



Tax Service Quality and Tax Compliance among Small and Medium Enterprises in North Rift Economic Block, Kenya: A Moderated Mediation Model of Government Trust and Social Value Orientation

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Purpose: This study examined the moderated mediation effect of social value orientation and government trust on the relationship between tax service quality and tax compliance among small and medium enterprises (SMEs).

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Methodology: Guided by a positivist research philosophy and explanatory design, the study sampled 393 SME owners/managers from a target population of 21,232 registered SMEs using a stratified sampling technique. Data was collected using a self-administered questionnaire, with the reliability and validity confirmed through Cronbach's alpha coefficient of 0.7 and factor analysis. Data analysis involved descriptive and inferential statistics and multiple regression analysis using Andrew Hayes Process macro.

Findings: The results indicate that tax service quality, government trust, and social value orientation had a significant positive effect on tax compliance. Tax service quality significantly influenced government trust which mediated the relationship between tax service quality and tax compliance. Social value orientation moderated the nexus between tax service quality and tax compliance, government trust and tax compliance, and the indirect relationship between tax service quality and tax compliance via government trust. The conditional effects were stronger at higher levels of social value orientation.

Practical Implications: Enhancing tax service quality and fostering government trust are crucial strategies for improving tax compliance among SMEs. Moreover, incorporating social value orientation in tax policy design is vital for optimizing revenue collection.

Originality: This study provides new insights into the interplay between tax service quality, government trust, and social value orientation, offering a comprehensive understanding of their impact on tax compliance within the SME sector.

Keywords: Tax compliance; tax service quality; government trust; social value orientation.

1. INTRODUCTION

Taxation is a fundamental tool used by governments worldwide to generate revenue essential for funding public goods and services, infrastructure development, poverty eradication, and promoting social equity while also fostering economic growth, enhancing government legitimacy, and promoting accountability [1,2]. Efficient tax revenue mobilization reduces dependence on external assistance, facilitates sustainable economic growth, and expands fiscal space. However, despite its importance, many countries, particularly developing ones, face significant tax compliance challenges, which undermine the effectiveness of taxation [3]. Non-compliance, whether intentional or not, undermines tax system fairness and hinders socio-economic progress by reducing government resources [4]. This problem exacerbates fiscal deficits and weakens governments' ability to provide essential public services, necessitating the engagement of stakeholders, including governments, development partners, and civil society organizations (CSOs), to find effective solutions.

Tax compliance refers to how well taxpayers meet their obligations, including accurate income reporting, timely filing of returns, and paying taxes by the due dates, while tax non-compliance involves actions such as late filings, underreporting income, overstating deductions, and failing to pay taxes on time [5]. Globally, it is

estimated that tax non-compliance costs governments about \$ 3.1 trillion annually, equivalent to more than 5.1% of the world's GDP [6]. Developing countries are hit hardest, losing between 6% to 13% of tax revenue, compared to 2–3% for OECD nations. The shadow economy also plays a substantial role, accounting for 16–45% of GDP. Developed nations such as the U.S., lose approximately \$1 trillion annually due to tax non-compliance, and European countries face similar challenges [7]. In Africa, tax losses average around 10%, which translates to \$25 billion every year. For instance, Kenya alone loses more than \$565.8 billion annually, exacerbating budget deficits and hindering sustainable development [8].

Enhancing public service quality, particularly tax services provided by authorities is essential for improving tax compliance. When taxpayers perceive public services as beneficial, they are more likely to comply with their tax obligations, as they recognize the value of their contributions to society [9]. To promote voluntary compliance, tax authorities globally have adopted more client-centred approaches, tailoring services to meet individual needs [10]. This strengthens the social contract between the state and citizens, as taxpayers view their taxes as vital for societal welfare [11].

Trust in government is crucial for ensuring democratic stability, effective governance, and successful policy implementation, as it directly

affects citizens' compliance with laws and regulations. When individuals trust their government, they perceive it as legitimate, which fosters cooperation and civic engagement. In the realm of taxation, government trust creates a psychological contract between taxpayers and authorities, promoting compliance through a shared commitment to societal welfare [12]. A tax system built on trust, where citizens see tangible benefits like improved infrastructure, is more likely to achieve higher compliance and reduced tax non-compliance [13]. Understanding the link between government trust and tax compliance is vital for strengthening democratic processes and enhancing social efficacy.

Social value orientation (SVO) plays a critical role in tax compliance by framing the social dilemma in which individuals must balance personal interests with the communal benefits of taxation [14]. This tension between taxpayers and tax authorities highlights the need for policies promoting fairness, transparency, and trust to encourage compliance [15]. Individuals with a cooperative SVO are more likely to comply with tax obligations, especially when they perceive their contributions as benefiting society.

Tax compliance poses a significant challenge for governments globally, predominantly in developing economies, where non-compliance undermines fiscal capacity and weakens public service delivery [16]. Having an effective tax system is crucial for raising revenue, reducing reliance on foreign aid, and supporting sustainable development. Despite numerous reforms, low tax compliance remains a persistent issue, particularly among small and medium-sized enterprises (SMEs) in developing nations. In Kenya, tax revenue is vital to government funding, making up about 90% of total collections [17]. Yet, SMEs, which account for 98% of businesses and employ 86% of the workforce, contribute less than 1% to tax revenues [18].

While existing literature has extensively examined the determinants of tax compliance, the focus has primarily been on the direct effects of factors such as tax service quality and trust in government. The moderating effects of individual behavioural traits, such as Social Value Orientation (SVO), and the mediating role of government trust remain underexplored. This study sought to address this gap by investigating the indirect relationship between tax service quality and tax compliance, with a focus on the mediating role of government trust and the

moderating role of SVO. The study hypothesizes that tax service quality, government trust, and social value orientation do not significantly influence compliance and that government trust does not mediate the relationship between service quality and compliance. Additionally, it proposes that social value orientation does not conditionally moderate this relationship. By examining the conditional effects of SVO and the mediating role of government trust, this research contributes to a more nuanced understanding of the factors that drive tax compliance among SMEs. It highlights the need for tax authorities to implement targeted strategies that enhance service quality and foster trust, while also accounting for the diverse social orientations of taxpayers. This study bridges the gap between economic and behavioural approaches, offering policymakers valuable insights into designing more effective tax systems that promote voluntary compliance.

2. LITERATURE REVIEW

Tax compliance has been examined through various theoretical lenses, each offering a distinct perspective on taxpayer behaviour and its determinants. The Social Contract Theory, rooted in the works of Hobbes, Locke, and Rousseau, emphasizes the implicit agreement between individuals and the state, where citizens surrender certain freedoms in exchange for public services and security [19]. In this context, taxation is viewed as a crucial mechanism for maintaining social order and justice, reflecting the reciprocal relationship between the state and its citizens [20]. As societal expectations evolve, effective governance, transparency in revenue allocation, and accountability become critical components in fostering public trust, which in turn enhances tax compliance [21]. Although taxation may not resemble a formal contract, it represents a mutual exchange, where taxpayers fund societal functions in return for public goods and services [22].

The empirical studies further emphasize the importance of tax service quality, government trust, and social value orientation in shaping taxpayer behaviour. Tax service quality has emerged as a critical determinant of compliance, as it influences perceptions of fairness, transparency, and efficiency [11]. Recent studies have shown empirical evidence of the impact of service quality on taxpayers' willingness to pay taxes, for instance, research by Lestari and Fadli [23], indicating that service quality positively

influences the willingness to pay taxes. Similarly, Sukesni & Yunaidah (2020) found that improved public services have a profound impact on changing taxpayers' compliance behaviours, leading to greater satisfaction and higher compliance with tax obligations. When tax authorities provide accessible, streamlined services, such as efficient filing systems and responsive customer support, taxpayers are more likely to cooperate and comply with tax laws [24].

H₀₁: Tax service quality has no significant effect on tax compliance.

Trust in government has also been consistently identified as a critical determinant of tax compliance. Trust in government refers to the confidence that taxpayers have in public institutions to use their contributions effectively and responsibly. Numerous studies established a strong positive relationship between government trust and tax compliance [25-27]. Higher levels of institutional trust lead to greater willingness to pay taxes, driven by perceptions of fairness and effective service delivery [28]. This trust is particularly critical in tax compliance, where complex tax systems require high levels of transparency and accountability to ensure taxpayer cooperation. Building and maintaining trust between taxpayers and tax authorities is essential for improving GST compliance [29].

When taxpayers trust that their contributions will be used responsibly to fund public goods and services, voluntary compliance is more likely to follow [30]. Trust in government fosters a sense of legitimacy and cooperation, encouraging compliance even in contexts where enforcement may be less stringent.

H₀₂: Government trust has no significant effect on tax compliance.

The role of Social Value Orientation (SVO), which reflects individuals' tendencies toward cooperation or competition, has gained increasing attention in tax compliance research. Taxpayers with a prosocial orientation, who prioritize collective welfare over personal gain, are more likely to have higher tax morale and exhibit voluntary compliance [31]. Prosocial taxpayers tend to trust tax authorities and perceive tax payments as part of their civic duty, which aligns with positive compliance behaviour [32]. This suggests that incorporating SVO into tax policy frameworks can enhance voluntary compliance [33].

H₀₃: Social value orientation has no significant effect on tax compliance.

Moreover, the interaction between tax service quality and government trust is critical in fostering compliance. Research shows that high-quality tax services strengthen trust between citizens and the government, which in turn promotes higher compliance rates [34]. Studies by Nurkholis et al. [35] emphasize that simplifying tax procedures and enhancing service delivery reduce opportunities for tax evasion, thereby increasing public trust. Similarly, [36] and [37], demonstrate that e-service quality, particularly in the realm of tax compliance, positively impacts public trust and satisfaction, reinforcing the role of technology as an enabler of compliance.

H₀₄: Tax service quality has no significant effect on government trust.

The mediating role of government trust between tax service quality and tax compliance has been highlighted in various studies. Research by Ardianto et al. [38], as well as [39] suggests that trust in government amplifies the positive effects of service quality on compliance. In the context of GST, trust becomes even more crucial as the complexity of the tax structure requires citizens to have confidence in the system's fairness and efficiency. These findings suggest that improving service quality alone may not suffice without concurrent efforts to build public trust [40].

H₀₅: Government trust has no significant indirect effect on the relationship between tax service quality and tax compliance.

Finally, SVO interacts with institutional factors such as tax service quality and government trust to influence tax compliance. Taxpayers with a cooperative SVO are more likely to trust the government and respond positively to high-quality tax services, resulting in higher compliance rates. Conversely, those with an individualistic or competitive SVO may be less influenced by these factors. Studies such as [41] suggest that integrating SVO into tax compliance models provides a more nuanced understanding of how psychological traits affect tax behaviour [31].

H₀₆: Social value orientation has no significant conditional effect on the relationship between government trust and tax compliance.

H₀₇: Social value orientation has no significant conditional effect on the link between tax service quality and tax compliance.

H₀₈: Social value orientation has no significant conditional effect on the indirect relationship between tax service quality and tax compliance via government trust.

3. MATERIALS AND METHODS

3.1 Research Design, Population, Sample Size, and Sampling Procedure

This study adopted a positivist research philosophy, and established a scientific approach that focuses on objective truth and observable facts to understand social behavior. Positivism involves unbiased research, assuming that the research subject is independent of the researcher, and is grounded on hypothesis development based on existing theory [42]. This study employed an explanatory research design to systematically explore causal relationships and underlying mechanisms through a deductive approach. The aim was to test hypotheses and enhance understanding of the subject matter by confirming, refining, or challenging existing concepts [43]. Utilizing a survey research strategy, the study gathered cross-sectional data through quantitative methods to evaluate theoretical propositions. The target population consisted of 21,232 SMEs registered within the North Rift Economic Bloc in Kenya. A sample of 393 SMEs was

determined using Yamane's formula to ensure representativeness.

Stratified sampling was employed to ensure proportional representation across the industry sectors, followed by simple random sampling to ensure each SME had an equal chance of selection [44]. Data collection involved a structured questionnaire divided into five sections: demographic information, tax service quality, government trust, social value orientation, and tax compliance. Of the distributed questionnaires, 373 were completed, resulting in a 97% response rate.

3.2 Measurement of Study Variables

Established measurement scales were utilized, with responses gathered using a five-point Likert scale. Variables were validated with Cronbach's alpha and a content validity index (CVI) exceeding the recommended threshold of 0.7 [45]. Tax compliance was measured through adherence to tax laws, including income reporting and tax payment [46,47]. Tax service quality was assessed based on tangibility, reliability, responsiveness, assurance, and empathy [48]. Government trust was evaluated through fairness, equity, reciprocity, transparency, and accountability [49,50]. Social value orientation was measured using Schwartz's dimensions of self-transcendence and self-enhancement [51]. Control variables included SME experience, sector, and size to provide a detailed understanding of tax compliance factors [52].

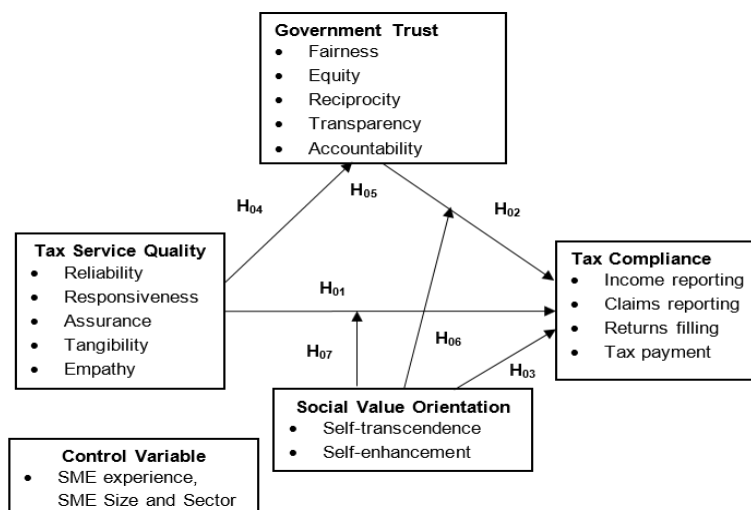


Fig. 1. Conceptual framework for the study

Source: Created by the Researcher for this Study, 2024

(Adopted and modified from Hayes, 2018, model 15)

3.3 Data Analysis

The collected data underwent a thorough cleaning process, including editing and coding, before being entered into statistical software for analysis. Descriptive statistics were used to summarize the data, while inferential statistics, such as Pearson correlation and regression analysis, were applied to explore relationships between variables and test the research hypotheses. The focus was on understanding the moderated mediation effects within the study's theoretical framework. The study's framework was grounded in methodologies proposed by [53,54] and [55]. Hypotheses H₀₁ through H₀₈ were tested using linear and multiple regression equations, ensuring the inferential statistics aligned with the study's statistical and conceptual models.

3.4 Model Specification

3.4.1 Direct effects testing

The following equations were used to test the effect of control variables and all the direct effects hypotheses on the dependent variable:

- i. $Y = \beta_0 + \beta_1 C + \varepsilon$ (Testing the effect of control variables on the dependent variable)
- ii. $Y = \beta_0 + C + \beta_1 X + \varepsilon$ (H₀₁) (Testing the effect of the independent variable on the dependent variable while holding constant the control variables)
- iii. $Y = \beta_0 + C + \beta_1 X + \beta_2 M + \varepsilon$ (H₀₂) (Testing the effect of the mediating variable on the dependent variable while holding constant the control variables and independent variable)
- iv. $Y = \beta_0 + C + \beta_1 X + \beta_2 M + \beta_3 W + \varepsilon$ (H₀₃) (Testing the effect of the moderating variable on the dependent variable while holding constant the control variables, independent variable, and mediating variable).
- v. $M = \beta_0 + C + \beta_1 W + \beta_2 X + \varepsilon$ (H₀₄) (Testing the effect of the independent variable on the mediating variable).

3.4.2 Mediation testing

To test for mediation, the study followed the model proposed by MacKinnon et al. [56] using the following steps:

- i. A significant relationship between the independent variable and the mediating:

$$M = a_0 + C + a_1 X + \varepsilon \quad (\text{Mandatory})$$

- ii. A significant relationship between the mediating variable and the dependent variable:

$$Y = b_0 + C + b_1 M + \varepsilon \quad (\text{Mandatory})$$

- iii. Testing the influence of the independent variable on the dependent variable, while holding constant the mediating variable:

$$Y = C'_0 + C + b_1 M + C'_1 X + \varepsilon$$

While significance is not a requirement for mediation, a significant relationship suggests partial mediation, whereas non-significance indicates full mediation.

- iv. Calculating the mediation effect (H₀₅):

$$\text{Mediation} = a_1 \times b_1 \text{ Or } C \text{ (Total effect)} - C' \text{ (Direct effect)}$$

- v. Total effect (C) = (a₁ × b₁) + C'.

3.4.3 Moderation testing

The following model equations were used:

- i. Testing the moderating role of social value orientation (W) on the relationship between government trust (M) and tax compliance (Y) (H₀₆):
- $$Y = b_0 + b_1 M + b_2 W + b_3 MW + \varepsilon \quad (\text{H}_{06})$$
- ii. Testing the moderating effect of social value orientation (W) on the relationship between tax service quality (X) and tax compliance (Y) (H₀₇):

$$Y = C'_0 + C + c'_1 X + c'_2 W + c'_3 XW + \varepsilon \quad (\text{H}_{07})$$

3.4.4 Moderated mediation testing

Finally, the moderated mediation effect was computed using the following equation:

$$Y = (b_1 + b_2 W) * a_1 \quad (\text{H}_{08})$$

4. RESULTS AND DISCUSSION

4.1 The Descriptive Statistics for the Constructs under Study

The results indicate a moderate level of tax compliance, with a mean score of 4.2241 and a standard deviation of 0.35353, showing moderate variability. The distribution is nearly normal, with skewness of 0.078 and kurtosis of

0.126, suggesting no significant outliers. Tax service quality had a higher mean of 4.4002, reflecting positive perceptions, and moderate variability (SD = 0.41349). The distribution is also near normal, with skewness of -0.100 and kurtosis of 0.126. Government trust scored moderately at 4.0477, with medium dispersion (SD = 0.40056) and a slightly peaked normal distribution (skewness = 0.102, kurtosis = 0.743). Lastly, social value orientation mirrored tax compliance, with a mean of 4.2241 and similar variability, showing moderate adherence to social values and normal distribution (skewness = 0.078, kurtosis = 0.126). These results reflect generally moderate and positive responses across the variables.

4.2 Correlation Analysis

The study used Pearson’s correlation coefficient to assess the strength and direction of linear relationships between variables. Pearson coefficients range from -1 to +1, with positive values indicating a direct relationship and negative values an inverse relationship. The analysis revealed significant positive correlations between all variables and tax compliance. Social value orientation had the strongest correlation with tax compliance ($r = .678, p < .01$), followed by government trust ($r = .642, p < .01$) and tax service quality ($r = .568, p < .01$). Additionally, there was a positive relationship between tax

service quality and government trust ($r = .373, p < .01$). These results suggest that higher social value orientation, trust in government, and perceived quality of tax services are associated with increased tax compliance. None of the correlation coefficients among the variables exceeded the threshold of 0.8, indicating that multicollinearity was not a concern [57]. The absence of significant multicollinearity ensures that the relationships between the predictors and the outcome variables are not distorted, allowing for more reliable interpretations of the factors influencing tax compliance. The findings highlight the important role of these factors in influencing tax compliance behaviour.

4.3 Hypotheses Testing Results

4.3.1 Results for covariates and direct effects hypotheses (H01 to H03)

The study examined the impact of control variables (SME experience, sector, and size) on tax compliance through regression analysis. Model 1 demonstrated that these covariates significantly predicted tax compliance, collectively accounting for 8% of the variance ($R^2 = .080$). Specifically, SME experience ($\beta = .120, p < .01$), sector ($\beta = .083, p < .05$), and SME size ($\beta = .167, p < .01$) all had positive effects on tax compliance. The model was statistically significant ($F = 10.845, p < .001$).

Table 1. Summary of the descriptive statistics for the constructs

	N	Mean	Std. Deviation	Skewness	Kurtosis		
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Tax compliance (TC)	377	4.2241	.35353	.078	.126	-.067	.251
Tax service quality (TSQ)	377	4.4002	.41349	-.100	.126	-.600	.251
Government trust (TGT)	377	4.0477	.40056	.102	.126	.743	.251
Social value orientation (SVO)	377	4.2241	.35353	.078	.126	-.067	.251
Valid N (listwise)	377						

Table 2. Pearson correlation results

	Tax compliance	Tax service quality	Government trust	Social value orientation
Tax compliance	1			
tax service quality	.534**	1		
Government trust	.547**	.373**	1	
Social value orientation	.471**	.372**	.362**	1

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

Hypothesis H₀₁: This hypothesis proposed no significant effect of tax service quality on SME tax compliance. Model 2, which controlled for the covariates, revealed that tax service quality significantly predicted tax compliance ($\beta = .541$, $p < .001$), explaining 35.4% of the variance ($R^2 = .354$), a substantial improvement over Model 1 ($\Delta R^2 = .273$). These results reject H₀₁ and highlight the crucial role of high-quality tax services in fostering tax compliance. The findings align with the Social Contract Theory, which argues that citizens are more likely to comply with tax obligations when they receive efficient government services. This supports the idea that responsive and high-quality tax services promote voluntary compliance, essential for sustaining a robust tax system. The results corroborate studies by earlier researchers, such as [58] and [59], who also identified a positive impact of service quality on tax compliance.

Hypothesis H₀₂: This hypothesis suggested that government trust does not significantly influence tax compliance. Model 3, which included covariates and tax service quality, found government trust to be a significant predictor of tax compliance ($\beta = .375$, $p < .001$). This model explained 48.3% of the variance ($R^2 = .483$), rejecting H₀₂ and emphasizing the role of government trust in promoting compliance. These findings are consistent with the Political Legitimacy Theory, which asserts that trust in government encourages taxpayers to fulfil their obligations. Studies by Jimenez and Iyer [60] and [40] similarly identified a positive association between government trust and tax compliance.

Hypothesis H₀₃: This hypothesis examined the effect of social value orientation on tax compliance. Model 4, controlling for tax service quality and government trust, found that social value orientation significantly affected tax compliance ($\beta = .234$, $p < .001$). This model accounted for 51.6% of the variance ($R^2 = .516$), rejecting H₀₃. The results align with the literature on prosocial behaviour, including research by Brizi et al. [31] and [61], which shows that individuals with cooperative tendencies are more likely to comply with tax obligations.

4.3.2 Effect of tax service quality on government trust (H₀₄)

Hypothesis H₀₄ explored the impact of tax service quality on government trust. Model 1 showed that SME experience positively influenced government trust ($\beta = .090$, $p < .05$), while SME sector and size were not significant predictors. This model explained 1.6% of the variance in government trust. In Model 2, which included tax service quality, SME experience remained a significant predictor, and tax service quality had a strong positive effect on government trust ($\beta = .395$, $p < .001$). This model explained 15% of the variance in government trust, rejecting H₀₄. The findings confirm that tax service quality significantly enhances government trust, supporting Fiscal Exchange Theory, which posits that high-quality services from tax authorities foster trust in government institutions. Efficient and transparent services build public trust and promote voluntary tax compliance, consistent with studies by Bernarto et al. [62] and [63].

Table 3. Results for covariates and direct effects hypotheses

Var.	Model 1		Model 2		Model 3		Model 4	
	Unstandardized Coefficients		Unstandardized Coefficients		Unstandardized Coefficients		Unstandardized Coefficients	
	β	t	β	t	β	t	β	t
(Constant)	3.101***	22.476	.926***	4.438	.035	.168	-.458	-2.040
Expe	.120**	3.474	.099**	3.392	.071**	2.711	.072**	2.829
Sector	.083*	2.302	.074*	2.461	.083**	3.066	.080**	3.044
Turnover	.167**	3.211	.175***	4.021	.167***	4.263	.146***	3.828
TSQ			.541***	12.541	.393***	9.444	.334***	7.971
TGT					.375***	9.631	.324***	8.312
SVO							.234***	5.037
R ²	.080		.354		.483		.516	
Adj. R ²	.073		.347		.476		.508	
SEE	.61144		.51330		.45972		.44533	
ΔR^2	.080		.273		.129		.033	
F	10.845***		157.273***		92.754***		25.372***	

* $p = .05$, ** $p = .01$, *** $p < .001$

Where; β = unstandardized parameter of estimates coefficients, Var = Variable Name, Expe = SME experience, Sector = SME sector, Turnover = SME turnover, ETSG = tax service quality, TGT = taxpayers government trust, SVO = social value orientation

Table 4. Results for tax service quality on Government trust

Var.	Model 1		Model 2	
	Unstandardized Coefficients		Unstandardized Coefficients	
	β	<i>t</i>	β	<i>t</i>
(Constant)	3.966***	26.699	2.376	***9.549
Expe	.090	*2.400	.074	*2.123
Sector	-.017	-.435	-.023	-.640
Turnover	.017	.308	.024	.452
TSQ			.395	***7.683
R ²	.016		.150	
Adj. R ²	.008		.141	
SEE	.65828		.61237	
ΔR^2	.016		.135	
F	1.973		59.026***	

p* = .05, *p* = .01, ****p* < .001

Where; β = unstandardized parameter of estimates coefficients, *t* = *t*-statistic, Var = Variable Name, Expe = SME experience, Sector = SME sector, Turnover = SME turnover, ETSG = tax service quality, TGT = taxpayers government trust, SVO = social value orientation.

4.3.3 Testing for the mediating effects of government trust on the relationship between tax service quality and SME’s tax compliance (H₀₅)

Hypothesis H₀₅ tested whether government trust mediates the relationship between tax service quality and SME tax compliance, using the four-step approach suggested by MacKinnon et al. [64] and [53]. First, tax service quality was found to significantly impact government trust ($\beta = .395$, *p* < .001). Second, government trust positively influenced tax compliance ($\beta = .377$, *p* < .001). Third, tax service quality had a strong direct effect on tax compliance ($\beta = .531$, *p* < .001). Finally, the mediation analysis showed both a direct effect of tax service quality on tax compliance ($\beta = .412$, *p* < .001) and an indirect effect through government trust ($\beta = .149$, CI [0.113, 0.190]). Sobel’s *z*-test confirmed partial mediation (*z* = 4.714, *p* < .001), rejecting H₀₅. This demonstrates that government trust strengthens the effect of tax service quality on tax compliance, aligning with the complementary mediation framework proposed by Wei et al. [65].

4.3.4 Moderating effect on government trust and tax compliance (H₀₆)

Hypothesis H₀₆ examined the moderating effect of social value orientation (SVO) on the relationship between tax service quality (TSQ) and SME tax compliance (TC). Model 3 found that the interaction between TSQ and SVO significantly predicts tax compliance ($\beta = .102$, *p* < .01), accounting for an additional 2.5% of the variance (R² = .543, $\Delta R^2 = .025$). The interaction plot indicated that higher SVO strengthens the

positive relationship between TSQ and TC, leading to the rejection of H₀₆. SVO influences perceptions of moral norms and societal responsibility, with individuals oriented towards values like conservation and self-transcendence more likely to view tax non-compliance as immoral. This results in higher tax compliance, while those focused on self-enhancement values, such as success and dominance, tend to have lower compliance rates [31,46,66].

4.3.5 Moderating effect on tax service quality and tax compliance (H₀₇)

Hypothesis H₀₇ assessed whether social value orientation (SVO) moderates the relationship between government trust (GT) and SME tax compliance (TC). Model 4 revealed that the interaction term (GT x SVO) significantly predicts tax compliance ($\beta = .097$, *p* < .01), contributing an additional 1.9% of the variance (R² = .562, $\Delta R^2 = .019$). The interaction plot indicated that higher SVO enhances the positive relationship between government trust and tax compliance, leading to the rejection of H₀₇. This finding aligns with previous research demonstrating that social values can strengthen taxpayers’ commitment to the tax system, fostering trust and improving compliance [67]. Governments can enhance tax compliance by aligning services with social value orientations [68].

4.3.6 Moderating effect on the indirect relationship via government trust (H₀₈)

Hypothesis H₀₈ suggested that social value orientation (SVO) moderates the indirect effect of

tax service quality (TSQ) on tax compliance (TC) through government trust (GT). Using Hayes Model 15, the analysis confirmed a significant moderated mediation effect, with the index of moderated mediation being notable ($\beta = .052$, CI [0.027, 0.084]). This finding indicates that the indirect effect of TSQ on TC via GT is stronger

for individuals with higher SVO. The results led to the rejection of H₀₈, supporting the hypothesis of moderated mediation. These findings emphasize that enhancing government trust and improving tax service quality, particularly by aligning with taxpayers' social values, is critical for fostering voluntary tax compliance [31,69].

Table 5. Results for mediation and total effect

Predictors names	Model 1	Model 2	Model 3	Model 4
	TGT	TC	Mediation M3= $a_1 \times b_1$	Total effect=CI (TC)
	β	β	β	β
Expe	.0738	.0712		.0988*
Sector	-.0231	.0830*		.0744
Turnover	.0235	.1666***		.1754***
TSQ	.3952***	.3926***		.5408***
TGT		.3749***		
R ²	.1504	.4828	$a_1 = .3952 \times .3749 = .1482$.3535
MSE	.3750	.2113	CI = .0981, .2015	.2635
F	14.0012***	90.4736***		59.1772***

* $p = .05$, ** $p = .01$, *** $p < .001$

Where; TGT = government trust, TC = SMEs tax compliance, TSQ = tax service quality, CI = Confidence intervals, B = Unstandardized parameter estimates coefficients.

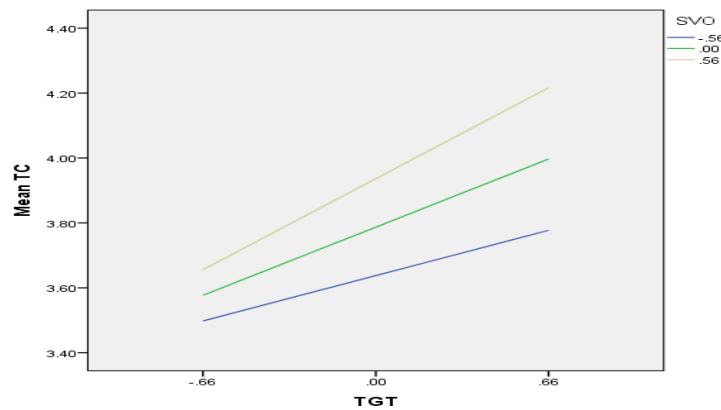


Fig. 2. Graphic representation of the moderating effect of TGT on TSQ and TC

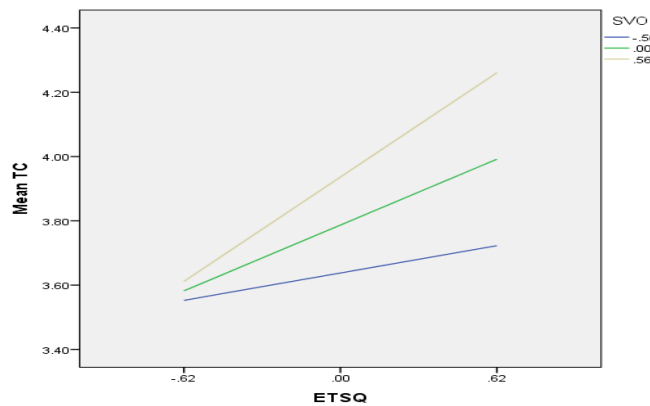


Fig. 3. Graphic presentation of the moderating effect of social value orientation on the relationship between tax service quality and SME tax compliance (H₀₇)

Table 6. Results for moderating effect of social value orientation on study variables

Predictors Name	Model 6		Model 7	
	β	<i>t</i>	β	<i>t</i>
Expe	.0738	1.9149	.0770*	2.3405
Sector	-.0231	-.5614	.0883*	2.5861
Turnover	.0235	.5020	.1155**	3.3769
TSQ	.3952***	6.7251	.3329***	5.9137
TGT			.3178***	5.8566
SVO			.2686***	6.2007
Int_1			.3502***	4.3025
Int_2			.1916*	2.4244
R ²	.1504		.5780	
MSE	.3750		.1738	
F	14.0012***		75.0731***	

* $p = .05$, ** $p = .01$, *** $p < .001$

Where; β = unstandardized parameter estimates coefficients, TC=SMEs tax compliance, TSQ = tax service quality, TGT = taxpayers government trust, SVO = social value orientation, Int_1 (TSQ*TC) =Interaction of tax service quality and SMEs tax compliance, Int_2 (TGT*TC) =Interaction of government trust and SMEs tax compliance.

Table 7. Conditional process analysis of the indirect effects at three levels of Social Value Orientation (SVO)

Levels of the SVO	β	SE	LLCI	ULCI
Low levels of SVO (-1)	.0835	.0208	.0464	.1282
Mean levels of SVO (0)	.1256	.0266	.0770	.1808
High levels of SVO (+1)	.1677	.0397	.0950	.2503

CI = 95% confidence interval for indirect effect; if CI does not include zero, the indirect effect is statistically significant.

5. CONCLUSION

This study concludes that several key factors significantly influence tax compliance among SMEs. First, high-quality tax services are shown to have a positive impact on tax compliance, indicating that efficient and effective tax systems encourage SMEs to fulfil their tax obligations. Second, trust in government emerges as a critical determinant of tax compliance; greater trust in government correlates with higher levels of compliance. This finding underscores the importance of transparent governance and the accountable use of tax revenues in fostering taxpayer trust and compliance. Third, SMEs with a strong social value orientation, which emphasizes collective welfare, demonstrate better compliance. This suggests that promoting social responsibility within SMEs can enhance tax compliance.

Additionally, the study finds that the quality of tax services directly enhances government trust, which in turn boosts tax compliance. The mediating role of government trust in the

relationship between tax service quality and tax compliance highlights the necessity of adopting integrated strategies to simultaneously improve service quality and build trust in government institutions. Furthermore, social value orientation is found to amplify the effects of both government trust and tax service quality on tax compliance. This indicates that fostering prosocial values among taxpayers can strengthen the impact of trust-building efforts and improve compliance outcomes. The study also reveals that social values moderate the indirect relationship between tax service quality and compliance via government trust, emphasizing the need to consider individual motivations and social orientations in the formulation of tax policies.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

CONSENT

A written informed consent was obtained from the participants. A copy of the written consent is available for review by the Editorial office/Chief Editor/Editorial Board members of this journal.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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