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## **Socio- Psychological Determinants, Compliance Cost and Value Added Tax Compliance**

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# Socio- Psychological Determinants, Compliance Cost and Value Added Tax Compliance

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## Abstract

**Purpose:** We tested the moderating effect of compliance cost on the relationship between socio-psychological determinants and Value Added Tax compliance among commercial building owners in Kenya.

**Design/Methodology/Approach:** We employed hierarchical regression model to test the hypotheses using a cross-sectional survey data drawn from 255 registered commercial building owners in Kenya.

**Findings:** The empirical findings indicate that taxpayer knowledge, religiosity and patriotism significantly and positively influence tax compliance while the effect of egoism is negative. In addition, when the compliance cost is high, the effect of taxpayer knowledge, religiosity and patriotism on VAT tax compliance weakens, whereas the influence of taxpayer egoism on VAT compliance is stronger.

**Research Implications:** Overall, the analyses suggest that the when taxpayers are knowledgeable, religious and patriotic they are more likely to be VAT compliant as opposed to when they egoistic. Further, compliance cost is a crucial catalyst that ought to be considered when assessing for tax compliance among taxpayers.

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**Originality/value:** This work highlights the value of the taxpayers attributes in pursuit of VAT compliance. Significantly, the study reveals that taxpayer's knowledge, religiosity and patriotism can enhance VAT compliance while egoism does not. However, their effect is contingent on compliance cost. This contributes to the socio-psychological determinants-tax compliance literature by clarifying how specific taxpayer attributes influence VAT compliance under different levels of compliance cost.

**Keywords:** *Taxpayer Knowledge, Religiosity, Patriotism, Egoism, Compliance Cost, VAT compliance*

## 1.0 Introduction

Tax is an important source of revenue for the government and every administration; it helps the government to fulfil its financial obligations in addition to providing services to the general public (Kenny & Winner, 2006; Gurdal et al., 2021). However, in order to meet these obligations, the government has implemented policies such as tax compliance measures to enhance revenue and foster sustainable economic growth (Li et al., 2020). Tax compliance has gained traction among scholars and policymakers in the recent past especially in emerging contexts. Various policies and facilities that are implemented government are geared towards improving taxpayer compliance in terms of paying and reporting their tax obligations (Hiyadat et al., 2023). Tax compliance refers to the readiness of individual taxpayers including corporate to adhere to provisions of the law in relation to filing, reporting and payment of taxes due without waiting to be forced by law enforcers to do (Mellon, 2016). Thus, tax compliance is an obligation to do the right think in the eyes of the tax laws. However, over time, tax compliance challenges have persisted due to the inherent reluctance of individuals and corporations to pay taxes (Abdallah, 2014). Due to this, scholars have made attempts to understand what drives tax compliance levels.

Previous work has explored into several aspects to determine what drives individual or corporate taxpayers to be noncompliant with tax laws. The majority of research findings on what determines tax compliance are inconclusive and sometimes contradictory. For example, taxpayer compliance levels have been connected to service quality (Susuwu et al., 2020), taxpayer education (Fagariba, 2016), and public awareness of tax reforms and education (Bruce-Twum, 2014). Additional analysis on voluntary tax determinants was done, with a focus on trust, compliance cost, tax fairness, tax rates, and tax authority as potential voluntary tax compliance drivers in agrochemical SMEs (Kumi et al., 2023). Another study proposed that perceived fiscal exchange, tax morality, tax justice, tax complexity, and the power of authority are key drivers of tax compliance (Saptono & Khozen, 2023). Recent studies offer new insights by examining greater levels of analysis. For example, recent work indicates that tax education and service quality influence tax compliance via political party affiliation (Nyantakyi et al., 2024). Another study found that the impact of socioeconomic variables on VAT compliance in the retail industry is dependent on tax knowledge (Lufti et al., 2023). Natariasari and Hariyani's (2023) research found that information knowledge technology improves the effect of accounting processes, attitudes toward tax incentives, and understanding of tax rules on compliance. Another body of research found that the effect of individual financial position, referral group, political influence, religiosity, and cultural influence is stronger when individuals possess greater knowledge (Sritharan & Salawati, 2019).

From the above studies, it is evident that findings are fragmented and are inconclusive. Thus, to fill this knowledge gap, first, we explore whether socio-psychological aspects influence VAT compliance. We proposed that an individual taxpayer's knowledge on tax laws and processes tend to enable them to comply with VAT requirements. Previous work has shown contradictory findings on the effect of taxpayers knowledge on compliance as some indicate a positive relationship (Jusoh et al., 2021), while others shows no association (Natariasari & Hariyani's, 2023). We also argue that taxpayer's religious orientation would determine the extent of their compliance with VAT laws. Evidently, studies have suggested that taxpayer's religiosity enhances tax compliance (Sritharan & Salawati, 2019). Even though there less studies that have examined association between egoism and tax compliance, we believe that when taxpayers are egoistic they are more likely to be noncompliant as opposed to when they are patriotic. Further to add onto the tax compliance literature, we extend our contributions by examining the moderating role of compliance cost. Our study contributes to tax compliance literature by hypothesizing that the effect of taxpayer knowledge, religiosity and patriotism becomes stronger when compliance cost is lower but when compliance cost is high it is more likely to increases the effect of egoism on VAT compliance.

Current study utilizes data from a developing context where tax system compared to advanced countries is still weak and unable to generate the expected levels of revenue because of administrative and political weaknesses, including a very narrow set of taxpayers, poor capacity to expand the tax base to the self-employed and resistance from the elite and wealthy individuals with plentiful opportunities to conceal their income (Fjeldstad, 2014). Kenya is a low-income country with a mixed economy. The government is actively involved in development planning, motivated by the need to maximize the use of the country's limited resources to satisfy national policy priorities (Nyambura et al., 2012). Development plans rely on a variety of sources, although taxation is regarded as the primary source of government budgetary resources (Kanyi & Kakui, 2014). One of the key source of revenue is the taxation of property owners who are taxable under under the VAT Act (No. 35 of 2013) - Laws of Kenya. To boost VAT in the sector, several provisions have been initiated and implemented, however, with such provisions; the level of tax compliance still remains low in many economic sectors including housing and property owners (Karanja, 2015; Mutai & Omwono, 2022). Statistics indicate that less than 50% of the property owners in Kenya comply with VAT tax laws implying a decrease in revenue.

Although tax compliance is thought to be a process by which the government generates income, higher rates of noncompliance have largely been linked to demographic aspects to the exclusion of socio-psychological characteristics (Gichuru & Wahome, 2022). We propose that if individual taxpayers are not knowledgeable, religious, patriotic, or less egoistic, they are more likely to be noncompliant. Furthermore, we include an important component, compliance cost, which is understudied in the tax compliance literature. We believe that when compliance costs are high, it may limit or support the effect of socio-psychological variables on VAT compliance, which has not been investigated to the best of the researchers' knowledge. Thus, from a developing context, we examine whether compliance cost moderates the association between socio-psychological determinants and VAT compliance among commercial building owners in Kenya.

The remainder of our manuscript is structured as follows: we will evaluate relevant literature on tax compliance and formulate hypotheses. We then outline the methods. This is followed by a

section that details the results, and the paper concludes by discussing the findings, including implications, limitations, and opportunities for further research.

## **2.0 Theory and Hypotheses Development**

### **2.1 Theoretical perspectives**

Existing research on tax compliance has extensively used the theory of planned behavior and the economic deterrence model to uncover the relationship between numerous elements proxied as tax compliance determinants (Taing & Chang, 2021; Murphy, 2008). The current study utilizes social identity and psychological egoism theory to explain the importance of socio-psychological determinants in enhancing VAT compliance. According to the social identity theory, in many social circumstances, people see themselves and others through the lens of group membership rather than as distinct individuals. This theory states that social identity plays a fundamental role in shaping intergroup behavior, distinguishing it from interpersonal relationships. Furthermore, it describes the circumstances under which social identities are likely to take precedence, becoming the primary determinants of social perceptions and behaviors. Thus, the social identity theory is applicable to ethnic, religious, nationality, or political identities since they exhibit a more "collective in nature" essence than other individual components of identity. We argue that a taxpayer's religious identity and national identity can enhance tax compliance. In essence, individual taxpayers who hold positive values that are aligned to their religious beliefs and love for their country are more likely to comply with VAT laws and policies. According to the psychological egoism theory, individuals' actions, behavior, motives, and decisions are primarily motivated by self-interest (Feinberg, 2007). The theory is reductive since it includes all ultimately selfish desires (Tomaszewski, 2021). As a result, it assumes that individuals acting in their own self-interest are more concerned with personal gain than with social and economic capital that benefits society. In the tax realm, psychological egoism theory posits that individual taxpayers motivated by personal interests are less likely to follow VAT rules and processes.

### **2.2 Hypotheses Development**

#### **2.2.1 Taxpayer Knowledge and VAT Compliance**

Tax knowledge refers to a taxpayer's capacity to understand fundamental tax policy principles, procedures, and obligations. This concept is critical in establishing the level of tax compliance with the tax system, especially when calculating one's tax liability (Baru, 2016). Tax knowledge refers to strategies for influencing a taxpayer's behavior and attitude. This step is typically accomplished by teaching, educating, and training initiatives. Learning about taxes improves tax literacy, leading to increased willingness to pay taxes (Nichita et al., 2019). This will increase taxes and boost economic growth (Abuselidze, 2020). It means individual taxpayers should seek to understand tax information as this will enhance their compliance level. Although there are few studies that examined association between taxpayer knowledge and VAT compliance, the findings are inconclusive. Literature shows that tax knowledge enhances tax compliance (Alm, 2019; Appiah et al., 2024; Nyantakyi et al., 2024). One of the critical factors contributing to the success of tax compliance among Micro, Small, and Medium Enterprises is the taxpayers' knowledge (Juniarti & Anggrahini, 2020). When MSME owners understand their tax obligations and the

importance of paying taxes, they are more likely to comply with tax regulations (Sari et al., 2021). This knowledge includes knowing the types of taxes that need to be paid, the deadlines for tax payments, and the proper procedures for tax reporting (Meidawati & Azmi, 2019). Additionally, knowledge of tax benefits and incentives available to MSME owners can encourage tax compliance (Harjanto et al., 2020). We argue that the extent to which an individual taxpayer seeks tax information or enhance his or her understanding on tax principles and policies would increase the appetite to comply with VAT laws and processes. We hypothesize that:

*H<sub>1</sub>: Taxpayer knowledge positively influences VAT compliance among commercial building owners.*

### **2.2.2 Taxpayer Egoism and VAT Compliance**

Egoism is characterized as an individual's excessive focus on personal interests, often at the expense of the wider community's well-being (Weigel et al., 1999). This self-centered perspective can significantly influence compliance levels, particularly in contexts such as tax obligations. While tax compliance is crucial for government revenue generation, some taxpayers exhibit egoistic tendencies, justifying dishonest behavior if it serves their personal gain. Such individuals are inclined to deceive when those lies align with their interests. Korndörfer et al. (2014) propose that egoism can significantly impact both tax evasion and the concealment of tax evasion, suggesting a direct relationship between egoistic behavior and non-compliance.

According to the theory of psychological egoism, individuals who prioritize their own interests typically overlook any potential societal or economic benefits that could arise from compliance with tax duties (Mu et al., 2023; Tomaszewski, 2021). This self-prioritization can lead to a predilection for engaging in behaviors that benefit the individual rather than the community. For instance, taxpayers driven by personal gain may actively seek to evade their tax responsibilities. Empirical findings indicate that individuals with egoistic personalities are often catalysts for non-compliance with tax regulations (Korndörfer et al., 2014). As a socially aversive trait, egoism can ultimately result in criminal behavior, particularly when it leads to tax non-compliance (Paulhus & Jones, 2015). Moreover, Chayati et al. (2024) found that taxpayer egoism positively influences intentions to evade tax, reinforcing the notion that a strong sense of personal advantage can significantly affect tax compliance behaviors. In light of these insights, we propose the following hypothesis.

*H<sub>2</sub>: Taxpayer Egoism affect Value Added tax compliance*

### **2.2.3 Taxpayer Religiosity and Value Added Tax Compliance**

Religiosity plays an important role due to the cultural and other factors, a strong belief in religion can change the taxpayers' attitude (Palil, Akir, & Ahmad, 2013). It was found that religiosity has a significant and direct impact on volunteer tax compliance scheme and a weak relationship with enforced tax compliance scheme in Malaysia (Ali, 2013). Other researchers also found that relationship between tax evasion and ethics has been moderated by religiosity (Lau, Choe, & Tan, 2013).

Barro and McCleary (2003) found that religiosity measurements, such as religious attendance and religious beliefs, decline when per capita Gross Domestic Product (GDP) increases. However, when specific economic developments such as education, urbanization and life expectancy are held constant, religiosity is virtually unrelated to per capita GDP. The second direction is the extent to which religiosity influences economic performance. Barro and McCleary (2003) suggest religion serves to encourage certain behaviors. For example, honesty and work ethics that enhance productivity indicate that economic growth responds positively to religious beliefs. Carsamer and Abbam (2023) results suggested that Ghanaian religious notoriety does not significantly explain SMEs' tax compliance, and tax evasion is perceived as ethical. Khalil and Sidani (2020) did not find religiosity to be a major explanatory variable affecting tax evasion attitudes. While religion and morality are not mutually exclusive, Nicholson (2019) found that religiosity has a beneficial impact on tax compliance. Abodher, et al. (2020) found that overall religiosity had a statistically positive impact on both voluntary and enforced tax compliance among Libyan self-employed. Dabor et al., (2021) focused on Indonesia, revealing that religiosity encourages taxpayers to voluntarily comply with tax regulations. Based on the aforementioned insights, we propose the following hypothesis

*H<sub>3</sub>: Taxpayer Religiosity affect Value Added tax compliance*

#### **2.2.4 Taxpayer Patriotism and Value Added Tax Compliance**

Patriotism was initially interpreted as an effort to fight colonialism. Patriotism in this study is interpreted as the pride of individuals for their country. Patriotism will foster bond between citizens and their nation or country. This bond can be shown through the citizens' love for the nation and pride of their national identity as citizens (Gangl & Kirchler, 2015). Willingness to sacrifice for the sake of the nation and state is a manifestation of a sense of patriotism. A form of love for the state can manifest in compliance to the tax regulations that have been issued by the state. The results of previous studies indicate that the manifestation of love for the state can affect citizen tax compliance (Pradini, Ratnasari, & Hidayat, 2016). This research is in accordance with what has been conducted by Konrad and Qari (Konrad & Qari, 2012) who found that a person's patriotism is related to the level of tax compliance. Nazaruddin (2019) showed that the level of patriotism affect taxpayer compliance. High patriotism would increase taxpayer compliance. Al-Maghrebi et al. (2022) conduct a systematic literature review, connecting tax compliance to patriotism and intention, suggesting the need for more empirical analyses using alternative research approaches and theories. In a related study, Alshira'h et al. (2021) examine the influence of patriotism and public governance on the sales tax compliance of SMEs, discovering that patriotism and public governance increase and improve sales tax compliance. Novita (2020) underscores the importance of taxpayer patriotism, emphasizing its positive relationship with tax compliance, especially at the individual level. The significance of patriotism in shaping taxpayer compliance intentions is supported by consistent findings in previous research. Therefore, the study proposed that:

*H<sub>4</sub>: Taxpayer Patriotism affect Value Added tax compliance*

## 2.3 The Moderating Role of Compliance Cost

Compliance costs can act as a moderating variable on taxpayer's egoism, Taxpayer's patriotism, Taxpayer's religion and taxpayer's knowledge and the dependent variable Value Added Tax Compliance by influencing the behavior of taxpayers. When compliance costs are high, there is a greater likelihood of unintended consequences, such as increased non-compliance, errors, or reluctance to fully adhere to tax regulations. As such, understanding and managing compliance costs are crucial for designing effective tax policies that encourage voluntary compliance and minimize unintended negative outcomes. The moderating role of compliance costs is significant in shaping the relationship between factors such as taxpayer egoism, patriotism, religion, and knowledge, and their impact on Value Added Tax (VAT) compliance. Compliance costs, which refer to the expenses incurred by taxpayers to meet regulatory obligations, can influence taxpayer behavior by altering their perception of the tax system and the associated burdens. When compliance costs are high, individuals may feel overwhelmed and demotivated, leading to a greater likelihood of non-compliance, errors in tax reporting, or hesitancy to fully adhere to tax regulations. Consequently, this increase in compliance costs could exacerbate egoistic tendencies, as taxpayers may prioritize their personal financial interests over compliance, viewing the costs as excessive or unjustified (Chayati et al., 2024; Korndörfer et al., 2014). Lower compliance costs can enhance taxpayers' willingness to comply, reinforcing positive influences from factors such as patriotism and religious convictions (Paulhus & Jones, 2015; Mu et al., 2023). Ultimately, fostering a tax environment with manageable compliance costs is essential for improving overall VAT compliance and promoting a culture of accountability among taxpayers.

*H<sub>5a</sub>: Compliance cost has a moderating effect on the relationship between Taxpayer knowledge and Value Added Tax compliance*

*H<sub>5b</sub>: Compliance cost has a moderating effect on the relationship between Taxpayer Egoism and Value Added Tax compliance*

*H<sub>5c</sub>: Compliance cost has a moderating effect on the relationship between Taxpayer Religiosity and Value Added Tax compliance*

*H<sub>5d</sub>: Compliance cost has a moderating effect on the relationship between Taxpayer Patriotism and Value Added Tax compliance*

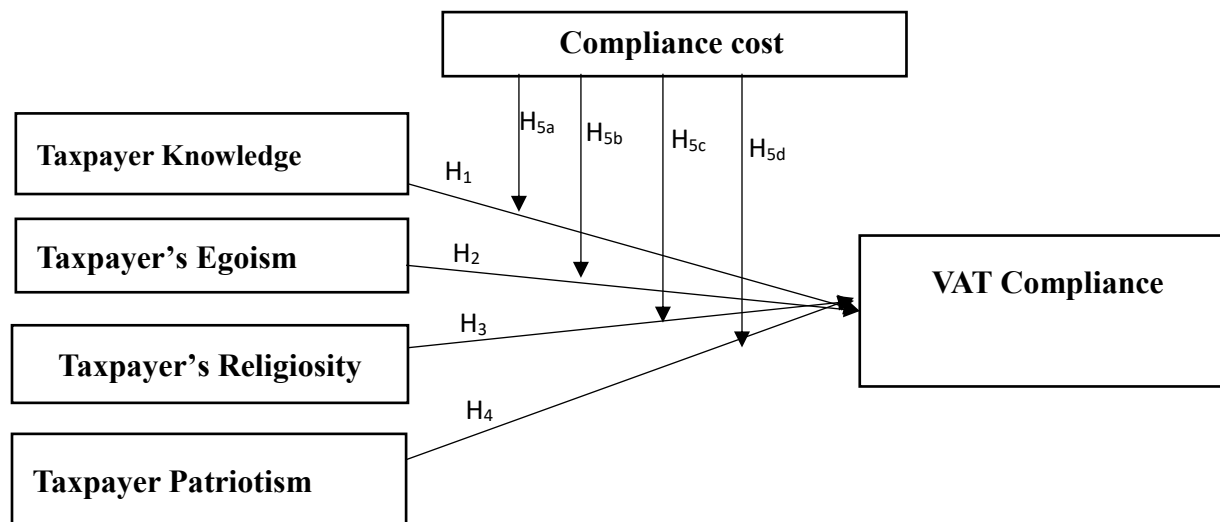




Figure 1 - Conceptual framework

### 3.0 Data and Methods

#### 3.1 Sample

To test our study hypotheses, we collected 336 surveys from a target group of commercial building owners in Makueni County, Kenya. Commercial building owners were chosen because they are obligated to pay VAT, and the majority of them are still confronting the difficulty of noncompliance, which is detrimental to the government in terms of income. Primary data was collected using semi-structured questionnaires based on previous studies. The analysis included 255 valid surveys. This is considered sufficient if the model includes variables with good reliability and robust parameter estimations (Kyriazos, 2018).

#### 3.2 Reliability and Validity

To ensure the content validity of the evaluation scale employed in the study, we used measures from prior research (Nguyen et al., 2020; Palil et al., 2017; Ilham & Hayon, 2019; Choe & Lau, 2010; Benos & Johec, 2009; Coolidge, 2018; Malekian, 2021). The instrument's reliability was assessed using the Cronbach's alpha approach. Factors influencing VAT compliance include knowledge of the taxpayers ( $\alpha = 0.988$ ), egoism ( $\alpha = 0.750$ ), religiosity ( $\alpha = 0.767$ ), patriotism ( $\alpha = 0.955$ ), and compliance cost ( $\alpha = 0.755$ ). This suggests that the research instrument was reliable, as all cronbach alpha values exceeded 0.70 (Sekaran & Bougie, 2010). A factor analysis was used to determine construct validity for the 35 items in the semi-structured questionnaire. VAT compliance resulted in a one-factor solution with an eigen value more than 1 and item loadings greater than 0.5. Similarly, all independent variables had Eigen values more than one and factor loadings greater than the 0.5 rule of thumb (Nunnally, 1978), indicating convergent validity.

#### 3.3 Measurement of Variables

**3.3.1 Dependent Variable.** We assessed VAT compliance using five items validated by Nguyen et al. (2020). This was based on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). The items assessed the degree, to which the commercial building owner is registered for VAT, filed VAT returns on time, remitted the correct VAT within the specified timelines, paid VAT by the due date because it is morally right, and made VAT returns on a monthly basis and has never been late as required by VAT regulations.

**3.3.2 Independent Variables.** **Taxpayer knowledge** was measured using seven questions adapted from Palil et al., (2017), which asked the commercial building owners if they are: aware of the provisions of VAT and its subsequent changes; aware of income from commercial buildings that is subject to VAT; received adequate VAT training from the tax authority; know the process of VAT filing and remittance of payment is complex and requires expertise; can comfortably calculate the value added tax per The items were presented on a five-point Likert scale, with 1 (strongly disagree) and 5 (strongly agree). **Taxpayer religiosity** was measured based on six items

proposed by Ilham and Hayon (2019). The commercial building owner was asked the extent to which he or she believes that his or her religious beliefs lie behind a whole approach to VAT tax compliance; spend time trying to grow in faith and understanding his or her VAT tax obligation; religious beliefs influence his or her VAT compliance; often read books and magazines about his or her faith and taxes; religion is important because it answers questions about the meaning of taxes; and enjoy spending time with others of my religious affiliation and discuss VAT compliance matters. This was based on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). *Taxpayer egoism* was assessed based on five questions as validated by Choe & Lau (2010). The commercial building owner was asked to assess whether the best way to handle people is to tell them what they want to hear; a person should obey only laws that seem reasonable; a person doesn't really know whom he or she can count on; people should not work hard unless they are forced to; and the difference between most criminals and other people is that criminals are stupid enough to get caught. The questions were anchored on a Likert scale where 1 is equal to strongly disagree and 5 is strongly agree. *Taxpayer patriotism* was evaluated based on average of seven questions (Benos & Jochev, 2009). The sample questions asked the commercial building owner the extent to which he or she prepare tax return in a professional manner; everyone should pay the same tax rate regardless of their income; pays more in taxes is more patriotic than a person who pays less in taxes and willing to pay more in taxes if it would be helpful to my country. The questions were adapted from the previous studies and based on Likert scale.

*3.3.3 Moderating Variable.* The moderator in the study was compliance cost. This construct was measured based on five items anchored on a Likert scale as proposed by Coolidge (2018). The sample questions evaluated the degree to which a commercial building owner believes the actual cost of VAT is high; costs of acquiring and transitioning from ETRs to ETIMS is the high; and use of Tax Invoicing Management system is expensive to install and maintain.

*3.3.4 Control Variable.* The study controlled for the age of the commercial building owner. This variable was evaluated based on the number of years (Malekian, 2021).

### 3.4 Analyses

We employed moderated regression analysis to examine the hypotheses. We used the hierarchical regression approach described by Aiken and West (1991). Prior to running the regression analysis, we checked that no model assumptions were violated. We used variance inflation factors to test the multicollinearity assumption. The VIF scores for all variables were within the acceptable range of 10 (Hair et al., 2010), indicating that there was no multicollinearity. We also checked the data for normality with residual plots and the Kolmogorov-Smirnov test. The results indicated no notable breaches of the normal distribution.

Prior to performing a regression test, we normalized all predictor variables to eliminate the multicollinearity issue that occurs when a moderator variable is computed as the product of two variables; a moderator and an independent variable (Aiken and West, 1991). To test the moderated regressions, all of the independent and moderated variables were introduced into the regression equation simultaneously.

*3.4.1 Model specification.* The regression equation for the overall effect model is shown below:

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$$VAT\ compliance = \alpha + \beta_1 (Taxpayer\ Knowledge) + \beta_2 (Taxpayer\ egoism) + \beta_3 (Taxpayer\ religiosity) + \beta_4 (Taxpayer\ patriotism) + \varepsilon \dots\dots\dots equation\ 1$$

The hierarchical regression model is as follows:

$$VAT\ compliance = \alpha + \beta_1 (Taxpayer\ Knowledge) + \beta_2 (Taxpayer\ egoism) + \beta_3 (Taxpayer\ religiosity) + \beta_4 (Taxpayer\ patriotism) + \beta_5 (Moderators) + \varepsilon \dots\dots\dots equation\ 2$$

## 4.0 Results

### 4.1 Descriptive and Correlation Statistics

The descriptive statistics showed indicated a moderate level of VAT compliance among respondents (M= 3.600, SD = 1.23). Taxpayers' Knowledge scores slightly lower, with a mean of 3.494 (SD = 1.18), suggesting that while taxpayers have some understanding of their tax obligations, there is significant potential for improvement in this area. Taxpayers' Egoism shows a mean of 3.569 (SD = 1.20), reflecting a noticeable trend towards self-interest that could affect compliance negatively. Taxpayers' Religiosity and Taxpayers' Patriotism both average around 3.506 (SD = 1.20) and 3.549 (SD = 1.22), respectively, indicating a relatively positive attitude toward civic responsibilities, although these scores are not particularly high. In contrast, compliance cost has a high mean of 4.467 (SD = 1.22), suggesting that taxpayers perceive the costs of compliance as burdensome. Overall, while there are positive sentiments regarding religiosity and patriotism, the variability in the standard deviations highlights the differences in perceptions among respondents, with the highest variability observed in Compliance Cost scores, indicating a wider range of opinions on the burden of compliance expenses.

The correlation coefficients showed that there is a strong positive correlation between VAT compliance and taxpayers' patriotism ( $r = 0.718, p = 0.000 < 0.01$ ), indicating that higher levels of patriotism are associated with increased compliance. Additionally, Taxpayers' Egoism also significantly correlates with VAT Compliance ( $r = 0.685, p = 0.000 < 0.01$ ), suggesting that as self-interest perceptions increase, so too does compliance, which could be indicative of the desire to maintain a positive public image or avoid penalties. Taxpayers' Religiosity demonstrates a strong positive correlation with VAT Compliance ( $r = 0.662, p = 0.000 < 0.01$ ), indicating that those with higher religious commitments tend to exhibit greater compliance, possibly due to ethical considerations rooted in their beliefs. Furthermore, Taxpayers' Knowledge is positively correlated with VAT Compliance ( $r = 0.447, p = 0.000 < 0.01$ ), suggesting that increased knowledge contributes positively to compliance behaviors. Interestingly, the correlation between compliance cost and VAT Compliance is relatively weak ( $r = 0.211, p = 0.004 < 0.05$ ) but still indicates a positive relationship, suggesting that lower perceived compliance costs may lead to higher levels of compliance. However, it is essential to interpret these correlations with caution since correlation does not imply causation.

**Table 1 Descriptive and Correlation Statistics**

	Mean	Std. Dev.	TC	TK	TE	TR	TP	CC	TA
VAT Compliance (VC)	3.600	1.23	1						
Taxpayers Knowledge (TK)	3.494	1.18	.447**	1					
Taxpayers Egoism (TE)	3.569	1.20	.685**	.287**	1				
Taxpayers Religiosity (TR)	3.506	1.20	.662**	.273**	.701**	1			
Taxpayers Patriotism (TP)	3.549	1.22	.718**	.426**	.643**	.583**	1		
Compliance Cost (CC)	4.467	1.22	-.211**	-.135*	-.284**	-.237**	-.182**	1	
Taxpayers age	-	-	0.61	0.003	-0.087	0.105	0.311**	0.129*	1

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

\* Correlation is significant at the 0.05 level (2-tailed).

### Hierarchical Regression Models

Before conducting the hierarchical regression diagnostics, several key tests were performed to ensure the integrity of the assumptions underlying the analysis. The Variance Inflation Factor (VIF) was utilized to assess multicollinearity among the independent variables. A VIF value of 10 or higher signals potential multicollinearity issues, whereas a VIF of 10 or lower, along with a tolerance factor of 0.1 or higher, indicates a healthy degree of multicollinearity. In this study, the VIF values revealed that taxpayer knowledge had a VIF of 2.612, taxpayer egoism had a VIF of 2.380, taxpayer religiosity had a VIF of 1.969, taxpayer patriotism had a VIF of 1.028, and compliance cost had a VIF of 1.824. These results confirm that the assumption of multicollinearity has not been violated. Additionally, the Shapiro-Wilk test for normality indicated that taxpayer knowledge exhibited a p-value greater than 0.05, suggesting that the variables conform to a normal distribution. The Breusch-Pagan test for homoscedasticity also indicated that the Prob. F value was greater than 0.05, thereby confirming that the assumption of homoscedasticity holds and that the data is homoscedastic. Lastly, the linearity test showed a deviation from linearity with a p-value exceeding 0.05, indicating that the relationship between the independent and dependent variables remains linear.

The results for Model 2 yielded an R-squared value of 0.619, indicating that approximately 61.9% of the variance in Value Added Tax (VAT) compliance among commercial building owners can be explained by the independent variables included in the model. This suggests that the model has a strong explanatory capability, providing a solid foundation for discussing the hypotheses.

In Model 2, Taxpayer Knowledge demonstrated a statistically significant positive relationship with VAT compliance (Beta = 0.423,  $p < 0.05$ ), supporting Hypothesis 1. This finding emphasizes that increased knowledge about tax regulations and obligations positively impacts the willingness of commercial building owners to comply with VAT requirements. It reflects how informed taxpayers are more likely to engage in compliant behavior, reinforcing the importance of educational initiatives within the tax framework. Model 2 also revealed a significant positive relationship between Taxpayer Egoism and VAT compliance (Beta = 0.269,  $p < 0.05$ ), thereby supporting Hypothesis 2. This result suggests that commercial building owners who exhibit higher levels of self-interest may still prioritize compliance, potentially indicating a desire to maintain a positive public image or avoid legal repercussions. This finding aligns with traditional views on

egoism, demonstrating that even self-interested behavior can lead to compliance when aligned with other motivations. For Hypothesis 3, Taxpayer Religiosity demonstrated a positive and significant correlation with VAT compliance in Model 2 (Beta = 0.028,  $p < 0.05$ ). This result implies that commercial building owners who are more religiously committed tend to comply more thoroughly with VAT regulations. The underlying rationale may reflect ethical considerations tied to religiosity, where moral obligations lead to increased tax compliance. Model 2 results also supported Hypothesis 4, as Taxpayer Patriotism was positively correlated with VAT compliance (Beta = 0.176,  $p < 0.05$ ). This indicates that commercial building owners who feel a strong sense of patriotism are more inclined to fulfill their tax obligations, perceiving compliance as a civic duty contributing to national development.

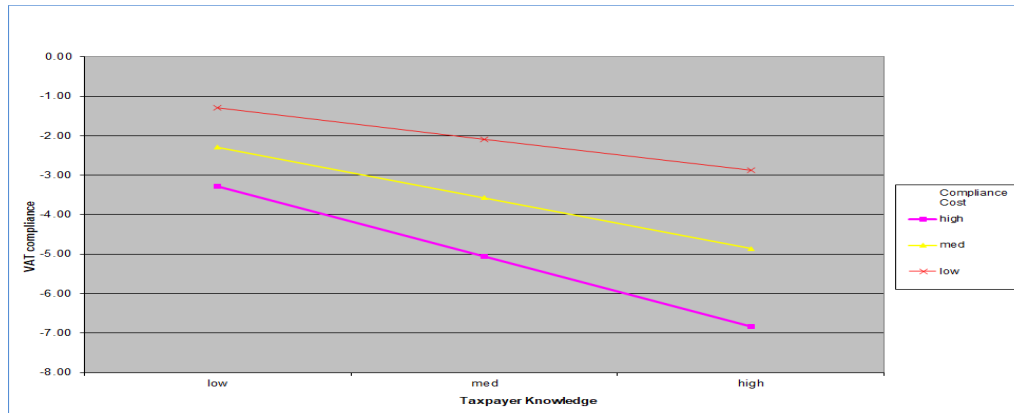
In Model 4, the interaction term for Taxpayer Knowledge and Compliance Cost showed a significant effect on VAT compliance (Beta = -0.328, R-squared = 0.678). This indicates that Compliance Cost does indeed moderate the positive relationship between Taxpayer Knowledge and VAT compliance, affirming Hypothesis 5a. Higher compliance costs might leverage the knowledge of taxpayers to further enhance their compliance behavior. Model 5 results demonstrated a significant moderating effect of Compliance Cost on the relationship between Taxpayer Egoism and VAT compliance (Beta = -0.207, R-squared = 0.697). This supports Hypothesis 5b, suggesting that as compliance costs increase, the influence of egoism on compliance behavior may vary, potentially leading to increased rationalization of non-compliant behavior. In Model 6, the analysis indicated that Compliance Cost significantly moderates the effect of Taxpayer Religiosity on VAT compliance (Beta = -0.189, R-squared = 0.71). This supports Hypothesis 5c, suggesting that the level of compliance costs can influence how religiosity impacts compliance behavior among commercial building owners, potentially enhancing the effect under lower compliance costs. Finally, Model 7 results showed an R-squared value of 0.73, indicating a significant moderating effect of Compliance Cost on the relationship between Taxpayer Patriotism and VAT compliance (Beta = -0.181,  $p < 0.05$ ). This supports Hypothesis 5d, affirming that compliance costs can influence the extent to which patriotism affects compliance behavior.

**Table 2: Hierarchical Regression**

	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>	<b>Model 6</b>	<b>Model 7</b>
	<b>B(s.e)</b>	<b>B(s.e)</b>	<b>B(s.e)</b>	<b>B(s.e)</b>	<b>B(s.e)</b>	<b>B(s.e)</b>	<b>B(s.e)</b>
(Constant)	2.892**(.144)	0.610**(.237)	0.79*(.230)	0.356**(.237)	0.361**(.224)	0.292**(.221)	0.210**(.210)
Age Bracket	-0.111(.051)	-0.09*(.033)	-0.093*(.030)	-0.092*(.033)	-0.112*(.030)	-0.114*(.029)	-0.118*(.028)
Taxpayer Knowledge		0.423**(.071)	0.422**(.051)	0.535**(.057)	0.468**(.070)	0.476**(.068)	0.452**(.066)
Taxpayer Egoism		-0.269**(.060)	-0.274**(.047)	-0.222*(.040)	-0.352**(.063)	-0.318**(.063)	-0.289**(.061)
Taxpayer Religiosity		0.028(.033)	0.032(.011)	0.104*(.069)	0.121*(.031)	0.216**(.039)	0.256**(.038)
Taxpayer Patriotism		0.176**(.057)	0.157*(.032)	0.190*(.053)	0.167*(.052)	0.152*(.051)	0.250**(.054)
Compliance Cost			-0.049(.069)	0.157*(.051)	0.192**(.047)	0.247**(.048)	0.307**(.048)
TK*CC				-0.328**(.044)	-0.228**(.012)	-0.221**(.012)	-0.192*(.012)
TE*CC					-0.207**(.011)	-0.156*(.011)	-0.156*(.011)
TR*CC						-0.189**(.011)	-0.183*(.010)
TP*CC							-0.181**(.010)
<b>Model Summary</b>							
R	0.111	0.787	0.788	0.823	0.835	0.842	0.855
R Square	0.012	0.619	0.621	0.678	0.697	0.710	0.730
Adjusted R Square	0.008	0.611	0.611	0.667	0.685	0.698	0.718
<b>Change Statistics</b>							
R Square Change	0.012	0.607	0.002	0.057	0.019	0.013	0.021
F Change	2.761	87.27	1.215	38.078	13.311	9.765	16.445
df1	1	4	1	1	1	1	1
df2	223	219	218	217	216	215	214
Sig. F Change	0.098	0.000	0.272	0.000	0.000	0.002	0.000

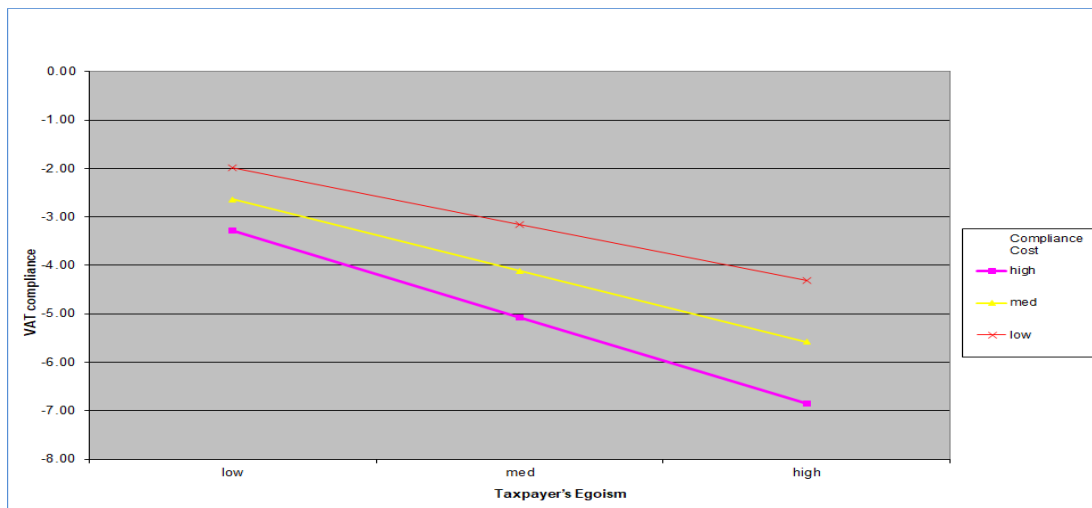
\*\*p&lt;0.01, \*p&lt;0.05,

Figure 1 illustrates that compliance costs negatively moderate the relationship between taxpayers' knowledge and VAT compliance. This suggests that higher compliance costs diminish the positive influence of taxpayer knowledge on VAT compliance, indicating an antagonistic moderating effect. Consequently, as compliance costs increase, the beneficial impact of having informed taxpayers on their compliance behaviour decreases.



**Figure 1: Compliance cost between taxpayer’s knowledge and VAT compliance**

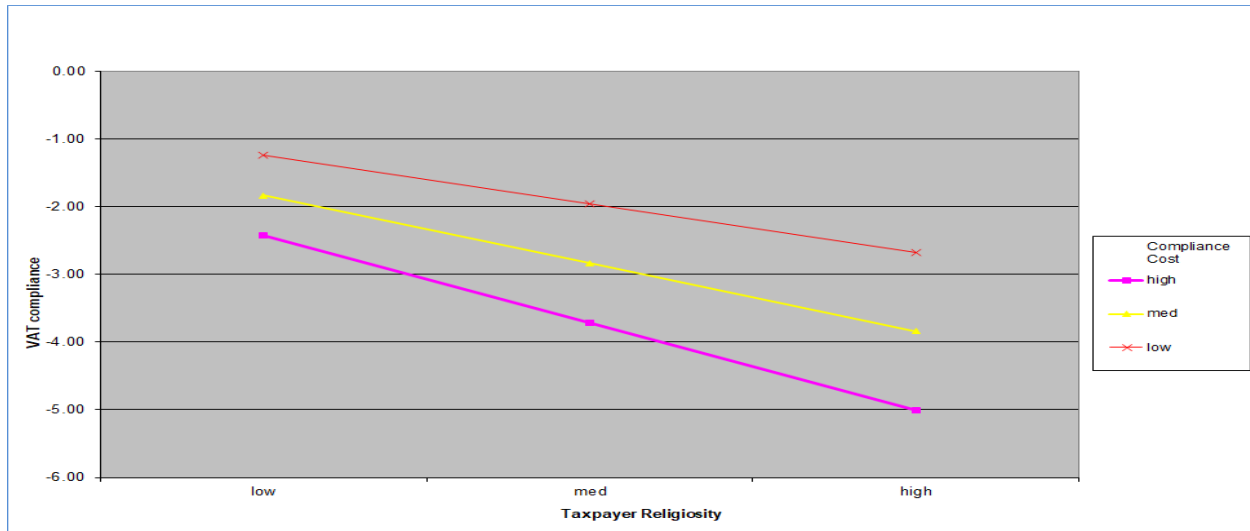
Figure 2 specifies that compliance costs enhance the negative moderating effects of taxpayer egoism on VAT compliance. This indicates that elevated compliance costs further exacerbate the detrimental impact of taxpayer egoism on their willingness to comply with VAT regulations. As compliance costs increase, the adverse effects of taxpayer egoism on VAT compliance become more pronounced, suggesting an antagonistic moderation where higher costs lead to lower compliance levels among individuals exhibiting egoistic behavior.



**Figure 2: Compliance cost between taxpayer’s Egoism and VAT compliance**

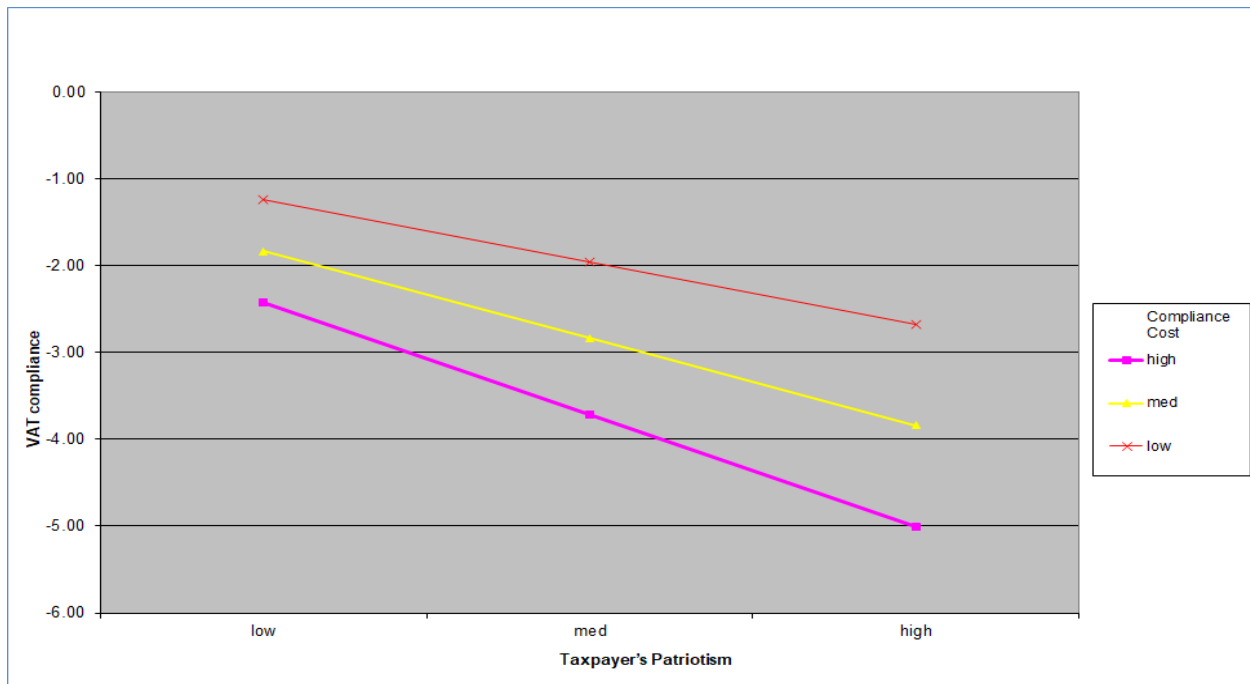
Figure 3 specifies that compliance costs inversely moderate the positive effects of taxpayer religiosity on VAT compliance. This indicates that high levels of compliance costs further weaken the positive influence of taxpayer religiosity on VAT regulations. As compliance costs increase,

the beneficial effects associated with taxpayer religiosity diminish, resulting in an antagonistic moderation effect where elevated costs counteract the motivational benefits typically derived from a strong sense of religiosity in promoting VAT compliance.



**Figure 3: Compliance cost between Taxpayer Religiosity and VAT compliance**

Figure 4 specifies that compliance cost moderates the effects of taxpayer’s patriotism on VAT compliance, but high levels of compliance cost further lower the effects of taxpayer’s patriotism on VAT compliance.



**Figure 4: Compliance cost between Taxpayer’s Patriotism and VAT compliance**



## 5.0 Discussion

The finding suggests that as taxpayers' knowledge of VAT regulations increases, their compliance with these regulations also tends to increase. The Coefficient analysis shows that taxpayer's knowledge has a positive and significant effect on VAT compliance. This could imply that efforts to improve taxpayers' understanding of VAT requirements, through education or outreach programs, may lead to higher levels of compliance and ultimately result in more effective tax collection for the government. A study by (Gitonga & Felix, 2022) concurs since it found that tax payer's knowledge had a substantial positive effect on VAT compliance among SMEs in Malaysia and also noted that providing information on tax laws and procedures increased VAT compliance.

The effect of taxpayer's Egoism on Value Added tax compliance among commercial building owners in Makueni County. The correlation analysis shows that there is a negative and significant correlation between taxpayer's Egoism and Value Added tax compliance. This implies that individuals who demonstrate higher levels of egoism are less inclined to comply with VAT regulations, p-value being less than 0.05 suggests that the observed correlation is statistically significant. This means that the likelihood of observing such a strong correlation between egoism and VAT compliance by random chance alone is very low. The study concurs with Korndörfer et al. (2014) who suggest that egoism may influence both tax evasion and concealment of tax evasion. This is in agreement with Murphy (2004) who suggests that in a tax avoidance lawsuit, taxpayers would respond based on how much they stand to lose financially in line with the rational choice model. This makes egoism a critical determinant of tax evasion intentions.

The effect of taxpayer's religiosity on Value Added tax compliance among commercial building owners in Makueni County. The correlation analysis shows that there is a positive and significant correlation between taxpayer's religiosity and Value Added tax compliance. It suggests that as religiosity increases, VAT compliance also tends to increase. The Coefficient analysis shows that taxpayer's religiosity has a positive and significant effect on VAT compliance. The analysis suggests that there is a meaningful relationship between a taxpayer's religiosity and their compliance with Value Added Tax regulations. Specifically, as individuals' religiosity increases, their adherence to VAT compliance also tends to increase. The study agrees with McCleary (2003) who suggests that religion serves to encourage certain behaviors. For example, honesty and work ethics that enhance productivity indicate that economic growth responds positively to religious beliefs.

The effects of taxpayer's patriotism on Value Added tax compliance among commercial building owners in Makueni County. The correlation analysis has a positive and significant relationship between taxpayer's patriotism on Value Added tax compliance. This means that as the level of patriotism among taxpayers increases, their compliance with VAT regulations tends to increase as well. In other words, individuals who identify more strongly with their country may be more inclined to fulfill their tax obligations regarding VAT. This finding implies that strategies aimed at fostering patriotism among taxpayers might potentially lead to increased compliance with VAT regulations. The study concurs with Konrad and Qari (2009) who examined the question of patriotism and tax compliance at both the country and individual taxpayer level using data from the International Social Survey Program (ISSP) for eight countries. At the individual level, they examine tax compliance using tax morale (measured as the response to the statement that a good

citizen should ‘never try to evade taxes’) as a proxy for tax compliance. In this respect, their measure of compliance is effectively equivalent to Alm and Torgler’s (2006) morale measure and, like Alm and Torgler (2006), they find evidence of a positive relation between pride in one’s country and compliance/morale.

The moderating effect of compliance cost on the relationship between socio- psychological determinants and value added tax compliance among commercial building owners in Makueni County. The correlation between compliance cost and VAT compliance has a negative and significant relationship with VAT compliance. The negative correlation suggests that as compliance costs increase the level of VAT compliance tends to decrease. In other words, when businesses face higher costs to adhere to VAT rules, they may be less likely to fully comply with those rules.

The study specifically sought to establish the moderating effects of compliance cost on the relationship between taxpayer’s knowledge and Value Added tax compliance among commercial building owners in Makueni County. The study found that compliance cost has a negative and significant moderating effect on the relationship between taxpayer’s knowledge and Value Added tax compliance. This indicates that as compliance costs increase, the relationship between taxpayer knowledge and VAT compliance weakens. So, higher compliance costs make it less likely that a high level of taxpayer knowledge will result in better VAT compliance.

The study specifically sought to test the moderating effect of compliance cost on the relationship between taxpayer’s Egoism and Value Added tax compliance among commercial building owners in Makueni County. The study found that compliance cost has a positive and significant moderating effect on the relationship between taxpayer’s Egoism and Value Added tax compliance.

The study sought to analyse the moderating effect of compliance cost on the relationship between taxpayer’s religiosity and Value Added tax compliance among commercial building owners in Makueni County. The study found that compliance cost has a negative and significant moderating effect on the relationship between taxpayer’s religiosity and Value Added tax compliance. The study suggests that as compliance cost increases, the relationship between religiosity and VAT compliance weakens, when compliance cost is higher, the influence of religiosity on VAT compliance decreases.

The study lastly sought to determine the moderating effect of compliance cost on the relationship between taxpayer’s patriotism and Value Added tax compliance among commercial building owners in Makueni County. The study found that there is a negative and significant moderating effect of compliance cost on the relationship between taxpayer’s patriotism and Value Added tax compliance. Higher compliance costs weaken the positive influence of taxpayer patriotism. In practical terms, this could mean that even though individuals may feel a sense of duty to contribute to their country through taxes, the burden of compliance costs can undermine their willingness or ability to comply fully with VAT regulations. The findings of the study concurred with Sandford (1989) who defined Tax compliance costs as the costs Acknowledging the fact that high compliance costs diminish competitiveness of the country in terms of taxation attractiveness,

public services have become increasingly interested in ways to simplify their tax legislation systems.

## 6.0 Conclusion

The main purpose of the study was to establish the moderating effect of compliance cost on the relationship between socio-psychological determinants, and value added tax compliance among commercial building owners in Makueni County. The effect of taxpayer's knowledge on Value Added tax compliance among commercial building owners in Makueni County. Firstly, there was a positive and significant correlation between taxpayer's knowledge of VAT regulations and compliance. This suggests that enhancing taxpayers' understanding of VAT requirements could lead to higher compliance levels. The effect of taxpayer's Egoism on Value Added tax compliance among commercial building owners in Makueni County. Conversely, there was a negative correlation between taxpayer's egoism and compliance, indicating that self-interest may deter compliance. The effect of taxpayer's religiosity on Value Added tax compliance among commercial building owners in Makueni County. Additionally, a positive correlation was found between taxpayer's religiosity and compliance, suggesting a potential influence of religious beliefs on adherence to VAT regulations. The effects of taxpayer's patriotism on Value Added tax compliance among commercial building owners in Makueni County. Furthermore, patriotism among taxpayers positively influenced compliance, indicating a sense of national duty.

The moderating effect of compliance cost on the relationship between socio- psychological determinants and value added tax compliance among commercial building owners in Makueni County. However, the study also revealed that compliance costs negatively moderated the relationships between these socio-psychological determinants and VAT compliance. Higher compliance costs weakened the effects of knowledge, egoism, religiosity, and patriotism on compliance, suggesting that financial burdens may hinder full adherence to VAT regulations despite other influencing factors. These findings underscore the importance of not only addressing social and psychological factors but also considering the financial implications of compliance when designing effective tax policies and strategies.

## 7.0 Policy, Managerial and Practical Recommendations

The KRA should develop comprehensive educational programs and campaigns to inform commercial building owners about VAT requirements. The KRA should introduce incentive programs that reward compliance, such as tax credits or public recognition for compliant taxpayers. Policy makers should consider implementing reward systems or tax breaks for compliant taxpayers, thereby appealing to self-interest in a positive manner and encouraging voluntary compliance. The close collaboration between the KRA, Treasury, and other relevant government agencies is crucial for coordinated tax policy implementation and enforcement. The KRA should Organize regular workshops and seminars focused on VAT compliance, targeting commercial building owners. It is recommended that the KRA should ensure these resources are easily accessible and cater to different levels of expertise, from novice to experienced taxpayers. It is recommended that the KRA should Promote the establishment of internal compliance teams or hiring of compliance officers who ensure adherence to VAT regulations. The KRA should promote the use of accounting software and online platforms that automate VAT calculations,

record-keeping, and filing. Organizations, especially those managing commercial buildings, should prioritize training programs for their management teams to enhance their understanding of VAT regulations. This would ensure better compliance and reduce the risk of legal penalties.

### **Theoretical implications**

Organizations, especially those managing commercial buildings, should prioritize training programs for their management teams to enhance their understanding of VAT regulations. This would ensure better compliance and reduce the risk of legal penalties. The Kenya Revenue Authority (KRA) should work towards simplifying VAT compliance procedures to lower the associated costs. This could involve the automation of tax filing processes and offering user-friendly platforms for tax submissions, thereby reducing the burden on taxpayers. Incorporate Religious and Ethical Considerations: Since religiosity positively correlates with VAT compliance, businesses and the KRA should consider strategies that align tax compliance with ethical and religious values. For instance, offering platforms where taxpayers can see how their contributions are being used for societal good may enhance compliance. Taxpayers should be encouraged to view VAT compliance as a patriotic act. Management should foster a culture of responsibility and national pride in their organizations, which could translate into higher compliance rates.

### **Future Research**

A study should be conducted to determine the effect of tax reforms on VAT tax compliance. Additionally, a study should be conducted on the effect of tax incentives on Custom duty tax compliance.

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