

Financial Literacy, Perceived Justice in the Tax System and Tax Compliance: A Sub-Saharan African Perspective

Prince Dacosta Anaman ¹, Ibrahim Anyass Ahmed ², Richmell Amanamah ³

*University of Ghana Business School – Department of Accounting, Legon-Accra, Ghana*¹

*School of Business – Department of Accounting, University of Education, Winneba, Ghana*²

*Accounting Department, Akonten Appiah-Menka University of Skills Training and Entrepreneurial Development, Tanoso-Kumasi, Ghana*³

ABSTRACT

This study explores the relationship between financial literacy, perceived justice in the tax system, and tax compliance behaviour among individuals in Ghana's informal sector. Using a self-administered questionnaire, data was collected from business owners in the Greater Accra region. The data was analysed using descriptive statistics, correlation, and multiple regression analyses in SPSS and Process MACRO for SPSS. The results indicate that higher levels of financial literacy and perceptions of justice in the tax system positively influence tax compliance. Furthermore, perceived justice moderates the relationship between financial literacy and tax compliance, with the relationship being stronger when individuals perceive the tax system as fair. These findings suggest that both financial literacy and an equitable tax system are essential in fostering voluntary tax compliance in Ghana's informal sector. The study highlights the need for policymakers to create and sustain transparent and fair tax systems, alongside implementing financial literacy programs tailored to the needs of the informal sector. Thus, by improving the perception of tax fairness and enhancing financial literacy, there is potential for increased voluntary tax compliance, which could result in higher tax revenues and better funding for public services. This, in turn, could contribute to the overall economic growth and development of Ghana.

Corresponding author: dacostaanaman057@gmail.com

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Introduction

Taxing the informal sector in a developing country like Ghana is very important because a large percentage of the population engages in informal business activities (Anaman & Ahmed, 2021). Nevertheless, there are still issues in complying with tax which affects the revenue generation process of the government.

Taxation plays an important role in generating national revenue and ensuring equitable redistribution of resources (Jensen, 2022; Resnick, 2021). A tax system, governed by legislation, helps achieve economic and social objectives (Agrawal & Wildasin, 2020; Carsamer & Abbam, 2023; Jensen, 2022). The fundamental objective of imposing targeted taxes on the populace is to generate revenue for the state, which is then used to cover public expenditures (Jensen, 2022; Resnick, 2021). However, as pointed out by Ataguba (2021), taxes have multiple other functions, one of which is to reduce economic inequality by redistributing income and wealth. In addition, tax systems are established to achieve social objectives, such as protecting the environment and deterring certain actions that are seen as undesirable (Anaman & Ahmed, 2021; Jensen, 2022). For instance, excise taxes on alcoholic drinks and tobacco goods aim to discourage consumption, which in turn encourages a healthier lifestyle. Citizens are urged to adhere to tax regulations since taxes are important to a nation's administration. According to Alm (2019) and Prichard et al. (2019), tax compliance is a requirement for a tax system to be effective.

Taxpayers are considered to fully comply with the law when they accurately and promptly report their income and pay all taxes owed (De Neve et al., 2021; Prichard et al., 2019). Tax compliance behaviour is defined as the accurate and timely reporting of taxable income and the payment of taxes owed, as mandated by law (Alm, 2019). According to Bello and Kasztelnik (2022), non-compliance, including tax evasion and avoidance, poses a significant threat to the fiscal health of a nation by reducing the tax revenue governments can collect. The taxpayers sometimes have their perception of the tax laws; whether the laws are fair to everyone paying the taxes or not. This perception of the tax laws affects the compliance of such tax laws. Perceived justice in the tax system is defined as taxpayers' subjective assessment of how fair a tax system is (Azmi et al., 2016). How taxpayers view the fairness and justice of the system influences their attitudes and behaviours towards tax compliance (Naeem & Gulzar, 2021). Also, according to Faizal et al. (2017) and Güzel et al. (2019), perceived justice in the tax system (including distributive, procedural and retributive justice) influences tax compliance behaviour. Research consistently shows that perceived fairness in the tax system, whether distributive (Roberts & Roberts, 2020), procedural (Gobena & Van Dijke, 2017; Niesiobędzka & Kołodziej, 2020), or retributive (Mahangila & Holland, 2015; Tan & Braithwaite, 2018), has a significant impact on tax compliance. Taxpayers are more likely to comply when they believe the system is fair, both in terms of the distribution of tax burdens and the procedures involved. Therefore, a tax system perceived as fair by taxpayers can foster higher tax morale (the intrinsic motivation to pay taxes) and lower incidences of tax evasion.

Financial literacy refers to making informed choices regarding one's financial situation (Goyal & Kumar, 2021). According to Lusardi (2019), the demand for financial services, savings, risk management, intermediation, and development are all enhanced when individuals can better understand and manage their financial resources. According to research, an individual has an easier time complying with tax regulations and paying their taxes when they are financially literate and have information on taxes (Intansari, 2022; Resmi et al., 2019). Furthermore, Wiquar et al. (2022) posit that if an individual does not have an understanding of the areas of finance and taxes, then it is very probable for that individual to not comply with the rules that govern taxes. Also, responsible financial behaviour, such as tax compliance, requires financial literacy (Goyal & Kumar, 2021). According to Nichita et al. (2019), individuals with a stronger understanding of personal finance are typically more adept at comprehending and adhering to different tax requirements. They are more likely to pay their taxes accurately and on time since they know how important it is to do so.

Consequently, enhancing financial literacy has been recognized as an effective strategy to increase tax compliance (Faing & Chang, 2021). The effect that financial literacy has on an individual's tax compliance levels is significantly influenced by other factors, one of which is the perception of justice in the tax system. This perception according to Faizal et al. (2017), is formed by various elements, including the perceived fairness in the distribution of tax burdens, the processes and procedures involved in tax administration, and the penalties imposed for non-compliance. Thus, when taxpayers have faith in a fair system, they are more inclined to voluntarily adhere to tax requirements (Faizal et al., 2017; Jimenez & Iyer, 2016; Mukhlis et al., 2015; Naeem &

Gulzar, 2021). In such instances, the motivation to comply stems not from a comprehensive understanding of tax obligations, but from the belief in the inherent fairness of the tax system (Jimenez & Iyer, 2016). This highlights the significance of perceived fairness as an important factor in tax compliance behaviour. Therefore, even though they are well-versed in the tax code, those who feel the system is unjust may opt to avoid paying their fair share of taxes as a protest or a means of self-defence (Güzel et al., 2019; Nasution et al., 2020). Consequently, although financial literacy is a significant factor in promoting tax compliance, it is not the only one. How individuals feel about the tax system's fairness can impact this relationship. Thus, one's financial knowledge and socio-psychological beliefs of justice and fairness influence their compliance with tax rules.

As a result, the purpose of this research is to examine how tax compliance and financial literacy are related to how people believe the system is fair to everyone. Questions that form the basis of the research include: (1) how does tax compliance relate to financial literacy? and (2) Is there a moderating effect of perceived justice in the tax system on the relationship between tax compliance and financial literacy? This research addresses a gap in knowledge in the literature by examining how tax compliance, financial literacy, and perceptions of fairness in the system all interact with one another. While previous research has examined the individual influences of financial literacy and perceived justice on tax compliance, this study takes a step further by investigating how these factors interact. In addition, there has been a dearth of research into the relationship between financial literacy and tax compliance, as well as how the two interact with perceptions of fairness in the tax system. Finally, this study addresses an important aspect of tax compliance behaviour that extends beyond economic rationality. It recognizes the role of perceptions of justice and fairness in shaping taxpayers' attitudes and behaviours. This study adds to our knowledge of tax compliance behaviour by taking subjective criteria like perceived tax justice into account. This new perspective can help shape more effective policy interventions and initiatives.

Literature Review

Overview of Taxation and The Ghanaian Tax System

Taxation is a key component of modern economies since it helps governments obtain money to fund public goods and services (Pantazatou, 2018). It is the process through which individuals and businesses are obligated to transfer a portion of their income or resources to the government in the form of taxes (Niesiobędzka & Kołodziej, 2020). These taxes are collected by tax authorities and are utilized for various purposes, including infrastructure development, education, healthcare, social welfare programs, and defence (Anaman & Ahmed, 2021). Different types of taxes exist, such as income tax, value-added tax (VAT), corporate tax, excise tax, customs duties, and property tax (Anaman & Ahmed, 2021; Pantazatou, 2018). Thus, to fulfil their tax responsibilities and stay in compliance with the law, people should familiarise themselves with the principles and framework of taxes (Bird & Davis-Nozemack, 2018; Gitaru, 2017). The Ghanaian tax system helps generate revenue for the government and supports public expenditure in the country (Anaman & Ahmed, 2021; Tee et al., 2016). The tax system in Ghana is composed of various taxes, each serving a specific purpose and imposed on different sources of income and economic activities.

One of the most important parts of Ghana's tax system is the income tax (Ameyaw, Korang, et al., 2016). Businesses and individuals are subject to it in proportion to their profits or income. The progressive income tax system in Ghana means that a larger portion of one's income is subject to taxation (Twum et al., 2020). The Ghana Revenue Authority (GRA) is responsible for collecting income tax and ensuring compliance with tax laws (Twum et al., 2020). Value-added tax (VAT) is another significant tax in Ghana (Anaman & Ahmed, 2021). The supply of goods and services is subject to this consumption tax at every point in the manufacturing and distribution cycle (Twum et al., 2020). VAT is collected by registered businesses on behalf of the government and is ultimately borne by the final consumer. Customs duties are levied on imported goods

entering Ghana (Egbunike et al., 2018). The government imposes these duties to safeguard domestic industries, control trade, and bring in money. In addition to income tax, VAT, and customs duties, various levies and charges exist in the Ghanaian tax system. These include specific levies on petroleum products, communication services, financial transactions, and environmental protection (Okpeyo et al., 2019). The specific purpose of these levies is to support particular sectors or address specific policy goals.

Empirical Review and Hypothesis Development

Financial Literacy and Tax Compliance

Scholarly discourse has shown interest in the relationship between tax compliance and financial literacy. When people are financially literate, they have a better grasp of basic financial concepts and ideas, including knowledge about taxes, which can help them meet their tax responsibilities (Resmi et al., 2019). Owners of SMEs who had a better grasp of financial matters were more likely to pay the appropriate amount of taxes (Tuffour et al., 2022). In addition, Adekoya et al. (2020) found that tax compliance behaviour was more common among people who had a better grasp of personal finance. The results of this research lend support to the idea that tax compliance has a positive relationship with financial literacy. In the Ghanaian informal sector, where financial literacy is often low, this suggests that improving financial literacy could be a good strategy for enhancing voluntary tax compliance.

Informal sector workers, who may lack formal financial education, would benefit from targeted financial literacy programs to better understand and meet their tax obligations. Furthermore, research has shown that financial literacy enables individuals to better navigate tax regulations and maintain accurate financial records, leading to increased compliance (Resmi et al., 2019). This is also relevant in Ghana's informal sector, where small-scale enterprises that are more financially literate are also more likely to comply with tax obligations (Tuffour et al., 2022). Because of this, tax compliance rates in Ghana can be improved by raising financial literacy levels among the country's formal and informal workers. Tuffour et al. (2022) further indicate that by empowering individuals with the information they need to understand their tax responsibilities and make sound financial decisions, stakeholders and policymakers in Ghana can promote tax compliance, which in turn will aid in the country's economic growth.

Studies from countries such as the United States, Canada, and Australia have also provided insights into this relationship (Cvrlje, 2015; Hofmann et al., 2017). A study conducted in Belgium by De Neve et al. (2021) discovered that people who had a better grasp of personal finance were more inclined to pay their taxes as they were required to, suggesting a relationship between the two. In a similar vein, Barrios et al. (2020) found that tax knowledge and compliance rates were both enhanced by higher degrees of financial literacy in Europe. More people pay their taxes and the system works better as a whole because financial literacy programmes teach people the skills they need (Alm et al., 2017). The positive relationship between financial literacy and tax compliance observed in these researches implies a comparable capacity that might apply to people in both developed and developing nations, despite potential differences in socioeconomic variables, tax systems, and cultural norms. Thus, the literature highlights that financial literacy is a determinant of tax compliance. Individuals with higher financial literacy are more likely to understand and fulfil their tax obligations. However, the extent of this relationship in the informal sectors of developing countries like Ghana remains underexplored, providing a gap that this study seeks to address. Therefore, it is hypothesised that;

H₁: Financial Literacy has a positive impact on the tax compliance behaviour of individuals in the informal sector of Ghana

Financial Literacy, Tax Compliance and Perceived Justice in the Tax System

Research in developed economies, as well as the formal and informal sectors of emerging nations' economies, is showing a growing interest in examining the relationship between tax compliance, perceived tax

fairness, and financial literacy. Although theoretical frameworks suggest that a sense of fairness in the tax system can mitigate the relationship between tax compliance and financial literacy, empirical research has not yet addressed this possibility. According to Jimenez and Iyer (2016), compliance behaviour might be influenced by people's perceptions of the tax system's fairness. This is supported by theoretical frameworks like the Justice Theory and the Normative Theory of Tax Compliance. A positive impression of the tax system, according to these models, encourages individuals to pay their fair amount in taxes. According to Inasius (2019) and Mukhlis et al. (2015), when individuals have faith in transparent and equitable tax administration systems, reasonable penalties for noncompliance, and a fair distribution of revenues, they form a positive impression of the tax system. The opposite relationship between financial literacy and tax compliance might occur if people feel the tax system is unfair. Thus, the literature highlights that perceived justice in the tax system plays a role in influencing tax compliance. Taxpayers are more likely to comply when they believe the system is fair. This study aims to explore how this perception interacts with financial literacy in shaping tax compliance behaviour in Ghana's informal sector. Therefore, it is hypothesised that;

H₂: Perceived justice in the tax system positively moderates the relationship between financial literacy and tax compliance

Theoretical Review - The Fairness Theory

Adams (1963) proposed the fairness theory, which states that people strive for social harmony by treating others with respect and dignity. In this view, people try to be fair by striking a balance between their inputs (such as their efforts and contributions) and their outcomes (such as their rewards and advantages) in comparison to others (Tseng & Kuo, 2014). When individuals perceive an imbalance or unfairness, it leads to feelings of dissatisfaction and may influence their behaviours. People's perceptions of the tax system's fairness or equity can be shaped by their interactions with the system's procedures and processes, the consequences for failing to comply, and the distribution of tax advantages and responsibilities (Jimenez & Iyer, 2016; Taing & Chang, 2021). Perceived justice in the tax system, as a component of fairness theory, can significantly impact individuals' attitudes and compliance behaviour (Mukhlis et al., 2015).

In Ghana, where the informal sector workers often face disproportionate tax burdens, perceived fairness may even be a stronger predictor of compliance (Ameyaw, Oppong, et al., 2016). If individuals perceive the tax system to be unfair, with unequal distribution of tax burdens or biased enforcement, it will lead to negative emotions and reduced compliance (Mukhlis et al., 2015; Taing & Chang, 2021). Thus, by incorporating the fairness theory into the study, this study examines how individuals' perceptions of fairness in the tax system influence their attitudes, intentions, and actual tax compliance behaviour within the informal sector. The theory offers an effective structure for understanding how people's views of tax justice impact their desire to pay their share of taxes and their attitude towards dealing with tax authorities.

Conceptual Framework

The conceptual framework presents predicted variable connections graphically. Financial literacy strongly influences tax compliance, according to theoretical and empirical reviews. Financial literacy and tax compliance are moderated by tax fairness. Perceived justice depends on how people view tax administration systems, tax loads and benefits, and non-compliance penalties. Financial knowledge should boost tax compliance when people think the tax system is fair. If they think the system is unjust, they may not pay their taxes.

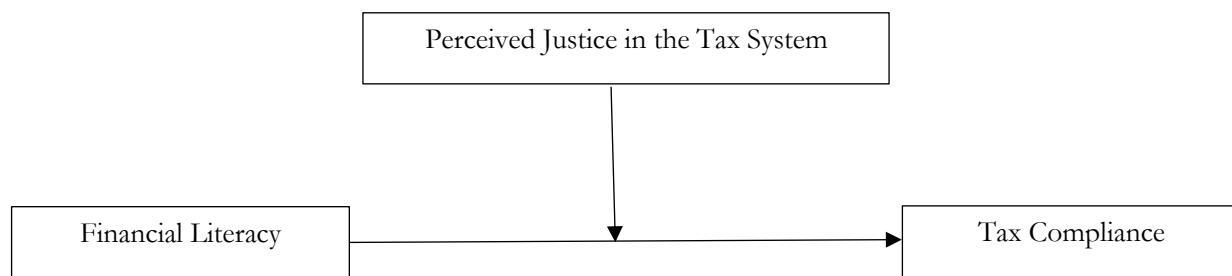


Figure 1: Conceptual framework depicting the moderating effect of perceived justice in the tax system in the relationship between financial literacy and tax compliance.

Methodology

Research Design

The study uses the quantitative research approach. The quantitative research approach is used for this study because it provides objectivity and enhances generalizability (Marsonet, 2019). Thus, by collecting numerical data from individuals in the informal sector, the study aims to obtain a representative sample that accurately reflects this target population. The empirical evidence derived from quantitative research can then be generalized to individuals in the broader informal sector in Ghana, offering broader conclusions beyond the specific sample under investigation (Creswell & Creswell, 2017). Moreover, Creswell and Hirose (2019) indicated that a quantitative approach offers precision and replicability. Numerical data collection ensures precise measurement and analysis of variables such as financial literacy, perceived justice, and tax compliance. With its focus on persons working in Ghana's informal sector, a descriptive and explanatory research design is a suitable choice for this study. Financial literacy, perceived fairness, and tax compliance in the informal sector may be examined in detail using the descriptive study approach (Connelly, 2016). The explanatory component of the research design aims to explore and understand the relationships between financial literacy, perceived justice, and tax compliance within the informal sector. It goes beyond mere description and investigates the underlying mechanisms and influences that drive tax compliance behaviour among individuals in the informal sector (Bentouhami et al., 2021). The combination of both descriptive and explanatory research design components provides a comprehensive approach that captures both the current state and underlying dynamics of tax compliance behaviour within the informal sector (Creswell & Creswell, 2017; Marsonet, 2019).

Population and Sample Size

In this study, Ghanaian informal sector workers in Greater Accra are examined. Individuals who engage in informal economic activities include street vendors, small-scale traders, artisans, and other self-employed individuals who are not formally registered or regulated. The decision to prioritise the informal sector is based on its substantial impact on many economies, by contributing to the development of employment, income, and economic growth. Understanding the tax compliance behaviour of individuals in the informal sector is important for effective tax administration and revenue collection. A purposive sampling technique was used to recruit individuals actively engaged in informal economic activities such as street vendors, small-scale traders, artisans, and other self-employed individuals. Participants were approached through in-person invitations and collaboration with local trade associations to ensure a diverse representation of Ghana's informal sector. This sampling technique allows for the intentional selection of participants who possess relevant characteristics and can provide valuable insights into the research objectives within the specific context of the informal sector (Etikan et al., 2016). The sample was drawn from different segments of the informal sector, including street vendors, small-scale traders, artisans, and other self-employed individuals. Participants were recruited through a combination of outreach to local trade associations and direct engagement in key commercial areas within the

Greater Accra Region. Informal meetings were conducted in marketplaces and business hubs to explain the study and invite eligible participants. The sample size was determined based on statistical power assessment and practical feasibility (Ryan, 2013; Teresi et al., 2022). Given the diversified and prevalent nature of the informal sector in Ghana, particularly in the Greater Accra Region, the sample size was chosen to be both big enough to yield important insights and manageable within the limitations of time and resources. However, there is a potential for bias in this study as the study primarily relied on participants from the Greater Accra Region, which may limit the generalizability of the results to other regions of Ghana. Thus, the data was collected in two streams with a two-week delay from the same participants to address common-method bias. Also, the precise sample size was determined through careful consideration of factors such as the variability of the variables of interest, the desired level of precision, and the available resources for data collection and analysis (Taherdoost, 2017). Thus, a sample size of 300 respondents in the informal sector was chosen for this study.

Measurement Instruments

The primary data collection instrument for this study was a well-structured questionnaire. In developing the questionnaire, relevant items and scales from previous studies were adapted. Specifically, the questionnaire drew upon the works of Jimenez and Iyer (2016) and Pham et al. (2020) as a foundation. These studies provided insights into the measurement of financial literacy, perceived justice in the tax system, and tax compliance, making them suitable references for item development in the questionnaire. The questionnaire utilized a 7-point Likert scale for respondents to rate their agreement or disagreement with each assertion. The scale options ranged from "1 - strongly disagree" to "7 - strongly agree," capturing the respondents' perception or stance on the given statements. The structured questionnaire was utilized for this study because it allowed for standardized data collection, ensuring consistency in the measurement of variables across participants (Corr, 2016). By employing items that have been developed based on validated scales, the questionnaire increases the reliability of data collection, enabling robust analysis and interpretation of results. Secondly, the questionnaire enabled efficient data collection from a diverse sample of individuals in the informal sector of Ghana (Yildirim & Correia, 2015).

Ethical Considerations

Ethical approval for the study was obtained from the Ethical Review Board of the University of Education, Winneba. Before data collection, participants were informed of the study's purpose, their rights, and how their data would be used. Informed consent was requested from all participants, emphasizing the voluntary nature of their participation and their right to withdraw at any time without penalty. To ensure confidentiality, no personally identifiable information was collected from the participants. The research adhered to ethical standards such as principles of anonymity, confidentiality, and participant protection.

Reliability of the Research Instrument

The reliability of the research instrument was evaluated through internal consistency analysis. Statistical techniques such as Cronbach's alpha coefficient were used to measure the internal consistency of the questionnaire items (Pavot et al., 1991). This analysis assessed the extent to which the items within each construct (financial literacy, perceived justice, and tax compliance) consistently measure the underlying construct.

Table 1: Reliability Statistics

Variables	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Financial Literacy	.949	.950	7
Perceived Justice in the Tax System	.928	.928	7
Tax Compliance Behaviour	.941	.943	8
All variables	.978	.979	25

The reliability analysis demonstrates a strong level of internal consistency for the measuring scales employed in the study. The Cronbach's alpha coefficients for financial literacy, perceived justice in the tax system, and tax compliance behaviour were .949, .928, and .941 respectively, indicating high reliability for each measure (Pavot et al., 1991). The overall reliability coefficient for all variables combined was .978, further confirming the robustness and reliability of the scales. These high coefficients suggest that the items consistently and accurately measure the intended constructs, enhancing the credibility of the study's findings (Pavot et al., 1991).

Statistical Tools

The data was analysed using IBM Statistical Package for Social Sciences version 23 and Process MACRO for SPSS (Hayes, 2018), starting with descriptive statistics to summarize means, standard deviations, and frequencies, offering insights into participants' levels of financial literacy, perceived justice, and tax compliance. Correlation analysis explored relationships between these variables, with Pearson's correlation coefficients indicating the strength and direction of associations. Multiple regression analysis assessed how financial literacy affects tax compliance and whether perceived justice moderates this relationship.

Results and Discussion

This section presents the results from the study and discusses the results.

Descriptive Statistics

Table 2: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
							Std. Error
FL	270	1.00	6.57	3.9524	1.51166	-.370	.148
PJ	270	1.00	6.00	3.7566	1.47961	-.168	.148
TC	270	1.00	6.00	3.9676	1.34819	-.809	.148

Descriptive statistics for financial literacy (FL), perceived justice in the tax system (PJ), and tax compliance behaviour (TC) reveal key characteristics of these variables. The mean FL score was 3.9524 (SD = 1.51166), with scores ranging from 1.00 to 6.57, indicating a moderate average financial literacy level. FL distribution showed slight left skewness (-0.370) and platykurtic shape (-0.891). For PJ, the mean was 3.7566 (SD = 1.47961), with scores from 1.00 to 6.00, suggesting a moderate perception of tax system fairness, with slight left skewness (-0.168) and a platykurtic shape (-0.954). TC had a mean of 3.9676 (SD = 1.34819), ranging

from 1.00 to 6.00, indicating moderate tax compliance, with slight left skewness (-0.809). These statistics provide insights into the central tendencies, variability, and distributional characteristics, showing moderate levels of financial literacy, perceived justice, and tax compliance among respondents. The results indicate moderate levels of financial literacy, perceived justice, and tax compliance among participants.

Correlation

Table 3: Correlation Statistics

		FL	PJ	TC
FL	Pearson Correlation	1		
	Sig. (2-tailed)			
	N	270		
PJ	Pearson Correlation	.784**	1	
	Sig. (2-tailed)	.000		
	N	270	270	
TC	Pearson Correlation	.816**	.858**	1
	Sig. (2-tailed)	.000	.000	
	N	270	270	270

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

Financial literacy (FL), perceived tax justice (PJ), and tax compliance behaviour (TC) are all strongly correlated with one another, according to the correlation analysis. A significant relationship between financial literacy and tax compliance ($r = .816$, $p\text{-value} = 0.000$) suggests that taxpayers who are well-versed in finances are more inclined to pay their share of taxes. Similarly, there exists a significant positive correlation ($r = .858$, $p\text{-value} = 0.000$) between taxpayers' opinion of fairness in the tax system and their actual compliance with tax obligations. The findings indicate that individuals' adherence to tax regulations is affected by their level of financial knowledge and their perception of fairness in the tax system. Therefore, a strong positive correlation between financial literacy and tax compliance suggests that greater financial knowledge is linked to higher compliance. Perceived justice is also positively correlated with compliance, showing the role of fairness in tax behaviour.

Regression

Financial Literacy and Tax Compliance Behaviour

A regression study was performed to investigate the influence of financial literacy (FL) on tax compliance behaviour (TC) among persons in Ghana's informal sector.

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.816 ^a	.667	.665	.77983

a. Predictors: (Constant), FL

Details on the regression model's overall goodness of fit are shown in Table 4. The coefficient of determination reveals that around 66.5% of the variation in tax compliance behaviour can be accounted for by the independent variable, financial literacy. These findings indicate a significant relationship between financial literacy and tax compliance behaviour among those working in the informal sector of Ghana.

Table 5: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	325.955	1	325.955	535.993	.000 ^b
	Residual	162.980	268	.608		
	Total	488.935	269			

a. Dependent Variable: TC
b. Predictors: (Constant), FL

Table 5 assesses the significance of the regression model. The regression sum of squares (325.955) is significantly higher than the residual sum of squares (162.980), as indicated by a large F-statistic (535.993) and a small p-value (0.000). This indicates that the regression model is statistically significant in predicting tax compliance behaviour.

Table 6: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.089	.133		8.187	.000
	FL	.728	.031	.816	23.152	.000

a. Dependent Variable: TC

From Table 6, the unstandardized coefficient (B) for financial literacy is 0.728, with a standard error of 0.031. The standardized coefficient (Beta) indicates that for every one-unit increase in financial literacy, tax compliance behaviour is expected to increase by 0.816 units. The t-statistic of 23.152 is highly significant ($p = 0.000$), suggesting a strong positive relationship between financial literacy and tax compliance behaviour. Based on these findings, it can be concluded that the hypothesis (H_1), which states that financial literacy has a positive impact on the tax compliance behaviour of individuals in the informal sector of Ghana, is supported. The regression analysis demonstrates that financial literacy is a significant predictor of tax compliance behaviour, with higher levels of financial literacy associated with greater tax compliance. The findings of empirical studies from developing countries, such as those by Adekoya et al. (2020) and Tuffour et al. (2022), found a positive relationship between financial literacy and tax compliance. Furthermore, research conducted in developed countries, such as Barrios et al. (2020), De Neve et al. (2021) and Hofmann et al. (2017), consistently supported the positive relationship between financial literacy and tax compliance. These findings from different contexts strengthen the validity of the results obtained in this study, indicating that the association between financial literacy and tax compliance is not limited to specific regions or economies. Therefore, the regression analysis shows that financial literacy significantly predicts tax compliance and this finding supports the hypothesis that higher financial literacy leads to greater tax compliance.

Perceived Justice in the Tax System, Financial Literacy and Tax Compliance Behaviour

The regression analysis was conducted to test the hypothesis that perceived justice in the tax system moderates the relationship between financial literacy (FL) and tax compliance behaviour (TC) among individuals in the informal sector.

Table 7: Model Summary

R	R-sq	MSE	F	df1	df2	P
.9107	.8294	.3135	431.1283	3.0000	266.0000	.0000

Table 7 indicates that the model explains approximately 82.94% of the variance in tax compliance behaviour. The coefficient of determination (R-squared) suggests a strong relationship between the variables (financial literacy and perceived justice) and tax compliance behaviour. This implies that both financial literacy and perceived justice play significant roles in explaining the variations in tax compliance behaviour among individuals in the informal sector.

Table 8: Model

	coeff	se	t	p	LLCI	ULCI
constant	-.5918	.1933	-3.0614	.0024	-.9724	-.2112
FL	.6682	.0559	11.9631	.0000	.5582	.7782
PJ	1.0256	.0747	13.7280	.0000	.8785	1.1727
Int_1	-.1166	.0148	-7.8897	.0000	-.1456	-.0875

Table 8 shows the coefficients for predictors of tax compliance behaviour. Financial literacy (FL) has a coefficient of 0.6682 ($p = 0.000$), and perceived justice in the tax system (PJ) has a coefficient of 1.0256 ($p = 0.000$), both indicating significant positive relationships with tax compliance. The interaction term (Int_1) has a coefficient of -0.1166 ($p = 0.000$), indicating a significant moderation effect. This negative coefficient suggests that perceived justice moderates the relationship between financial literacy and tax compliance, with the positive impact of financial literacy on tax compliance being stronger when the tax system is perceived as just. Therefore, perceived justice moderates the relationship between financial literacy and tax compliance, strengthening the effect of financial literacy when the tax system is viewed as fair.

Product terms key:

$$\text{Int}_1: \text{FL} \times \text{PJ}$$

Table 9: Test(s) of highest order unconditional interaction(s):

	R2-chng	F	df1	df2	p
X*W	.0399	62.2478	1.0000	266.0000	.0000

Additionally, the test of the highest-order unconditional interaction (X*W) shows a significant increase in R-squared (0.0399), a large F-statistic (62.2478), and a small p-value (0.0000). Based on the results, it can be concluded that the hypothesis (H_2), which states that perceived justice in the tax system moderates the relationship between financial literacy and tax compliance, is supported. The analysis reveals that both financial literacy and perceived justice individually influence tax compliance behaviour, and perceived justice moderates the relationship between financial literacy and tax compliance behaviour. These findings suggest that a combination of financial literacy and a perceived just tax system is influential in promoting tax compliance behaviour among individuals in the informal sector. Studies by Ameyaw, Korang, et al. (2016) and Wadesango et al. (2018) in Ghana found that financial literacy positively influenced tax compliance, and the effect was strengthened by individuals' perceptions of fairness in the tax system. These findings are consistent with the results of the current study, which also demonstrated that both financial literacy and perceived justice individually influence tax compliance behaviour among individuals in the informal sector of Ghana. Additionally, research from the developed world, as cited by Abd Hamid et al. (2019) and Alshira'h and Abdul-Jabbar (2019), also supports the notion that perceived justice in the tax system can moderate the relationship between financial literacy and tax compliance. This means that the positive influence of financial literacy on tax compliance is enhanced when individuals perceive the tax system as fair and just. Additionally, the more significant impact of perceived fairness as a moderating factor implies that financial literacy alone may not be enough to drive tax compliance if individuals see the tax system as unjust. This finding emphasizes the necessity of implementing measures that not only prioritize financial education but also aim to establish confidence and openness within the tax system. Although this relationship was expected, the extent to which perceived fairness

affected compliance was more significant than in some other research, especially those carried out in more established economies.

Conclusion

Tax compliance is essential to a nation's economic well-being, and policymakers and tax authorities need to understand the variables that impact tax compliance behaviour. This study investigated the relationships between financial literacy, persons' perception of fairness in the tax system, and their adherence to tax regulations among those working in the informal sector of Ghana. The results demonstrate the significant impact of financial literacy and perceived fairness in the tax system on the outcomes of tax compliance. The study indicates that persons with greater degrees of financial literacy are more inclined to adhere to their tax responsibilities. This emphasises the necessity for focused financial literacy programmes and educational activities specifically designed to meet the distinct requirements of the informal sector. Also, by equipping individuals with the knowledge and skills to navigate tax laws and regulations, policymakers can empower them to fulfil their tax responsibilities effectively. The study also emphasises the role of perceived justice in the tax system in moderating the relationship between financial literacy and tax compliance. When individuals perceive the tax system as fair and just, the positive impact of financial literacy on tax compliance behaviour is strengthened. This emphasizes the importance of building trust and confidence in the tax administration by promoting transparency, accountability, and equitable distribution of tax burdens and benefits. Hence, the results of this research have significant implications for policymakers, tax authorities, and practitioners. This study reinforces the dual importance of financial literacy and perceived justice in understanding tax compliance behaviour. Thus, integrating socio-psychological and economic factors provides a comprehensive model for predicting tax compliance, particularly in developing economies. The findings suggest that perceptions of fairness in the tax system can moderate the effect of financial literacy on compliance. Also, practically, this research suggests that improving tax compliance in Ghana's informal sector will require both targeted financial education and reforms to build a fair and transparent tax system. Policymakers should focus on increasing the visibility of tax benefits and ensuring equitable treatment across different taxpayer groups. Enhancing trust in tax authorities through fair distribution of tax responsibilities and visible public spending could foster greater voluntary compliance, thereby improving tax revenue collection. In conclusion, this research contributes to what is already known about tax compliance behaviour and offers helpful guidance for developing successful policies and programmes within the informal economy.

Limitation and Future Direction

This study has some limitations which include the focus on the informal sector within the Greater Accra region, which may not be representative of the entire informal sector in Ghana. Future research could expand the geographical scope to include other regions for a more comprehensive analysis. Furthermore, the study is dependent on data that is reported by the participants themselves, which might be influenced by a tendency to present themselves in a socially desirable manner, leading to potential bias. Although the data was collected in two streams with a two-week delay from the same participants to address common-method bias, this issue remains. Therefore, future research initiatives could use a mixed-methods approach to validate findings and minimise potential bias. In addition, future studies might investigate other factors that impact tax compliance behaviour, such as cultural influences and economic situations, to get a more comprehensive knowledge of tax compliance in the informal sector. Also, future research could explore the impact of targeted financial literacy interventions on tax compliance in informal sectors.

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