



## Tax Education and Tax Compliance in Nigeria

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### Abstract

Inadequate tax compliance remains a major challenge that hinders revenue collection and national development in Nigeria. Despite government reforms, many eligible tax payers still evade their responsibilities, primarily due to lack of tax education and awareness. Therefore, this study examines the influence of tax education on tax compliance (filing, reporting, and payment dimensions) in Nigeria, focusing on three forms of tax education: formal education, informal education, and professional certification. The study employed a quantitative research design using a sample of 400 taxpayers. Primary data was gathered from the respondents using questionnaire (google form). The collected data were analysed using descriptive statistics and Ordinary Least Squares (OLS) regression technique. The findings reveal that formal education has a significant positive effect on tax compliance, indicating that structured learning enhances taxpayers' understanding and adherence to tax obligations. Informal education also exhibited a significant positive effect on compliance, suggesting that unstructured learning through social interactions and media is capable of improving tax compliance behaviour. Surprisingly, professional education was found to have a significant negative effect on tax compliance, indicating likely issues such as misuse of technical knowledge for aggressive tax avoidance strategies. Overall, the study concludes that tax education plays a pivotal role in promoting tax compliance in Nigeria and there is a need to reassess the content and ethical emphasis of professional certification programs. Based on these findings, the study recommends integrating tax education into formal curricula, enhancing the quality of informal tax education through reliable information dissemination, and restructuring professional certification programs to emphasise ethical standards and social responsibility thereby shaping professionals' attitudes toward honesty and civic duty.

**Keywords:** Formal tax education, Informal tax education, Professional tax certification, Tax compliance

### 1.0 Introduction

Taxation plays a significant role in the economic development of any country, providing the essential funds for public services such as healthcare, education, and infrastructure development (Ewa et al., 2020). In Nigeria, tax revenue represents a substantial portion of the government's income, although the country has struggled with low tax-to-GDP ratios. According to Okon (2024), Nigeria's tax-to-GDP ratio in 2023 stood at approximately 9.4%, which is a fall from the 10.86% reported in 2021 by the National Bureau of Statistics (NBS) and significantly lower than the African average of 16% (OECD/ATAF/AUC, 2024), indicating a considerable revenue gap. This shortfall is largely attributed to non-compliance, which is a major challenge in Nigeria's tax system.

Tax compliance is the extent to which taxpayers meet their tax obligations as mandated by law, encompassing timely filing of returns, accurate reporting of income, and prompt payment of taxes (Alawode & Adegbe, 2022). In the words of Sopekan et al. (2025), tax compliance is the "willingness of individuals and other entities to act within the spirit and letter of tax laws and regulations". Tax compliance in Nigeria faces numerous obstacles that extend beyond

merely understanding tax regulations. These obstacles include limited tax understanding among the populace, complex and redundant tax framework at various government levels, along with a weak administrative capacity characterised by inefficiency and corruption (Oladipo et al., 2025). Additionally, widespread skepticism towards the government, stemming from ineffective use of revenues, undermines voluntary compliance. Also, the prevalence of the informal sector, inadequate enforcement strategies, and pervasive poverty exacerbate the issue, as numerous individuals and businesses function outside formal tax systems or do not have the resources to comply (Enoch et al., 2025; Olaoye & Ekundayo, 2019). According to Adekoya (2019) and Hidayati et al. (2023) improving the knowledge capacity of tax payers via tax education and awareness programmes can help boost tax compliance. Consequently, this study investigates the nexus between tax education and tax compliance within the context of the Nigerian tax system.

Researches have demonstrated that tax education is a significant scheme that can be employed by the relevant tax authorities to increase tax compliance (Hidayati et al., 2023). Tax education improves compliance in Nigeria by deepening the understanding of tax regulations, and obligations. When individuals and enterprises comprehend how taxation functions and its significance, they are more likely to file correctly and make timely payments. It builds confidence in the tax system by reducing fear and uncertainty. According to Adekoya (2019), formal education improves tax compliance by elevating individuals' financial knowledge and comprehension of tax regulations, which nurtures favourable attitudes toward meeting tax responsibilities. Informal education through public campaigns, media outreach, and community engagement enhances understanding of the significance of taxation and reduces evasion by influencing social norms related to compliance (Adekoya et al., 2020) while professional certification enhances tax compliance by guaranteeing that accountants, auditors, and tax practitioners have current technical knowledge and ethical standards essential for precise tax reporting and advisory services (Awotimi, 2022). These types of education complement each other creating a holistic framework that enables individuals at various levels of society to understand their tax obligations and embrace voluntary tax compliance.

Numerous research efforts have investigated how tax education influences tax compliance, consistently reinforcing its positive influence. For instance, Simanullang et al. (2024) in Indonesia found that technology enhanced tax education fosters compliance by improving tax literacy. Oloyede and Nwachukwu (2021) similarly demonstrated that public awareness campaigns have enhanced tax compliance in the informal sector, while Oladipupo and Obazee (2016) highlighted the role of tax knowledge and penalties in shaping compliance behaviour among small and medium-sized enterprises in Nigeria. Onuoha et al. (2019) focused on the role of tax education in driving tax revenue growth, and Mohammed and Tangl (2023) in Hungary emphasised how education reduces taxpayers' perception of tax as punitive. These studies have integrated variables such as taxpayer awareness, penalties, and the quality of tax services in their analysis. However, this study distinguishes itself by exploring formal education, informal education, and professional/certification education as distinct variables of tax education. Furthermore, most existing studies in Nigeria have focused on specific regions, such as Lagos and Kaduna States (Oloyede & Nwachukwu, 2021; Mustapha et al., 2015), without taking a holistic approach of the entire country. Consequently, this study extends its scope of investigation beyond state boundaries and looks at how tax education affects tax compliance as a country.

Against the backdrop, this study examines the influence of tax education on tax compliance within the context of Nigeria, providing new insights into how educational interventions can improve tax compliance in this under-researched region. Specifically, the study examines if

formal education, informal education, and professional education have significant effects on tax compliance in Nigeria. The remaining aspect of this paper is divided into sections. Immediately after the introduction is the review of empirical and theoretical literature. Next is the methodology section and thereafter, the results and discussions of findings section. Lastly, the study closes with the conclusion and recommendation section.

## **2.0 Literature Review**

The literature review in this section comprises of a conceptual review, a theoretical framework, and then an empirical review. Together, these components provide a holistic perspective concerning the subject matter of tax education and tax compliance.

### **2.1 Tax Compliance**

The conceptualisation of tax compliance has been captured from various descriptions to include voluntary compliance, enforced compliance, administrative compliance, filing compliance, reporting compliance, and payment compliance (Kirchler, 2009; OECD, 2014; Okello, 2014; Sopekan et al., 2025; Tusubira, 2018). Specifically, tax compliance is the extent to which taxpayers adhere to established tax laws by accurately declaring income, submitting returns, and paying their tax obligations (Alm, 2019). Hartmann et al. (2020) see tax compliance as a behaviour influenced by both voluntary motivations and external enforcement, wherein individuals fulfill their tax responsibilities either willingly or under coercion. In contrast, Khozen and Setyowati (2023) argue that tax compliance extends beyond legal conformity, emphasising the role of perceptions of fairness, trust in governmental institutions, and the perceived value of public goods funded by taxes. Collectively, these perspectives suggest that tax compliance involves more than meeting legal requirements; it represents a dynamic interplay between individual behaviour, societal norms, and institutional enforcement. In addition, it suggests that the concept of tax compliance can be deconstructed into several core components, which include registration compliance, timely filing of returns, accurate income reporting, and payment compliance. According to Sopekan et al. (2025), numerous studies in both developed and emerging economies have investigated the factors that affect the extent of tax compliance among different entities and among these factors, the issue of tax education ranks high (Hidayati et al., 2023).

### **2.2 Tax Education**

Tax education has been widely explored as a critical tool for enhancing taxpayer compliance, with scholars offering various definitions of the concept. Mpangile (2023) define tax education as the systematic dissemination of knowledge and understanding regarding tax systems, obligations, and benefits, aimed at increasing taxpayer literacy and compliance. Similarly, Clercq (2023) emphasises that tax education involves not only the transmission of factual knowledge about tax laws but also fostering a sense of civic responsibility and ethical behavior toward tax compliance. On the other hand, Bawa and Boachie (2024) describe tax education as an intervention mechanism designed to bridge the knowledge gap between taxpayers and complex tax systems by providing accessible information on tax regulations, thus improving voluntary compliance. These definitions converge on the premise that tax education goes beyond mere information dissemination to encompass behavioural transformation and awareness-building. They collectively underline the multifaceted nature of tax education as both an informative and normative tool that addresses taxpayers' cognitive and behavioural challenges. In this study, tax education is represented by formal, informal, and professional/certification education. Formal tax education is usually provided within organized teaching setting, such as high schools, colleges, and various academic establishments, where individuals receive systematic instruction on the principles, policies, and responsibilities related to taxation (Othman et al., 2020). Informal tax education refers to the unstructured, non-formal

ways of learning that happen through social interactions, media channels, and community involvement (Obashoro-John & Findsen, 2023). It significantly influences taxpayers' attitudes and behaviours, often serving as a complement to formal education. Professional or certification education focuses on providing tax professionals with in-depth knowledge, technical expertise, and ethical guidelines needed for roles in tax advisory and compliance (Mulhollen, 2024). This factor is vital since tax professionals act as intermediaries between taxpayers and tax authorities, playing a significant role in shaping compliance behaviour.

### **2.3 Theoretical Framework**

The Fischer Tax Compliance Model, developed by Carol Ann Fischer in 1993, serves as a foundational framework in understanding the behavioral factors influencing tax compliance. Fischer, alongside her colleagues, proposed a model that integrates economic, psychological, and demographic variables to explain why taxpayers either comply with or evade taxes. Unlike earlier compliance models that predominantly focused on economic deterrents such as penalties and audits (Allingham & Sandmo, 1972), Fischer's model integrates psychological, demographic, and systemic factors, making it more adaptable to the complexities of developing economies like Nigeria.

The significance of this model to this study stems from its recognition of the crucial impact that education has on influencing taxpayer behavior. The model's integration of demographic factors, such as education, facilitates a detailed examination of how socio-economic inequalities in Nigeria affect tax behavior. For example, a considerable share of Nigeria's economy is represented by the informal sector, which frequently lacks a clear understanding of tax responsibilities (Ariyo, 2015). By focusing on both individual and systematic issues, the Fischer's model offers a thorough framework for comprehending how targeted tax education efforts can address compliance challenges within Nigeria's environment. This flexibility and relevance render the model not only theoretically sound but also practically useful for creating policies that improve tax compliance through educational initiatives and systematic changes (Oyedele, 2016).

### **2.4 Formal tax education and Tax compliance**

The study by Oladipupo and Obazee (2016) examined the effects of tax knowledge and penalties on tax compliance among small and medium-sized enterprises (SMEs) in Nigeria. Using a survey research design, data were gathered through questionnaires and analysed using the Ordinary Least Squares (OLS) regression technique. The findings revealed that tax knowledge had a significant positive impact on tax compliance, while tax penalties, although positively correlated, had an insignificant effect. The study concluded that increasing taxpayers' knowledge about tax obligations is more effective in promoting compliance than reliance on punitive measures.

In their research, Ogoun and Ekpulu (2020) examined the connection between educational level and tax compliance in Nigeria. Using an ex post facto research design, the research analysed data collected over 17 years (2002–2018) to investigate how government expenditure on education affects tax revenue, which served as a proxy for compliance. The findings demonstrated a positive relationship between government investment in education and tax compliance, suggesting that higher educational attainment fosters an understanding of tax obligations and promotes voluntary compliance. The study concluded that prioritizing education funding could serve as an indirect mechanism for improving tax compliance and enhancing public revenue collection.

Oladipupo et al. (2022) explored the effects of tax fairness and tax knowledge on the tax compliance behaviour of listed manufacturing companies in Nigeria. The study employed the Laffer Curve Theory and utilised a survey research method to collect data from 400 manufacturing companies across the consumer and industrial goods sectors. Analytical tools such as Correlation Analysis, ANOVA, and Multiple Regression Analysis were used to analyze the data. The results showed a significant positive relationship between taxpayers' perception of fairness and their willingness to comply, with a p-value of 0.006. Similarly, tax knowledge significantly influenced tax compliance, with a p-value of 0.000.

Flowing from the literature and theoretical framework, the study asserts that formal tax education has a significant effect on tax compliance in Nigeria (H1).

## **2.5 Informal tax education and Tax compliance**

Oloyede and Nwachukwu (2021) assessed the role of taxpayer education in enhancing tax compliance among operators in Nigeria's informal sector. Employing a survey research approach, the study gathered data from 400 individuals within a population of 19,383,447 spread over 12 states, with the sample size calculated using the Taro Yamane formula. The results indicated a positive correlation between taxpayer education levels and compliance. The research highlighted that regular educational and awareness initiatives by state tax authorities could enhance compliance rates within the informal sector, which frequently lacks understanding of tax responsibilities.

The study by Ogaluzor and Edori (2023) focused on the relationship between tax education and compliance among informal sector operators in Abia and Rivers States, Nigeria. Utilising a survey approach, the researchers distributed 120 questionnaires, of which 114 were retrieved and analysed using Pearson correlation. The findings indicated a notable connection between tax education, particularly electronic taxpayer education, stakeholder awareness initiatives, and educational programs through print media, as well as compliance measures such as timely filing, registration, and prompt payment of liabilities. The study concluded that improved taxpayer education positively influences compliance behaviour and recommended that tax authorities invest in diverse educational programs to boost awareness and compliance within the informal sector.

Ellawule et al. (2024) investigated the moderating effect of tax knowledge on the relationship between tax rates and tax compliance among micro, small, and medium enterprises (MSMEs) in Nigeria. Using a sample of 304 respondents, drawn from an initial 500 distributed questionnaires, stratified and proportional sampling techniques were applied to ensure adequate representation. The research revealed that an understanding of taxation enhanced the connection between tax rates and compliance, highlighting the critical role of literacy in influencing taxpayer behavior. Additionally, tax rates and tax knowledge, on their own, had notable positive impacts on compliance. Flowing from the literature, the study asserts that informal tax education has a significant effect on tax compliance in Nigeria (H2).

## **2.6 Professional education and Tax compliance**

Adekoya (2019) examined the relationship between taxpayer education and tax compliance in Lagos state, Nigeria. A cross sectional survey was conducted on a sample of individual tax payer in the state. Primary data was collected using a questionnaire with a five-point likert scale. The data collected was presented with the use of descriptive statistics, while both simple linear and multiple regressions were used in the estimation of the regression models developed. The results from the analyses revealed that taxpayer education has a significant positive effect on tax compliance. Awotomilusi (2022) examined the effect of tax administrator's professional skills and tax audit on voluntary compliance taxpayers in Nigeria. The survey research design was used in the study. The population of the study consisted of 120 staff in the FIRS Abuja.

The whole population purposively used as sample. Data was collected through the use of questionnaire. The result revealed that when tax audit and tax administrators' professional skills are used, the level of voluntary compliance by taxpayers increases in Nigeria. Also, it was revealed that there is statistically significant relationship between tax administrator's professional skills, tax audit and tax compliance. Flowing from the literature and theoretical framework, the study asserts that professional education has a significant effect on tax compliance in Nigeria (H3).

## **2.7 Gaps in Literature and Research Justification**

Despite the plethora of studies investigating the determinants of tax compliance in Nigeria, a critical review of the extant literature reveals specific conceptual, contextual, and methodological gaps that this study addressed.

A significant conceptual gap exists regarding the decomposition of tax education. While prior studies such as Oladipupo and Obazee (2016) and Ellawule et al. (2024) established the relevance of "tax knowledge" and "taxpayer education," they largely treated these concepts as monolithic variables and focused narrowly on general awareness. Although few studies like Ogoun and Ekpulu (2020) and Oloyede and Nwachukwu (2021) have systematically disintegrated tax education into distinct dimensions, none of these studies integrates these three distinct educational streams into a single holistic framework to determine which mode of education most significantly drives voluntary compliance. Furthermore, there is a notable geographical and contextual gap in existing empirical evidence. The majority of studies on tax compliance in Nigeria are geographically restricted or sector-specific. For example, Adekoya (2019) and Ogaluzor and Edori (2023) limited their investigations to specific sub-national entities like Lagos, Abia, and Rivers States, respectively.

Similarly, studies by Oladipupo et al. (2022) and Oloyede and Nwachukwu (2021) restricted their scope to specific economic sectors, such as listed manufacturing companies or the informal sector. These restricted scopes limit the generalizability of findings to the broader Nigerian tax system. This study addressed this limitation by adopting a country-wide approach, extending the scope of investigation beyond state boundaries to provide a more macroeconomic perspective on how tax education influences compliance across Nigeria. More so, methodological gaps exist regarding the measurement of variables. Some existing studies, such as Ogoun and Ekpulu (2020), relied on ex post facto designs using secondary data (government expenditure on education) as a proxy for tax compliance behaviour. This indirect measurement often fails to capture the behavioral and psychological nuances of the taxpayer. By employing a primary data approach that assesses formal, informal, and professional education as direct independent variables, this study offers a more robust and direct assessment of the behavioral nexus between education and tax compliance in Nigeria.

## **3.0 Methodology**

This section comprises of the research design, sampling technique, sample size, model specification and data analysis techniques.

### **3.1 Research Design and Sampling**

This research adopts a cross-sectional survey research design. In cross-sectional studies, researchers examine a subject matter across widely dispersed respondents at a specific point in time, which makes this method appropriate for the present study. The population of this study is infinite and consists of tax payers in Nigeria. The Cochran's (2005) sampling technique was utilized to determine the minimum sample size of 384 respondents. However, to account for attrition, 400 copies of questionnaires were distributed to respondents using goggle form.

According to Saunders et al. (2016: 283) one way to address attrition in responses is for the researcher to “estimate the likely response rate – that is, the proportion of cases from your sample who will respond or from which data will be collected – and increase the sample size accordingly”.

### 3.2 Model Specification

This study’s model was adapted from the study of Oladipupo and Obazee (2016).

Their model was:

$$TCOMP = \alpha_0 + TKNOW\beta_1 + TPEN\beta_2 + \varepsilon \text{ ----- (1)}$$

The modified model of this study is stated in equation (2);

$$TCOMP_i = \beta_0 + \beta_1 FEDU_i + \beta_2 IEDU_i + \beta_3 PEDU_i + \beta_4 GEN_i + \varepsilon \dots \dots (2)$$

Where; TCOMP = Tax Compliance, FEDU = Formal Education, IEDU = Informal Education, PEDU = Professional, GEN = Gender (control),  $\beta_0$  – Slope,  $\beta_1, \beta_2, \beta_3, \beta_4$ - Coefficients,  $\varepsilon$  – Error term

### 3.3 Method of Data Analysis

This study employed both descriptive and inferential analyses. The descriptive comprised of descriptive statistics and correlation while the ordinary least squares regression technique formed the substance of the inferential analysis. To ensure robustness of result, the classical diagnostic tests were conducted. In addition, the ordered regression technique was used as a secondary tool for inferential analysis. The measurements of the variables used in this study are presented in Table 1.

## 4.0 Results and Discussions

**Table 2 Descriptive Statistics**

	TCOMP	FEDU	IEDU	PEDU	GEN
Mean	3.892	3.528	3.449	3.397	0.583
Median	4.000	3.600	3.600	3.400	1.000
Minimum	1.400	1.000	1.000	1.000	0.000
Maximum	5.000	5.000	5.000	5.000	1.000
Std. Dev.	0.841	0.892	0.886	0.907	0.494
Jarque-Bera (Prob.)	0.000	0.010	0.023	0.026	0.000

TCOMP = Tax Compliance; FEDU = Formal Education; IEDU = Informal Education; PEDU = Professional Education; GEN = Gender

Source: Extraction from Eviews 10

The descriptive statistics presented in Table 2 provides insights on the characterization of variables. The mean value for TCOMP (3.892) is approximately 4, suggesting a general consensus among the respondents on their moderate extent of compliance with tax obligations. Among the independent variables, FEDU has the highest mean (3.528), followed by IEDU (3.449) and PEDU (3.397). Collectively, these statistics indicate that formal education is perceived to contribute more to tax compliance than informal education and professional education. The mean for gender (GEN) is .583. Since this is a categorical variable, this value indicates that 58.3% of the respondents are women, making the proportion of men 41.7%. These show a near-balanced gender distribution for the respondents.

In terms of variability, PEDU exhibits the highest standard deviation (0.907), reflecting greater dispersion in responses regarding professional education, while TCOMP has the lowest (0.841), indicating a relative more consistent view of tax compliance among respondents. Lastly, the probability values of the Jarque-Bera statistics does not support the assumption of normality of the variables and with p-values less than the 0.05 threshold, there is significant

deviation from normality, necessitating the use of spearman rho correlation (Schober et al., 2018).

**Table 3 Correlation Matrix**

	TCOMP	FEDU	IEDU	PEDU	GENDER
TCOMP	1.000				
FEDU	0.528*	1.000			
IEDU	0.417*	0.784*	1.000		
PEDU	0.338*	0.734*	0.820*	1.000	
GENDER	-0.235*	-0.006	0.095**	0.019	1.000
VIF	NA	2.911	4.558	3.623	1.034

\* Sig @ 1%; \*\* Sig @ 10%;

Source: Extraction from Eviews 10

The correlation analysis presented in Table 3 reveals that TCOMP exhibits a positive correlation with FEDU,  $r_s(398) = .528$ ; IEDU,  $r_s(398) = .417$ ; PEDU  $r_s(398) = .338$ ; but a negative association with GEN  $r_s(398) = -.235$ . Inferring from the correlation coefficients and in conjunction with the interpretation table in Schober et al. (2018), TCOMP's correlation with FEDU and IEDU can be described as moderate while the correlation with PEDU and GEN can be viewed as weak. These values indicate that there is a consistent relationship between tax compliance and all the explanatory and control variables, wherein an increase in tax compliance levels corresponds with a rise in the levels of formal, informal, and professional education respectively. Additionally, strong inter-correlations exist among the independent variables, particularly between IEDU and PEDU ( $r_s = .820$ ), FEDU and IEDU ( $r_s = .784$ ), and FEDU and PEDU ( $r_s = .734$ ) suggesting that different forms of education and training are closely linked in shaping respondents' tax compliance behavior. Furthermore, none of the variables have a coefficient value greater than 0.90, indicating the absence of any serious multicollinearity problem (Kim, 2019). This is equally buttressed by the results of the variance inflation factor test with values ranging from 4.558 to 1.034.

**Table 4 OLS Regression without Robust Std. Error**

Variable	Coef.	Std. Error	t-Stat.	Prob.
FEDU	0.549	0.064	8.592	0.000
IEDU	0.173	0.080	2.156	0.032
PEDU	-0.212	0.070	-3.025	0.003
GENDER	-0.400	0.069	-5.815	0.000
C	2.311	0.148	15.639	0.000
R-squared	0.377			
Adjusted R-squared	0.371			
F-statistic	59.876			
Prob. (F-statistic)	0.000			
Breusch-Godfrey Serial Correlation LM (Prob.)	0.000			
Breusch-Pagan-Godfrey Heteroskedasticity Test (Prob.)	0.000			
Ramsey RESET Test (Prob.)	0.411			

Source: Extraction from Eviews 10

In Table 4, the result shows that the joint relationship among the variables is statistically significant  $F(4, 396) = 59.876$ ,  $p < .001$ , R squared = .377 and indicating that 37.7% of the systemic variation in tax compliance is explained by the independent and control variables in this study. This slightly reduces to 37.1% when adjusted for the degree of freedom. However, based on the significant p-values of the Breusch-Godfrey test for serial correlation and the Breusch-Pagan-Godfrey test for heteroskedasticity, this study concludes that higher order

autocorrelation is present and that the residuals are not homoscedastic. Consequently, to ensure reliance of the regression estimation, the regression has to be redone using robust standard errors.

**Table 5 OLS Regression with Robust Std. Error**

Variable	Coef.	Std. Error	t-Stat.	Prob.
FEDU	0.549	0.066	8.354	0.000
IEDU	0.173	0.084	2.069	0.039
PEDU	-0.212	0.077	-2.764	0.006
GENDER	-0.400	0.091	-4.399	0.000
C	2.311	0.320	7.213	0.000
R-squared	0.377			
Adjusted R-squared	0.371			
F-statistic	59.876			
Prob. (F-statistic)	0.000			
Wald F-statistic	70.187			
Prob. (Wald F-statistic)	0.000			

Source: Extraction from Eviews 10

Having corrected for serial correlation and heteroskedasticity using robust standard error option, from Table 5, the Wald statistics result shows that the joint relationship among the variables is statistically significant  $F(4, 396) = 70.187, p < .001$ , hence, the outcomes can be used for policy recommendations. Focusing on the effect of the individual variables, Table 5 also reveals that formal education ( $\beta = 0.549; p < .001$ ), informal education ( $\beta = 0.173; p = .039$ ) and professional education ( $\beta = -0.212; p < .01$ ) have significant effects on tax compliance. Specifically, both formal and informal education have statistically significant positive effect on compliance while professional education has a negative significant effect on compliance. The control variable (gender) equally exhibited a significant negative effect on compliance. Conclusively, all the hypotheses of a significant effect are accepted in this study at the 5% significance level because none of the probability values are greater than .05.

**Table 6 Robustness Test using Ordered Logistics Regression**

Variable	Coefficient	Std. Error	z-Statistic	Prob.
FEDU	0.754	0.099	7.613	0.000
IEDU	0.251	0.113	2.207	0.027
PEDU	-0.263	0.110	-2.383	0.017
GENDER	-0.658	0.119	-5.548	0.000
Pseudo R-squared	0.157			
Schwarz criterion	2.200			
Hannan-Quinn criter.	2.152			
LR statistic	155.164			
Prob(LR statistic)	0.000			

Source: Extraction from Eviews 10

The results from the ordered logistics regression in Table 6 are not significantly different from the results from the OLS regression. Both results show that both formal and informal education have statistically significant positive effect on compliance while professional education has a negative significant effect on compliance. The control variable (gender) equally exhibited a significant negative effect on compliance. Therefore, the findings from this study are robust, reliable, and not by chance.

## 4.2 Discussion of Findings

The findings reveal that formal education significantly enhances tax compliance, underscoring the importance of structured learning environments in fostering taxpayer awareness and responsibility. This aligns with findings by Bodea and LeBas (2016); Othman et al. (2020), who highlight that integrating tax education into the school curriculum has the potential to inculcate a culture of tax compliance from an early age.

Informal education showed significant effect, suggesting that unstructured learning through social interactions and media is capable of improving tax compliance behaviour. This finding aligns with the positions of Emmanuel et al. (2023) and Mascagni et al. (2024) that found that taxpayers exposed to targeted education campaigns displayed higher levels of compliance, with evidence suggesting an increase in voluntary tax payments in regions where such initiatives were implemented. In addition, the finding on the effect of informal education on tax compliance is supported by the study of Ogaluzor and Edori (2023) that focused on the relationship between tax education and compliance among informal sector operators in Abia and Rivers States, Nigeria and discovered a notable connection between tax education and compliance, particularly electronic taxpayer education, stakeholder awareness initiatives, and educational programs through print media.

Professional education was found to have a significant negative effect on tax compliance, indicating potential issues such as overconfidence among certified professionals or misuse of technical knowledge for aggressive tax avoidance strategies. This finding is at variance with the study of Oladipupo et al. (2022) that explored the effects of tax fairness and tax knowledge on the tax compliance behaviour of listed manufacturing companies in Nigeria and found amongst others that tax knowledge significantly influenced tax compliance positively, with a p-value of 0.000.

## 5.0 Conclusion and Recommendations

### 5.1 Conclusion

The study concludes that tax education plays a pivotal role in promoting tax compliance in Nigeria and there is a need to reassess the content and ethical emphasis of professional certification programs. Furthermore, the study recommends integrating tax education into formal curricula, enhancing the quality of informal tax education through reliable information dissemination, and restructuring professional certification programs to emphasise ethical standards and social responsibility.

### 5.2 Recommendations

This study makes a significant contribution to the body of knowledge on tax education and compliance by offering a nuanced understanding of how different forms of tax education influence taxpayer behaviour in Nigeria. The study equally expands existing literature by revealing the nature and interplay between tax education types and compliance behaviour. Future studies may consider expanding the scope of this study by focusing on a comparative study across various states or between urban and rural areas which could provide deeper insights into regional differences in tax education and compliance. Additionally, Future studies might consider using a mixed-methods strategy that integrates quantitative surveys with qualitative methods like interviews or focus group discussions to achieve a deeper insight into the reasons and obstacles related to tax compliance behaviors.

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