences. It is advisable for future research endeavors to take into account the perspectives of tax auditors or combine both perspectives to enhance the quality of inferences and conclusions.

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The mediating role of tax education between tax audit and tax compliance is an area which has not been well explored. This study represents one of the latest contributions that have examined the mediating role of tax education between the predictive and response variables. Consequently, it strongly urges future researchers to conduct more comprehensive investigations into this field of study. The study used a cross-sectional research design, future research could adopt a longitudinal research design to investigate the changes in tax compliance behavior over time. Finally, the study focused on the Ghanaian context; future research could investigate tax compliance behavior in other African countries to provide a comparative analysis of tax compliance behavior across different countries.

Overall, future research could build on the findings of this study to provide a more comprehensive understanding of tax compliance behavior among taxpayers in Ghana and other African countries
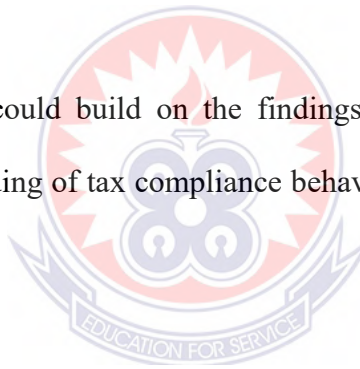
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APPENDIX

RESEARCH QUESTIONNAIRE

TOPIC: TAX AUDIT AND TAX COMPLIANCE IN GHANA: THE ROLE OF TAX EDUCATION AND FEAR-APPEALING MESSAGES.

Date: ………………

Dear Sir/Madam,

My name is Josephine Kesewaah Frimpong, a student from the University of Education, Winneba, and undertaking a study leading to the award of a Master of Philosophy in Accounting. This survey seeks your response about the impact of tax audit on tax compliance: analyzing the role of tax education and fear-appealing messages.

Responding to the questions will take about 8 to 10 minutes to complete. If you do not wish to answer a question, or if a question does not apply to you, you may leave your answer blank.

This is an entire scholarly exercise that considers the anonymity, privacy, and confidentiality of this conversation highly important.

But before I start, I need to seek your permission and time to go ahead. Do you agree to be part of the study?

Yes, I agree **[ ]** No, I disagree [ ]

Note that, there is no right or wrong answer, both answers (negative or positive) are equally important.

SECTION A

SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

1. Kindly indicate the industry your company falls in.`

a. Commerce / Trading [ ]   b. Service Industries [   ]   c. Manufacturing Industries [ ]

2. What is your current position in your company?

a. Accountant/ Finance Officer [ ] b. Internal auditor [ ] c. General manager [ ] d. Any other [ ]

Please specify…………….

3. Sex: a. Male [ ]   b. Female [ ]

4. Age: a.25-30 years [   ]   b. 30-39 years [   ]   c. 40-49 years [   ] d. above 50 years [ ]

5. Please specify your highest academic qualification.

 a. HND/ Bachelor's Degree [   ]   b. Master's Degree [   ] c. Ph.D. [   ]   d. Professional

certification [ ] e. Others [ ] Please specify……………..

6. How many years of working experience do you have?

a. 1-5 years [   ]   b. 6-10 years [   ]   c. 11-15 years [   ]   d. Above 15 years [ ]

SECTION B

GENERAL TAX AUDIT EXPERIENCES

7. How many times has GRA visited your premises in the past 10 years?

   a. 1-2 times [   ]   b. 3 -5 times [   ]   c. More than 5 [ ]

8. Which of the following best describes the activities performed by GRA during their visit to your premises?

a. Invoice invigilation [ ] b. Issue-based audit [ ] c. Comprehensive audit [ ] d. Refund audit [ ]

 e. any other [   ] please specify………..

SECTION C

EXPERIENCES WITH TAX COMPLIANCE

Please indicate the extent to which you agree to the following statements.

(1= Strongly disagree, 2= Disagree, 3=Fairly Disagree, 4=Neutral, 5=Fairly Agree, 6= Agree, 7= Strongly Agree)

	1	2	3	4	5	6	7
1. My company should be charged a penalty if the tax filed differs from the tax they are supposed to file.							
2. Criminal charges should be pressed against the company if management deliberately fails to file correct taxes.							
3. If it is detected that I have bribed tax officials, I should be handed over to the Economic and Organized Crime Unit.							

	1	2	3	4	5	6	7
1. A fair tax rate should be the same or proportional to income for every company irrespective of its size.							
2. Companies with high profits should be made to pay a higher tax rate than companies with low profits.							

	1	2	3	4	5	6	7
1. Preparing the corporate income tax return is difficult and ambiguous.							
2. The corporate income tax laws are relatively simple to understand and provide clearer guidelines when filing returns.							

	1	2	3	4	5	6	7
1. If my company suffers a cash flow crisis within a period, fulfilling tax obligations may not be a priority.							
2. Given the industry my company finds itself, it is more easily traceable for tax compliance than other companies.							
3. If the economy becomes difficult for businesses to survive, companies should be made to pay a lesser							

proportion of their income as tax.							

	1	2	3	4	5	6	7
1. To successfully render complete tax returns, my company requires the services of external consultants.							
2. The length of time invested in filing tax returns is enough to achieve better business performance.							

	1	2	3	4	5	6	7
1. The availability of needed information and guidelines enhances the payment of taxes							
2. The amount of information available is simple and clearer enough to render self-assessment returns without the services of external consultants.							

	1	2	3	4	5	6	7
1. The self-assessment system has increased fairness and made the entire tax process easy, accessible, and convenient.							
2. The revenue accrued from taxes is spent judiciously by the government.							
3. My company is committed to paying taxes because other companies do.							

SECTION D

RESPONSES TO TAX AUDIT AND ASSURANCE ENGAGEMENTS

Please indicate the extent to which you agree with the following statements.

(1= Strongly disagree, 2= Disagree, 3=Fairly Disagree, 4=Neutral, 5=Fairly Agree, 6= Agree, 7= Strongly Agree)

	1	2	3	4	5	6	7
1. During a visit by GRA officials to our company, they inspected all our invoices to ensure they conform to tax requirements.							
2. During a visit by GRA officials to our company, they audit all tax types including VAT, Withholding tax, PAYE, Corporate Income Tax, etc.							
3. GRA officials audit just one tax type during their visits.							
4. Tax audit is likely to expose the possible attraction of a refund (Tax credit) to the company.							
5. Tax audit notices make management apprehensive.							
6. Management willingly provides information and other details requested by the tax auditors in the course of tax audit engagements							
7. The tax auditor hardly tracks differences between turnover filed and actual turnover supposed to be filed.							
8. Tax auditor tracks differences in the expenses submitted in tax documents.							
9. Tax auditors are likely to track fake invoices in the course of tax audit engagements.							
10. Tax auditors are likely to track differences between the net profits submitted in tax documents and net profits supposed to be filed							

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SECTION E

RESPONSES TO FORMS OF TAX EDUCATION GIVEN AFTER TAX AUDIT

Please indicate the extent to which you agree to the following statements.

(1= Strongly disagree, 2= Disagree, 3=Fairly Disagree, 4=Neutral, 5=Fairly Agree, 6= Agree, 7= Strongly Agree)

	1	2	3	4	5	6	7
1. Entrance conferences are held to educate management on the expectation gap.							
2. Education on tax laws takes effect immediately after-tax audits.							
3. Tax education enhances future compliance by management.							
4. The form of education relayed after tax audits best handles/ reduces future tax evasion or avoidance practices and leads to voluntary compliance.							
5. The awareness of tax audits makes the company render satisfactory returns.							
6. Tax audit engagement serves as a supporting platform to educate taxpayers on tax laws and their application.							
7. I am aware of the company's right to object to a review of additional tax imposed after tax audit engagements.							

SECTION F

RESPONSES TO THE EFFECT OF FEAR-APPEALING MESSAGES

Please indicate the extent to which you agree to the following statements.

(1= Strongly disagree, 2= Disagree, 3=Fairly Disagree, 4=Neutral, 5=Fairly Agree, 6= Agree, 7= Strongly Agree)

	1	2	3	4	5	6	7
1. The prospect of tough penalties and fines deters the entity from evading taxes in the future.							
2. Entities that possess an awareness of penalties and fines for noncompliance are more compliant than those who do not possess such awareness.							
3. The absence of penalties and other legal enforcements will pursue the possibility of not obliging to tax laws and payments.							
4. The threat of the company facing legal charges due to discrepancies detected after tax audits plays a role in increasing future tax obligations and vice-versa							
5. My company has been faced with some of these threats of non-compliance							
6. The fear of imprisonment, delayed salary payment, or losing my job for discrepancies tracked by the GRA makes me file and pay accurate returns							

THANK YOU FOR YOUR TIME