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Examining the Effect of Formal Tax Education on Filing Compliance: The Mediation Role of Procedural Tax Knowledge within the Informal Sector of Ghana

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Abstract:
In Ghana, tax payment is considered a civic responsibility for all citizens and it is required for all to fulfil their tax responsibilities without hesitation. Nevertheless, in Ghana, few people barely pay taxes voluntarily, most especially within the informal sector. In view of this, the overall purpose of the study is to examine the effect of formal tax education on filing compliance and the mediation role of procedural tax knowledge within the informal sector of Ghana. The study adopted the Theory of Planned Behaviour. The study employed the quantitative research method and descriptive research design. Three critical variables underscored the study: formal tax education, filing compliance and procedural tax knowledge. The study obtained data from 1,152 SME business people within the Greater Accra Region of Ghana. The data was obtained using 11-item questionnaires. Individuals of SMEs within the indicated region were sampled using a multi-stage sampling technique made up of simple random sampling and snowball sampling. Data analysis was carried out using the partial least squares (PLS) tool through SMART-PLUS software. The study found that formal tax education exerts a significant impact on filing compliance. Additionally, the study discovered that formal tax education exerts a significant impact on procedural tax knowledge. Further, the study discovered that procedural tax knowledge exerts a significant impact on filing compliance. Moreover, the findings show that procedural tax knowledge mediates the effect of formal tax education on filing compliance. In conclusion, it was revealed that the mediating role of procedural tax knowledge, as revealed by the study, also amplifies the impact of education on the actual filing behaviour of informal sector business owners. It suggests that providing a solution to both theoretical comprehension and procedural capabilities is very critical in propelling voluntary compliance among informal sector businesses. This is not the only gain that tax authorities obtain by raising revenue; it is also achieved by fostering a milieu of accountability and transparency. Therefore, the study underpins the need for more comprehensive tax educational programs, especially those targeted at informal sector participants, with the aim of enhancing overall tax compliance.

Keywords: Tax knowledge, formal tax knowledge, compliance, filing compliance and procedural tax knowledge

1. Introduction

A lot of countries across the globe, of which Ghana is no exception, depend on taxation for revenue generation to meet the nation's expenditure requirements. According to Ndiaye et al. (2018), significant or large numbers of SMEs in developing countries such as Ghana do not pay taxes due to the informal nature of those businesses, leading to losses to governments. Further, taking into account the high level of tax evasion and avoidance within the informal sector of Ghana, the government has introduced diverse tax laws, policies and administrative strategies to widen the tax net with the aim of generating more revenue (Dube & Casale, 2016). Despite this, these outlined measures have yielded a limited level of outcomes, making the issue of non-compliance a major issue within the tax system. Further, within the corridors of Ghana, payment of tax is considered a civic responsibility for all citizens and is required for all to fulfil their tax responsibilities without hesitation (Asare, 2020). Nevertheless, in Ghana, a few people barely pay taxes voluntarily, most especially within the informal sector (Dube & Casale, 2016; Asare, 2020). Despite this, tax education and tax knowledge have been the major contributors to voluntary tax compliance (Abdallah et al., 2018). In this vein, diverse researchers have posited that many SMEs lack the required knowledge regarding tax laws, policies, regulations, processes and responsibilities (Ameyaw et al., 2018; Adams & Webley, 2019; Asare, 2020). This revealed that the knowledge gap mostly leads to unintentional non-compliance, as most SME owners often make mistakes in tax estimations and filling processes (Abdallah et al., 2018). Further, Asare (2020) claimed that without adequate comprehension of these issues, SMEs in Ghana have the propensity to miss out on crucial legal deductions and credits, thereby advancing the complication that exists in the tax situations of SMEs, resulting in disputes with tax authorities in Ghana. Moreover, Mbilla and Abiire (2020) indicated that with the existence of this issue, the issue of tax compliance, specifically filing compliance, becomes a major issue within the informal sector of Ghana. It has also been advanced that although initiatives underscoring formal tax education have been introduced by Ghana Revenue Authority (GRA) to provide information to taxpayers regarding their responsibilities, filing

compliance rates at the offices of GRA remain low (Ameyaw et al., 2018 Amaning et al., 2021). In view of this, it has been argued that knowledge of tax procedures will serve as a springboard in bridging the gap between formal tax education and filing compliance among SMEs (Ogaluzor & Edori, 2023). In addition, most scholarly works have examined the direct linkage between tax educational programs and compliance; however, few have looked at specific tax education indicators called formal tax education and compliance indicators called filing compliance, especially within the informal sector of Ghana. Essentially, there is a lack of empirical evidence underscoring how procedural tax knowledge mediates the relationship between formal tax education and filing compliance within Ghana's informal sector. In view of this, the study seeks:

- To examine the direct linkage between formal tax education and filing compliance within informal SMEs in Ghana and
- To assess the mediating role of procedural tax knowledge on the relationship between formal tax education and filing compliance.

2. Literature

2.1. Theory of Planned Behaviour (TPB)

The Theory of Planned Behaviour (TPB) was introduced by Ajzen (1991) and underpinned by three critical assumptions or elements: attitudes towards the behaviour, subjective norms, and perceived behavioural control (Ajzen, 1991). The outlined three elements indicate that an individual's behaviour is influenced or shaped by these critical elements. Therefore, in the context of filing compliance within the tax system, individuals with a high level of formal tax education can have their behaviours and attitudes shaped by offering them the required knowledge on the significance and benefits of tax compliance (Fishbein & Ajzen, 2011). This, in turn, has the capacity to propel positive attitudes towards filing taxes. In view of subjective norms such as societal expectations or peer pressure through education, individuals within the informal sector are in compliance with tax regulations among SMEs in Ghana (Ajzen, 2020). Thirdly, when it comes to the issue of perceived behavioural control, the better informal sector SME business comprehends the processes and procedures for tax filing, the more control they feel regarding the overall success in completing the whole process. This rise in control, supported by knowledge, skills, and expertise, improves the likelihood of filing compliance.

2.2. Formal Tax Education

According to Palil and Mustapha (2020), formal tax education deals with planned, structured, and systematic instruction designed to improve individuals' comprehension of tax processes, policies, regulations, filing processes and gains when it comes to compliance. This can be achieved through academic programs, teaching processes, seminars and learning through online platforms or systems. Asare (2020) indicated that when it comes to formal tax education, it helps to equip individuals and businesses with the required skills, expertise, knowledge and capacity to fulfill their tax responsibilities more precisely. By propelling an in-depth comprehension of tax policies, laws, and regulations, formal tax education fosters voluntary compliance, a reduction in errors, and a decline in tax evasion (Adams & Webley, 2019). In addition, Palil and Mustapha (2020) reported that tax education enhances the behaviour of taxpayers, resulting in a better rate of compliance and improved tax administration efficiency.

2.3. Filing Compliance

Kamleitner et al. (2019) claimed that filing compliance is the process whereby taxpayers adhere to legal responsibilities to timely and accurately file their tax returns. It also covers the process of submitting the required documentation, reporting income levels, deduction claims, and adherence to tax payments that are owed. It is regarded as a critical aspect of tax administration, as non-compliance, whether internal or due to lack of knowledge, expertise, or capacity, can lead to penalties, audits and legal effects (Gonidakis, 2024). Many governments and tax authorities globally most often implement strategies like tax education, which simplifies tax processes aimed at promoting tax compliance (Kamleitner et al., 2019). Diverse studies indicate that enhanced compliance raises the revenue of the government and propels fairness within the tax system (Kamleitner et al., 2019).

2.4. Procedural Tax Knowledge

According to Saad (2021), procedural tax knowledge deals with individuals' comprehension of the processes and procedures involved in tax filing and compliance, including completing tax reforms, meeting deadlines and applying deductions. It has been reported that greater levels of procedural tax knowledge are linked to a rise in tax compliance (Kamleitner et al., 2019). Saad (2021) argued that procedural tax knowledge can be improved through education aimed at reducing errors and unintended non-compliance.

2.5. Formal Tax Education and Filing Compliance

In the study by Kamleitner et al. (2019), a rise in taxpayers' knowledge due to education results in a rise in compliance behaviour. In addition, Saad (2021) reported that taxpayers with greater levels of tax education have a greater likelihood of ensuring filing compliance requirements. In a similar vein, Palil and Mustapha (2020) indicated that formal tax education lessens unintended non-compliance, thereby improving procedural knowledge and making them less prone to errors during the whole process of filing. Further, Awa and Lanis (2018) revealed that taxpayers with formal tax education in relation to tax-related matters are more likely to perceive tax compliance as a social norm propelling voluntary tax compliance, thereby reinforcing the positive attitudes of taxpayers.

2.6. Formal Tax Education and Filing Compliance, Mediated by Procedural Tax Knowledge

In the study by Saad (2021), the author reported that taxpayers with greater levels of tax education have a greater likelihood of ensuring filing compliance requirements. This study stresses that procedural tax knowledge raises perceived behavioural control, a critical aspect of the theory of planned behaviour, which improves compliance. In a similar vein, Palil and Mustapha (2020) indicated that formal tax education lessens unintended non-compliance, thereby improving procedural knowledge and making them less prone to errors during the whole process of filing. Furthermore, Awa and Lanis (2018) found that procedural tax knowledge mediates the linkage between education and compliance. Other studies, such as Frecknall-Hughes and Moizer (2019), claimed that procedural tax knowledge gained through education enhances compliance by reducing the perception of the tax system's complexity. Additionally, Tan and Liu (2021) and Kirchler (2019) showed a positive effect of procedural tax knowledge in propelling voluntary compliance.

3. Methodology

3.1. Method and Design

Overall, the study was carried out using quantitative research methods. The quantitative orientation provided the researcher with an insight into the study variables, such as procedural tax knowledge, filing compliance and formal tax education using numerical representation. It helped establish the relationship between procedural tax knowledge, filing compliance, and formal tax education. In addition, the study utilized the descriptive research design. This helped the researcher describe the data objectively and provide insight into the data utilized by the study.

3.2. Population and Sample Administration

The study targeted individuals and entities in the Greater Accra Region engaged in economic activities in the informal sector and thus classified as SMEs. Across various sectors of the economy of the Greater Accra Region, there exist 2,180 registered SMEs. The Greater Accra Region was used because, as a capital region of Ghana, it has a significant number of informal sector businesses (Ampaabeng, 2019). In light of this, the Krejcie and Morgan (1970) sample size determination formula was employed to obtain a sample size of 1,152 respondents. In addition, the study utilizes the multi-stage sampling technique made up of probability and non-probability sampling techniques, namely simple random sampling and snowball sampling. Simple random sampling was used to select four important sectors within the region: Agricultural, Commerce, Manufacturing and Service out of the fourteen sector categorizations by the International Standard Industrial Classification aggregation criterion across the Greater Accra Region. Further, the snowball sampling technique was employed to target identifiable group members or SME business owners within the region.

3.3. Data Collection and Analysis

The study utilized an 11-item questionnaire designed through the guidance of literature. The items for the design were sourced from studies such as Brown and Mazur (2003), Twum et al. (2020), Mohammed and Tangl (2024), Othman et al. (2020), Ogaluzor & Edori (2023), Gitaru (2017), and Saragih & Putra (2021). The questionnaire items covered three important areas: formal tax education, filing compliance and procedural tax knowledge. The questionnaire was designed using a 5-point Likert scale ranging from strongly agree, agree, neutral, disagree and strongly disagree. Data analysis was carried out using Structural Equation Modelling (SEM), specifically Partial least squares (PLS). The model consisted of two frameworks or models: the measurement model (outer model) and the structural model (inner model) (Hair et al., 2022). Besides the models, descriptive statistics and regression tools were employed to analyze the data.

4. Results and Discussion

4.1. Demographic Characteristics of Respondents

The study obtained information regarding the demographic features of study respondents. The features covered gender, age, marital status, level of education, employee size and issue of religious affiliation. This is shown below:

Demographic Areas	Category	FREQ.	Percent (%)
Gender	Male	667	58.0
	Female	485	42.0
	Sub-Total	1152	100.0
Employee Size	1-2 employees	464	40.0
	3-9 employees	516	45.0
	10-49 employees	139	12.0
	Above 49 employees	33	3.0
	Sub-Total	1152	100.0
Marital Status	Married	317	28.0
	Divorced	47	4.0
	Single	772	67.0
	Widowed	16	1.0
	Sub-Total	1152	100.0
Educational Level	Primary	45	4.0

Demographic Areas	Category	FREQ.	Percent (%)
	High School	224	19.0
	Diploma	355	31.0
	Graduate	528	46.0
	Sub-Total	1152	100.0
Religious Affiliation	Christian	883	77.0
	Muslim	252	22.0
	Traditional	17	1.0
	Sub-Total	1152	100.0

Table 1: Demographic Features
Source: Field Data, 2024

From table 1, it is vital to establish that out of 1152 respondents used by the study, the majority of the respondents (58%) were males and the rest of the respondents (42%) were females. In addition, a significant number of the SMEs had a maximum of 3 employees (45%), followed by those with 3 to 9 employees (45%), next are those with 10 to 49 employees (12%), and the lowest representation were those above 49 employees (3%). Further, a greater percentage of the respondents are single 67%), followed by those who are married (28%), next are those who are divorced (4%) and least represented are those widowed (1%). It is clear that the majority of the respondents, representing 46%, are graduates, followed by those with diplomas, representing 31%, and the lowest representation is those with the primary, representing 4%. Moreover, more than half of the respondents are Christians 77%, 22% are Muslims, and the least are those who are traditionalists 1%.

4.2. Measurement Model

In order to establish the validity and reliability of the data utilized by the study, a measurement model was obtained from the data evaluation. The outcome of the analysis is shown below:
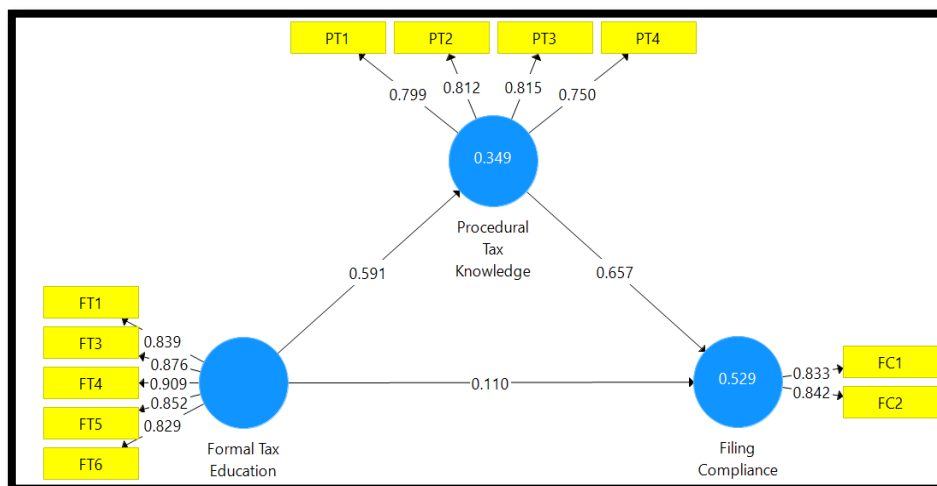

Figure 1: Model of Measurement

4.3. Factor Loadings

The factor loadings and multicollinearity statistics are presented in table 2 below:

Items	Filing Compliance	Formal Tax Education	Procedural Tax Knowledge	VIF
FC1	0.833			1.194
FC2	0.842			1.194
FT1		0.839		2.447
FT3		0.876		3.106
FT4		0.909		3.723
FT5		0.852		2.632
FT6		0.829		2.597
PT1			0.799	1.656
PT2			0.812	1.966
PT3			0.815	1.934
PT4			0.750	1.444

Table 2: Factor Loading and Multicollinearity Statistics (i.e. VIF)

The examination of data through factor loadings was guided by the study of Creswell (2019) and Goran (2013), who are of the view that the magnitude at which individual items are related to the principal construct or variable is what factor loading is about. Goran (2013) claimed that values for factor loading range from -1.0 to +1.0, with superior absolute scores indicating stronger correlations between the items and the underlying construct. The result shows that the factor loading score for filing compliance ranges from 0.833 to 0.842, illustrating a strong level of relationship with the filing compliance construct. In addition, the factor loading score for formal tax education ranges from 0.829 to 0.909, illustrating a strong level of relationship with the formal tax education construct. Furthermore, the factor loading score for filing compliance ranges from 0.750 to 0.815, illustrating a strong level of relationship with procedural tax knowledge construct. Generally, the findings imply that the values obtained show superior absolute scores, indicating stronger correlations between the items and the underlying constructs, namely filing compliance, formal tax education and procedural tax knowledge. Despite this, it has been argued that the issue of multicollinearity is not an issue if the VIF score is < 10 and not > 10. The result shows that VIF scores range from 1.194 to 3.723, illustrating that there is no issue of multicollinearity.

Additionally, the results from the goodness of fit show that filing compliance has an R square value of 0.529 and an Adjusted R square value of 0.528, as well as procedural tax knowledge with an R square value of 0.349 and an Adjusted R square of 0.348. This implies that 52.9 percent and 34.9 percent of disparities in filing compliance and procedural tax knowledge can be elucidated through formal tax education.

4.4. Reliability Results

The reliability analysis and results are presented in table 3 as shown below:

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Filing Compliance	0.775	0.775	0.825	0.702
Formal Tax Education	0.913	0.915	0.935	0.742
Procedural Tax Knowledge	0.805	0.804	0.872	0.631

Table 3: Reliability Results

Table 3 presents the reliability results. Firstly, the Cronbach's alpha result, which helps to measure the internal consistency of variables, a greater value of 0.7 and above is considered reliable, and less than 0.7 is regarded as unreliable (Hair et al., 2017; Creswell, 2019). In view of this, values such as filing compliance (0.775), formal tax education (0.913) and procedural tax knowledge (0.805) illustrate a greater level of internal consistency, indicating the existence of construct reliability among the study constructs. For the composite reliability (CR), the values include filing compliance (0.825), formal tax education (0.935), and procedural tax knowledge (0.872), illustrating a greater level of internal consistency and support for construct reliability. Furthermore, the result of convergent validity measured using Average Variance Extracted (AVE) explains the degree to which items specific to a particular construct positively correlate and share similar levels of variance with the major constructs (Hair et al., 2022). According to Creswell (2019), an AVE value greater than 0.50 is considered valid, and a value below that is considered invalid. In view of this, the AVE values include filing compliance (0.702), formal tax education (0.742), and procedural tax knowledge (0.631), illustrating the convergent validity of the study constructs.

	Filing Compliance	Formal Tax Education	Procedural Tax Knowledge
Filing Compliance	**0.838**		
Formal Tax Education	0.498	**0.861**	
Procedural Tax Knowledge	0.722	0.591	**0.794**

Table 4: Discriminant Validity – Fornell and Larcker Criterion

	Filing Compliance	Formal Tax Education	Procedural Tax Knowledge
Filing Compliance			
Formal Tax Education	**0.685**		
Procedural Tax Knowledge	1.059	**0.688**	-

Table 5: Discriminant Validity – HTMT

The result from the discriminant validity is presented in tables 4 and 5 for both Fornell and Larcker criterion and Heterotrait-Monotrait Ratio (HTMT), respectively. Hair et al. (2017) argued that discriminant validity is observed when the square root of Average Variance Extracted (AVE) for a given construct or variable exceeds its correlation with other constructs. Therefore, the result shows that the following ratios filing compliance (0.838), formal tax education (0.861) and procedural tax knowledge (0.794) illustrate that these values exceed their correlations with another construct, thus providing robust evidence for the establishment of discriminant validity. Moreover, when it comes to HTMT, Hair et al.

(2022) claimed that a threshold score of 0.85 and below shows the existence of discriminant validity. On the contrary, Teo et al. (2008) posited that a threshold of 0.90 or lower shows the existence of discriminant validity. Therefore, the results of formal tax education (0.685) and procedural tax knowledge (0.688) illustrate that the ratios were less than 0.90, confirming the existence of discriminant validity.

4.5. Structural Model

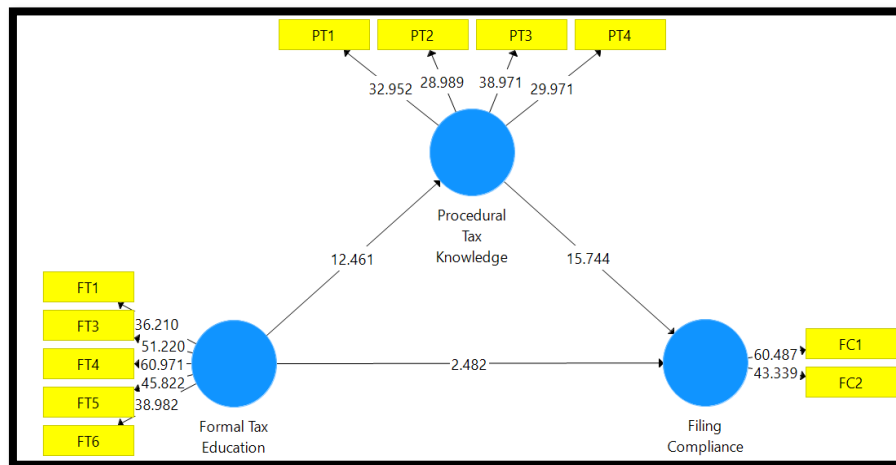The path analysis presented a structural model and is shown in figure 2 below:

Figure 2: Structural Model from Mediating Analysis

4.6. Direct Relationship Results

The direct association from the path coefficients is presented in table 6.

Paths	Beta Coefficient	T-Statistics	P-Values
Formal Tax Education -> Filing Compliance	0.110	2.482	0.013
Formal Tax Education -> Procedural Tax Knowledge	0.591	12.461	0.000
Procedural Tax Knowledge -> Filing Compliance	0.657	15.744	0.000

Table 6: Paths Results

From the analysis, the result shows that formal tax education exerts a significant impact on filing compliance shown as ($\beta = 0.110$, T = 2.482, p < 0.05). This is a positive impact, and a variance of 11.0% can be elucidated. This shows that each additional formal tax education provided to SMEs within the informal sector of Ghana leads to an 11.0% rise in filing compliance. This implies that SME owners or business individuals who received a well-structured, organized and planned education in relation to tax issues have a higher likelihood of complying with filing requirements within the tax system of the nation. This succinctly shows that well-structured tax education captured formal tax education provides taxpayers within the informal sector the required knowledge, skills, expertise, abilities and confidence or assurance to comprehend their responsibilities in relation to tax and the capacity to meet filing deadlines. Consequently, tax authorities can increase compliance rates within the informal sector of Ghana by instituting or expanding the formal tax system or frameworks or programs. These educational programs would be greatly beneficial in enhancing SMEs' awareness level in relation to filing responsibilities and procedures, thereby resulting in compliance and ultimately improving the tax revenue collection of the country. This aligns with the study by Kamleitner et al. (2019), which shows that a rise in taxpayers' knowledge due to education results in a rise in compliance behaviour. It also confirms the study by Saad (2021), which reported that taxpayers with greater levels of tax education have a greater likelihood of ensuring filing compliance requirements. It is also consistent with the study by Awa and Lanis (2018), which revealed that taxpayers with formal tax education in relation to tax-related matters are more likely to perceive tax compliance as a social norm propelling voluntary tax compliance, thereby reinforcing positive behaviour and attitudes of taxpayers.

Additionally, the result shows that formal tax education exerts a significant impact on procedural tax knowledge ($\beta = 0.591$, T = 12.461, p < 0.05). This is a significant positive impact, and a variance of 59.1% can be elucidated. This depicts that each additional formal tax education provided to SMEs within the informal sector of Ghana leads to a 59.1% rise in procedural tax knowledge. This, by implication, stresses the crucial role of tax education that is well-structured, organized, and planned in helping informal sector SME business individuals comprehend the technical aspects underpinning the tax filing. This result also shows that informal sector SMEs are able to navigate the tax system of the country as a result of the practical level of knowledge obtained through formal tax education. This supports the study by Saad (2021), who posited that procedural tax knowledge can be improved through education aimed at reducing errors and unintended non-compliance. It is also consistent with the study by Palil and Mustapha (2020), who indicated that formal

tax education lessens unintended non-compliance, thereby improving procedural knowledge and making them less prone to errors during the whole process of filing.

Further, the result shows that procedural tax knowledge exerts a significant impact on filing compliance shown as (β = 0.657, T = 15.744, p < 0.05). This is a significant positive impact, and a variance of 65.7% can be elucidated. This depicts that each additional procedural tax knowledge provided to SMEs within the informal sector of Ghana leads to a 65.7% rise in filing compliance. This implies that informal sector SMEs and their owners who are highly knowledgeable in tax processes and procedures are more likely to comply with filing requirements and systems. This shows that the knowledge level of taxpayers on tax filing systems and processes aids in reducing confusion and errors, which increases the likelihood of meeting the required timelines and fulfilling responsibilities. It is worth noting that ensuring that informal sector SMEs comprehend the filing procedures can aid in lessening the issue of non-compliance due to errors or misunderstandings, which can enhance the general impact of tax collection effectiveness and efficiency. This is in line with the study by Saad (2021), which stresses that procedural tax knowledge raises perceived behavioural control, a critical aspect of the theory of planned behaviour which improves compliance. In a similar vein, Palil and Mustapha (2020) indicated that formal tax education lessens unintended non-compliance, thereby improving procedural knowledge and making them less prone to errors during the whole process of filing.

4.7. Mediating Results

Indicators	Beta Coefficient	T-Statistics	P-Values
Formal Tax Education -> Procedural Tax Knowledge -> Filing Compliance	0.388	8.973	0.000

Table 7: Specific Indirect Effects

The result from table 7 shows the mediation outcome from the data analysis. The outcome shows that procedural tax knowledge mediates the effect of formal tax education and filing compliance indicated as (β = 0.388, T = 8.973, p < 0.05). This implies that formal tax education indirectly enhances filing compliance by improving informal sector SME individuals' comprehension of tax processes and procedures. This means that formal tax education, first and foremost, builds a procedural knowledge of individual taxpayers, such as SMEs, resulting in greater compliance. The procedural tax knowledge indicating its role as a mediator stresses the importance of concentrating educational programs not only on the basis of tax awareness but also on processes, practicals, and procedures, underscoring the whole tax system. This underscores the need to develop a comprehensive strategy that combines both theoretical and practical tax educational processes to help propel compliance at all levels. This confirms the study by Awa and Lanis (2018), which found that procedural tax knowledge mediates the linkage between education and compliance. It also aligns with the study by Frecknall-Hughes and Moizer (2019), who claimed that procedural tax knowledge gained through education enhances compliance through a reduction in the perception of the complexity of the tax system. Additionally, Tan and Liu (2021) and Kirchler (2019) showed a positive effect of procedural tax knowledge in propelling voluntary compliance.

5. Conclusion

Generally, the study found that formal tax education exerts a significant impact on filing compliance. In addition, the study found that formal tax education exerts a significant impact on procedural tax knowledge. Further, the study discovered that procedural tax knowledge exerts a significant impact on filing compliance. Moreover, it was revealed that procedural tax knowledge mediates the effect of formal tax education and filing compliance. It is worth noting that individuals who receive an education that is highly structured, planned, and organized have the most likelihood of complying with filing requirements. This is attributable to not only the formal tax education obtained but also procedural tax knowledge received, which deals with practical knowledge in navigating filing processes underscoring tax. The mediating role of procedural tax knowledge, as revealed by the study, also amplifies the impact of education on the actual filing behaviour of informal sector business owners. The findings also show that taxpayers within the informal sector who acquire formal tax education and procedural tax knowledge become highly confident in meeting their tax responsibilities, reduce errors in the filing process and have a greater likelihood of non-compliance. It suggests that providing a solution to both theoretical comprehension and procedural capabilities is very critical in propelling voluntary compliance among informal sector businesses. This is not the only gain tax authorities obtain by raising revenue but also fostering a milieu of accountability and transparency. Therefore, the study underpins the need for more comprehensive tax educational programs, especially those targeted at informal sector participants, with the aim of enhancing overall tax compliance.

6. Theoretical and Managerial Implications

Theoretically, the findings of the study align with Ajzen's theory of planned behavior (TPB), which revealed that three elements underpin behaviour modification: name attitudes, subjective norms, and perceived behavioural control. Formal tax education exerts a significant positive impact on filing compliance and depicts how taxpayers' understanding of tax regulations and obligations is achieved. The direct effect of procedural tax knowledge and its mediating role shows a direct link with perceived behavioural control, a critical dimension of TPB called perceived behavioural control. In view of this, as informal sector businesses gain greater confidence in their ability to file their taxes, they have the perception that the processes are less complex and convoluted, thereby ensuring a higher likelihood of compliance. This underpins TPB's assertion that a rise in knowledge propels perceived control, thereby encouraging behaviour (filing compliance) within the context of taxation.

At the managerial level, the findings of the study provide important insights for government agencies, tax authorities, and policymakers. In order to enhance filing compliance tax, most especially within the informal sector, it would be critical to invest in formal tax educational programs or initiatives that focus not only on general knowledge regarding tax but also on procedures underscoring the tax system. In this vein, it is appropriate that tax authorities consider offering seminars, online courses or tutorials, seminars and guidelines that are simplified to make filing processes and procedures easy and highly comprehensible. In addition, building the confidence of taxpayers within the informal sector through targeted educational strategies and initiatives will have the propensity of creating a sense of responsibility and greater control over the tax filing system. Further, policymakers can also employ these findings to tailor educational tax programs that cater to the specific problems faced by informal sector businesses, including greater access to digital resources. In view of this, by consolidating procedural tax knowledge and simplifying the tax filing system, tax authorities would have the capacity and the resources required to mitigate common challenges to compliance, thus enhancing the effectiveness and efficiency of revenue collection efforts.

7. Limitations of the Research

The study only focused on SME businesses within the informal sector of Ghana, specifically in the Greater Accra Region. Therefore, the findings, although with a large sample size, might not be generalized across all 16 regions of Ghana. Despite this, respondents were made to comprehend all questions posed to enhance findings and propel greater generalization across Ghana and Africa.

8. Future Research Recommendations

The following suggestions are provided for future researchers. It is vital for them to (1) expand the sample size to cover all other 16 regions of Ghana, (2) look at a comparative analysis of the topic in other African countries, (3) examine how general tax knowledge mediates the relationship between formal tax education and tax compliance.

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