

Obtaining the best value for money through procurement planning: can procurement regulatory compliance intervene?

Procurement
regulatory
compliance

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Abstract

Purpose – While empirical studies establish the importance of procurement planning in achieving value for money (VfM) in procurement, there is scant evidence demonstrating a link between procurement planning and procurement regulatory compliance, and thus VfM. As a result, this study examined how procurement regulatory compliance can be applied when procurement practitioners in Tanzania seek to maximize VfM through procurement planning.

Design/methodology/approach – A cross-sectional research design was adopted from which data were collected once through a structured questionnaire. The structural equation modeling (SEM) and Hayes' PROCESS macro test for mediation analysis were used to analyze the collected data.

Findings – Procurement planning has a significant and positive relationship with procurement regulatory compliance ($\beta = 0.491, p < 0.001$). Procurement regulatory compliance has a significant and positive relationship with VfM in procurement ($\beta = 0.586, p < 0.001$). Results also show that procurement planning is a significant positive predictor of VfM ($\beta = 0.257, p = 0.005$). Furthermore, the bootstrapping confidence intervals revealed that procurement regulatory compliance significantly mediates the relationship between procurement planning and VfM in procurement.

Research limitations/implications – Although the study was able to accomplish its overall objective, it is limited in terms of the geographical setting under which the study was conducted. Hence, the generalization of research results should be made with caution as each country has specific public procurement laws and regulations governing the conduct of procurement activities in the public sector.

Originality/value – The study contributes to the growing debate on achieving VfM in procurement activities. The study adds to the literature on public procurement by establishing the mediation effect of procurement regulatory compliance on the quest toward achieving VfM in public procurement.

Keywords Procurement, Procurement planning, Public procurement, Procurement regulatory compliance, Value for money

Paper type Research paper

1. Introduction

Value for money (VfM) in public procurement has been an area of research for decades (Mamiro, 2010; Morallos and Amekudzi, 2008) due to the important role of public procurement at the organizational, societal, and national levels (Changalima *et al.*, 2021;



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Flynn, 2018). For example, public organizations can receive goods, works and services for day-to-day operations through public procurement. Also, the public can access services provided by the government through effective public procurement practices in public organizations (Abioro, 2021; Anane *et al.*, 2019; Basheka, 2021). For instance, governments can procure health equipment and medicines to enhance health service delivery to the public (Adusei, 2018; Israel *et al.*, 2019; Miller and Lehoux, 2020). In addition, the construction of classrooms and other infrastructure for public schools boosts access to education for the public (Gidigah *et al.*, 2022; Matto, 2021). Furthermore, public procurement enhances transportation infrastructure construction under public-private partnerships (Välilä, 2020), facilitating trade, business and other economic activities within and across regions. Therefore, the procurement activities in the public sector are geared toward achieving the best VfM (Fourie and Malan, 2020; United Republic of Tanzania (URT), 2011).

Like in most countries in emerging economies, the government of Tanzania provides important services to its responsible citizens through public procurement. For example, citizens can access free and less costly health and education services through established health facilities and schools. In addition, public procurement is associated with constructing transportation infrastructure such as roads and railways to enhance trading and exchange within communities, as in the case of the Standard Gauge Railway project, one of Tanzania's most significant rail infrastructure projects since 1961 (Rweyendela and Mwegoha, 2022). In other areas, it has been reported that public procurement boosts business for small and medium enterprises that conduct business with public organizations by accessing public procurement opportunities (Liu *et al.*, 2020; Namagembe *et al.*, 2021; Soong *et al.*, 2020); the same is happening in Tanzania (Stephen, 2021). So, the involvement of small and medium-sized enterprises makes public procurement operations in the country more important.

Despite the significance of procurement in the public sector, the current state of VfM in procurement is unappealing. The audit reports show that public organizations are striving to achieve better VfM (National Audit Office of Tanzania (NAOT), 2020, 2021; Public Procurement Regulatory Authority (PPRA), 2020, 2021). For instance, poor deliveries and delays reported in public procurement affect the achievement of VfM in procurement. In addition, lack of competition among bidders and favoritism affect the amount of public funds directed at public procurement activities (Changalima and Ismail, 2019; Grega *et al.*, 2019). Since public procurement accounts for a large portion of the Tanzanian national budget (Changalima *et al.*, 2021), efforts are needed to enhance VfM in public procurement activities. A stream of empirical studies shows that VfM in procurement within the country is associated with the effective management of procurement contracts (Matto *et al.*, 2021a; Mchopa, 2015) and the procurement practitioners' factors (Mwaiseje and Changalima, 2020). In another context, a strand of the literature shows that procurement planning is related to VfM in procurement (Changalima, 2016; Chepkesis and Keitany, 2018). However, these previous studies examine the direct relationship between independent and dependent variables of the study. Practically, procuring organizations plan for procurement undertakings and comply with the procurement regulatory framework (URT, 2011). However, previous studies overlook the role of procurement regulatory compliance as they pay less attention to it when investigating the relationship between procurement planning and VfM.

The procurement compliance model suggests that compliance in procurement enhances fewer flaws (Mrope, 2018; Sarawa and Mas'ud, 2020). Moreover, procurement regulatory compliance enables public buyers to ensure procurement activities are performed in a transparent, fair and accountable manner (Chikwere *et al.*, 2019; Mrope *et al.*, 2017). So, the current study intends to examine the general research question: "*is the relation between procurement planning and achieving VfM in public procurement mediated by procurement regulatory compliance*"? By investigating this research question, our study centers on how

procurement planning enhances procurement regulatory compliance and hence enables VfM in public procurement. The study adds to the public procurement literature on the role of procurement planning in enhancing procurement regulatory compliance and hence VfM. Policymakers can use the study findings to emphasize procurement regulatory compliance at the organizational level to prevent mismanagement of public funds.

2. Literature review and hypotheses development

2.1 Theory of regulatory compliance

The theory establishes that deterrent measures may explain compliance, and it can be further explained by psychological and social aspects (Sutinen and Kuperan, 1999). The theory emphasizes the importance of choosing the proper rules and regulations for governing the conduct of individuals. This theory provides the foundation for the research because it explains why regulatory compliance is so substantial in public procurement. For example, compliance is critical to achieving transparency, accountability and proper use of public funds (Mrope *et al.*, 2017). Therefore, non-compliance will jeopardize the overarching aims of public procurement, which are to achieve efficiency and economical use of public funds, VfM and the quality of services, commodities and works.

Also, the theory is used in this study because it explains how individual traits affect compliance decisions. As in public procurement, an individual's moral obligations influence compliance with laws and regulations. In a similar context, the Public Procurement Act (PPA) and its regulations emphasize complying with procurement procedures when undertaking procurement activities in the public sector in Tanzania (URT, 2011, 2013). The law provides the necessities for determining compliance through proper procurement planning and adherence to procurement procedures when engaging suppliers and contractors after response to public procurement opportunities. Furthermore, it is important to ensure compliance in procurement activities (Chikwere *et al.*, 2019; Omagbon, 2016; Sarawa and Mas'ud, 2020). In this case, complying with procurement laws and regulations is a prerequisite for public procurement officials. In the context of this study the theory of regulatory compliance is assumed to ensure that procurement practitioners abide by the right rules and procedures when undertaking procurement functions in their respective organizations.

2.2 Procurement planning and VfM in procurement

Procurement planning is a must-do activity for public organizations in developed and developing countries (Basheka, 2008). The literature on procurement for procurement activities and VfM in procurement is vast (Aimable *et al.*, 2019; Changalima, 2016; Obura, 2020). Also, these studies center on various dimensions of procurement planning when they relate them to VfM in procurement. For instance, Aimable *et al.* (2019) focused on procurement packaging, procurement method and procurement schedule as dimensions of procurement planning. Changalima (2016) focused on preparation of annual procurement plans, preparing annual procurement plans by adherence to PPRA format and contents and use of prepared annual procurement plans. In addition to that, Obura (2020) centered on need identification, market survey, aggregation and looting and method of procurement.

It should be noted that the procurement planning process encompasses all activities involved in the acquisition of goods, works and services (Changalima *et al.*, 2021). Therefore, during the planning process, various actors must be involved. That is why users remain important players in planning, as they provide necessary inputs for the needs and requirements that the organization may need at a given time. Though public organizations in Tanzania encounter challenges during procurement planning (Bryson, 2018; Mamiro, 2010), the activity remains vital for the betterment of the organizations in terms of procurement activities (Mahwi and Panga, 2020). Empirical studies on procurement planning are

necessary to reveal the practical aspects of procurement undertakings. Procurement planning manages the expenses of operations and supports an organization in cutting costs (Deepradit *et al.*, 2020). Similarly, public organizations can manage expenditures through proper procurement plans when the prepared plans are well integrated with the expenditure budget. Given the importance of procurement planning in public procurement, our study suggests the following:

H1. Procurement planning significantly relates to VfM in public procurement

2.3 Procurement planning and procurement regulatory compliance

In Tanzania, procurement planning remains an important and necessary activity for public procuring organizations as mandated by the country's PPA (URT, 2011). Tanzanian public procuring organizations must prepare and submit procurement plans on a timely basis to the PPRA, which the PPA legally mandates to oversee the country's public procurement affairs. However, the current audit reports show that public organizations are not complying with this requirement, as some do not submit their annual procurement plans (PPRA, 2021). This results in non-compliance with laws and regulations. Therefore, as in practice, organizations that do not plan for needs and requirements are categorized as among public procuring organizations that do not comply with PPA and its regulations, and hence our study hypothesizes that:

H2. Procurement planning significantly relates to procurement regulatory compliance

2.4 Procurement regulatory compliance and VfM in procurement

Procurement regulatory compliance refers to how the organization abides with the basic procurement principles, rules, and regulations when undertaking procurement activities. In Tanzania, public procurement activities are governed by PPA No. 7 of 2011 and its amendments, plus the public procurement regulations of 2013 and amendments (Mwagike and Changalima, 2022). Most amendments made to this regulatory framework center on increasing compliance while reducing the time taken in the procurement process. A stream of the literature shows that regulatory compliance in procurement is necessary for various aspects (Chikwere *et al.*, 2019; Mwelu *et al.*, 2020). These aspects include ensuring effective service delivery, road infrastructure and procurement performance (Mwelu *et al.*, 2018). It is believed that public procuring organizations that comply with procurement rules and regulations are more likely to perform well procurement activities (Mrope *et al.*, 2017) and, hence, save public funds from misuse. On this basis, the current study hypothesizes that:

H3. Procurement regulatory compliance significantly relates to VfM in public procurement

2.5 Procurement planning, procurement regulatory compliance and VfM

Procurement planning is necessary for public procuring organizations to enhance compliance with the public procurement laws and regulations. However, the reports from PPRA and NAOT show that some organizations in the public sector in Tanzania are not complying with this requirement (NAOT, 2020; PPRA, 2019). This makes these organizations questionable in managing public funds and allocating budgets directed to procurement activities. VfM in procurement entails how the procuring organizations achieve efficiency, effectiveness and economy in undertaking procurement activities and the overall outcomes obtained from procurement undertakings (Dimitri, 2013; Mchopa, 2015; Mchopa *et al.*, 2014). Given the loss reported on public funds in Tanzania concerning procurement activities, our current study investigates the mediating role of procurement regulatory compliance in the relationship between procurement planning and VfM in the public sector. The basic assumption is that

public procuring organizations that plan for procurement needs and requirements are more likely to enhance regulatory compliance in procurement undertakings and achieve VfM in public procurement. Therefore, the study hypothesizes that:

- H4.* Procurement regulatory compliance significantly mediates the relationship between procurement planning and VfM in public procurement

2.6 Conceptual framework

The conceptual framework of the research is depicted in [Figure 1](#). This is the hypothesized model from the review of the literature. The model shows the study's hypotheses and the relationships between study variables. Procurement planning as an independent variable relates to the study's dependent variable, VfM in public procurement. Procurement planning also relates to the mediating variable, procurement regulatory compliance and procurement regulatory compliance to the VfM in public procurement. Lastly, the mediating variable (procurement regulatory compliance) intervenes in the relationship between procurement planning and VfM in public procurement.

3. Methods

3.1 Research design and sample size

A cross-sectional survey design was conducted under which data were collected only once. The research design was cross-sectional since the study focused on getting the general picture of the relationship between study variables. This design is cheap and quick compared to the longitudinal design. Since they are done more quickly and are less costly than other studies, cross-sectional studies are often preferable for time and cost factors ([Setia, 2016](#)). Therefore, this design made collecting data in a short period much easier. The study collected data from 146 procurement practitioners working in various public procuring organizations in Dodoma City, Tanzania. The study involved procurement practitioners as they are involved in procurement activities within public organizations. Dodoma city was purposefully chosen as the region experienced an increasing number of public procuring organizations after the actual shift of URT's government offices ([Changalima et al., 2021](#)). Therefore, Dodoma, the country's capital city, has enough public procuring organizations to assure the researchers of obtaining relevant and adequate information.

3.2 Data collection method and tool

Data were collected using a survey tool as a questionnaire was the dominant method for collecting primary data from respondents. A questionnaire survey tool enables the collection of vast amounts of information and requires less time than interviews. Furthermore, as opined by [Kasoga \(2021\)](#) when respondents have limited time for interviews, a questionnaire can be very useful. Therefore, the study collected enough data to make inferences about the study variables through a structured questionnaire.

3.3 Measurements of study variables, reliability and validity

The variable procurement planning was measured using four adapted items ([Gatobu, 2020](#)). VfM in procurement was measured by four items which were adapted from [Iddi \(2020\)](#).



Figure 1.
The conceptual framework

The mediator variable, procurement regulatory compliance, was measured by four adapted items (Chogo, 2017; Geoffrey, 2012). The items used from these previous studies were slightly modified to fit the context and objective of the current study. Before full-scale data collection, pre-testing was conducted to ensure that the items measured what they were supposed to measure. Three independent procurement professionals and academicians were involved, and tools were modified to suit the recommendations. In this study, the internal consistency reliability was assessed through Cronbach’s alpha, and the results are presented in Table 1. All constructs were within the acceptable range above 0.7 (Tavakol and Dennick, 2011).

Similarly, as shown in Table 1, composite reliability values are also within the acceptable range. Convergent validity was achieved as AVE values for all constructs were above 0.5 (Amani, 2022). Also, the discriminant validity was achieved as the square root of each value of AVE of individual construct was higher than correlations with another construct. Discriminant validity is achieved if the value of AVE is greater than the square of the intercorrelations (Fornell and Larcker, 1981).

3.4 Data analysis approach

The study applied a SEM to test the hypotheses and relationships depicted in Figure 1. Before analyzing the path analysis through the structural model, the CFA was conducted first to assess if the measurement model fits well the collected data. While SEM is useful in analyzing latent variables for model relationships (Amani, 2022), CFA extracts the latent construct from the other variables and shares the most variance with the variables connected to the latent construct (Fan et al., 2016). Then, through the SEM, the study evaluated the effects of the relationships of the study variables. The PROCESS mediation analysis was also conducted to establish the mediating effect of procurement regulatory compliance. Therefore, the simple mediation model was conducted to analyze the direct and indirect effects.

4. Results and discussions

4.1 Model measurements through CFA

The data collected in this study were conducted in two main steps. First, we conducted a CFA to confirm the study’s variables under the study area context. The model fit indices are

Indicators	Factor loadings	AVE	Cronbach’s alpha	Composite reliability
<i>Procurement planning</i>		0.545	0.822	0.826
Plan1	0.754			
Plan2	0.756			
Plan3	0.793			
Plan4	0.614			
<i>Regulatory compliance</i>		0.616	0.860	0.864
Reg1	0.674			
Reg2	0.847			
Reg3	0.863			
Reg4	0.740			
<i>Value for money</i>		0.624	0.870	0.869
Vfm1	0.740			
Vfm2	0.773			
Vfm3	0.815			
Vfm4	0.829			

Table 1. Measurements, factor loadings, AVE, reliability and validity

Source(s): SPSS output

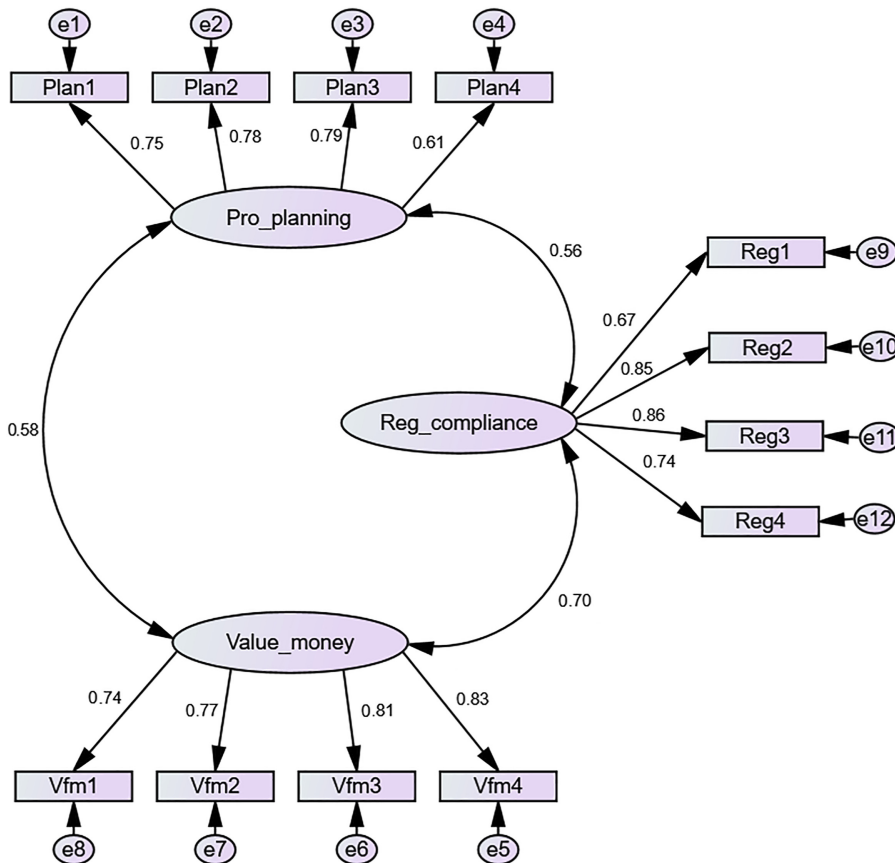
GFI = 0.909, NFI = 0.911, IFI = 0.962, TLI = 0.950 and CFI = 0.962 (the recommended values should be at least close to 1) (Hooper *et al.*, 2008). RMSEA = 0.068 (the value should be between 0.05 and 0.08, which is considered to be acceptable) (Hooper *et al.*, 2008), and $\chi^2/df = 1.674$ (the value should be less than 3) (Hooper *et al.*, 2008). All the model fit indices values fit the model well, so the data were used to explain the model fit. Factor loadings, as presented in Figure 2, are all above 0.5, which is recommended for the items to explain well the latent constructs of the study (Fornell and Larcker, 1981; Truong and McColl, 2011).

4.2 Structural model and hypotheses testing

Since the model presented in Figure 2 fits the data well, the second step was to analyze the structural model as presented in Figure 3. The model fit indices for structural models also fit the data well, as all the indices in Table 2 were within the acceptable range as recommended (Hooper *et al.*, 2008).

4.3 Procurement planning and VfM

The study first hypothesized that “H1: procurement planning significantly relates to VfM in public procurement.” This hypothesis was accepted as the results in Table 2 reveal that



Source(s): SPSS Output

Figure 2. The CFA for study constructs

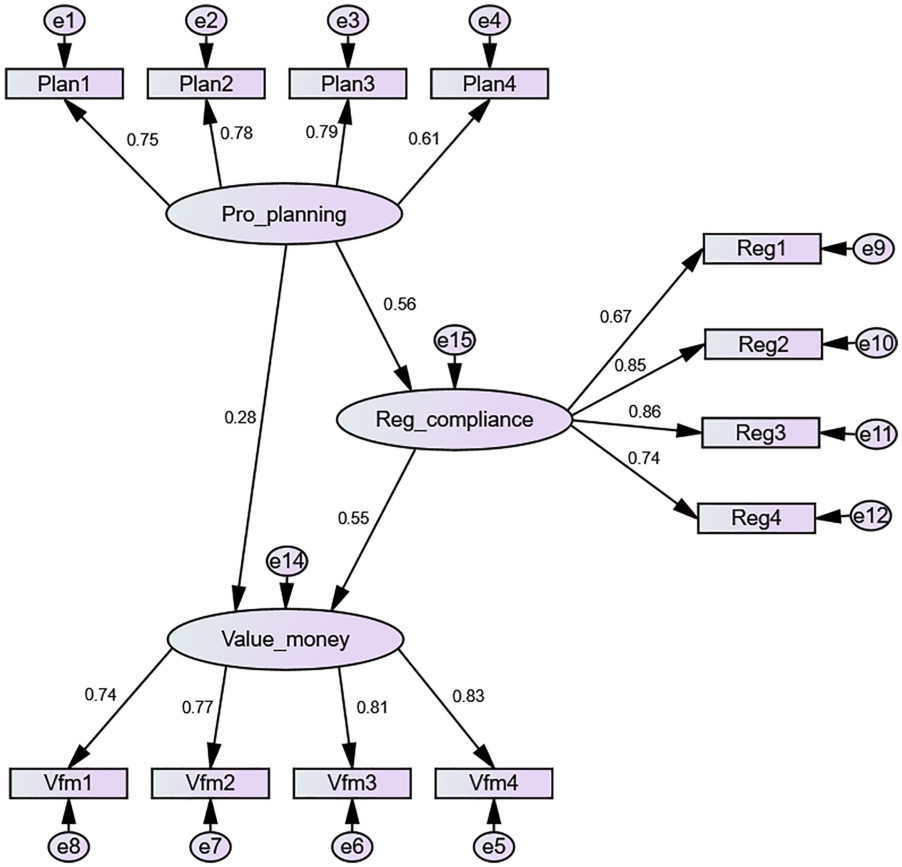


Figure 3.
The structural model
for study constructs

Source(s): SPSS Output

Regressed variables	Estimate	SE	CR	P
Regulatory compliance ← Procurement planning	0.491	0.095	5.179	***
Value for money ← Regulatory compliance	0.586	0.116	5.052	***
Value for money ← Procurement planning	0.257	0.091	2.831	0.005

Table 2.
Relationships between
study variables as
presented in
structural model

Model fit indices: GFI = 0.909, NFI = 0.911, IFI = 0.962, TLI = 0.950, CFI = 0.962, RMSEA = 0.068, and $\chi^2/df = 1.674$

Note(s): *** $p < 0.001$

Source(s): SPSS output

procurement planning is significantly related to VfM in public procurement ($\beta = 0.257$, $p = 0.005$). This finding implies that procurement planning contributes to achieving the best VfM in public procurement. The finding is supported by [Aimable et al. \(2019\)](#), these studies suggested that organizations that successfully plan for procurement undertakings are more likely to achieve VfM in procurement. Therefore, organizations are required to plan for

procurement activities. They may control the time taken in procurement activities as scheduled tasks are planned ahead of actual execution. Procurement costs in this aspect are reduced as planned tasks are aligned with the expenditure budgets.

Also, [Gambo and Musonda \(2021\)](#) opined that through procurement planning, organizations could identify and aggregate needs and define procurement timelines that lead to VfM. A stream of empirical studies recommends that public procuring organizations plan procurement activities to enhance performance ([Kariuki and Wabala, 2021](#); [Mahuwi and Panga, 2020](#); [Muhwezi et al., 2020](#)). However, our current study emphasizes achieving VfM through procurement planning. The same may enable public procuring organizations to save procurement costs that can be redirected to finance other development programs.

4.4 Procurement planning and procurement regulatory compliance

The study's second hypothesis was "*H2: procurement planning significantly relates to procurement regulatory compliance*". Results presented in [Table 2](#) show that procurement planning is positively and significantly related to procurement regulatory compliance ($\beta = 0.491, p < 0.001$). Therefore, *H2* was accepted, and null was rejected as this study's findings imply that public procuring organizations can enhance procurement regulatory compliance through procurement planning. As the country's public procurement law mandates public procuring organizations to plan for procurement undertakings, it enhances regulatory compliance. This calls for procurement practitioners to ensure that procurement planning is conducted according to the existing laws and regulations.

These findings are in line with that of [Basheka \(2008, 2009\)](#); these studies opined that procurement planning results in compliance with established procedures, which ultimately results in savings for taxpayers. Therefore, procurement planning is widely used as one determinant of compliance with procurement laws and regulations. Our study suggests that procurement planning is a predictor of procurement regulatory compliance. In the Tanzania context, procurement plan is used as among indicator of procurement regulatory compliance ([PPRA, 2020, 2021](#)). This can be evidenced by non-compliance issues related to procurement plans public procuring organizations.

4.5 Procurement regulatory compliance and VfM

Also, the study hypothesized that "*H3: procurement regulatory compliance significantly relates to VfM in public procurement*". Results presented in [Table 2](#) show that procurement regulatory compliance is a positive predictor of VfM in public procurement ($\beta = 0.586, p < 0.001$). Therefore, *H3* was accepted as a significant relationship between procurement regulatory compliance and VfM is presented in [Table 2](#). The finding of this study suggests that through procurement regulatory compliance, public procuring organizations can achieve VfM in public procurement. The result is supported by [Eyaa and Oluka \(2011\)](#), who opined that the need to achieve VfM in public procurement should be emphasized through compliance with procurement laws and regulations. Furthermore, following the findings of Tanzanian audit reports, procurement practitioners who fail to adhere to procurement laws and regulations resulted in the loss of public funds during the public procurement process ([PPRA, 2019, 2021](#)). Therefore, the emphasis is on complying with the procurement regulatory framework for public organizations to achieve VfM in procurement ([NAOT, 2019, 2020](#); [PPRA, 2019](#)).

4.6 Testing the mediation effect

The last hypothesis of the study stated that "*H4: procurement regulatory compliance significantly mediates the relationship between procurement planning and VfM in public procurement*". Therefore, to test the mediation effect of procurement regulatory compliance

on the relationship between procurement planning and VfM, the PROCESS macro mediation test (Model 4) by Hayes was conducted. This is the method for testing mediation through bootstrapping confidence intervals (Hayes, 2018). Therefore, a simple mediation model was analyzed to determine the direct and indirect effects (Hayes, 2018). Results are presented in Figure 4 and Table 3.

The first regression model in Figure 4 shows that procurement planning as an independent variable is positively and significantly related to the mediator variable (procurement regulatory compliance) ($\beta = 0.482, p < 0.001$). So, the direct effect of the variable procurement planning on the procurement regulatory compliance in the path model is presented by a coefficient of 0.482. Also, procurement planning and procurement regulatory compliance are positively and significantly related to VfM in procurement with a coefficient of 0.236 ($p < 0.001$) and 0.460 ($p < 0.001$), respectively (see Figure 4 and Table 3).

The bootstrap confidence intervals at 95% range from 0.128 to 0.327. Since there are non-zero values between the ranges, H_4 was accepted as the null hypothesis was rejected. Hence, the results presented in Table 3 show that procurement regulatory compliance mediates the relationship between the independent (procurement planning) variable and the dependent variable (VfM). Furthermore, the indirect effect can be obtained by using coefficients of procurement planning to procurement regulatory compliance and coefficient of procurement regulatory compliance to VfM.

The findings support the regulatory compliance theory that emphasizes complying with existing laws and regulations to control the deviation of practitioners on organizational

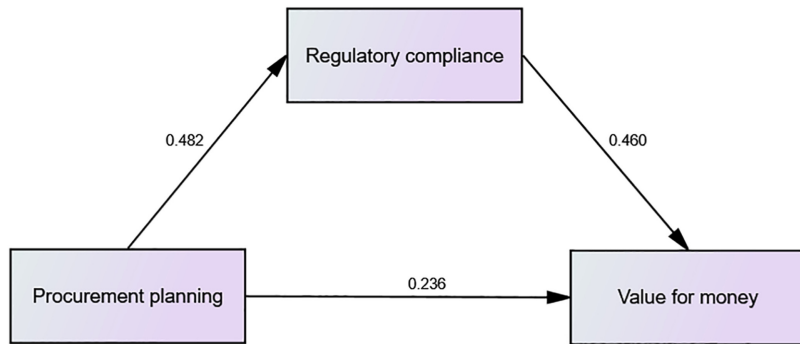


Figure 4. Direct effects of study variables in the path model

Source(s): SPSS Output

Variables	Direct effect	SE	<i>t</i>	<i>p</i>	LLCI	UPCI
ProcP → RegC	0.482	0.073	6.595	****	0.337	0.626
ProcP → VfM	0.236	0.066	3.592	****	0.106	0.365
RegC → VfM	0.460	0.066	7.015	****	0.331	0.590

	Indirect effect	BootSE	BootLLCI	BootUPCI
RegC	0.222	0.051	0.128	0.327

Table 3. The direct and indirect effects (bootstrapping confidence intervals)

Note(s): **** $p < 0.001$, ProcP – Procurement planning, RegC – Regulatory compliance and VfM – Value for money

Source(s): PROCESS output

practices. Concerning public procurement, procurement practitioners in the public sector must abide by procurement laws and regulations. Compliance with procurement procedures procurement practitioners are considered ethical (Eyaa and Oluka, 2011; Mrope, 2018). Also, many countries have rules and legislation to guarantee the regulation of public procurement activities related to the acquisition of goods, services and works to obtain VfM and accountability in procurement decisions (Hoekman and Taş, 2022). Therefore, procurement regulatory compliance remains to explain the relationship between procurement planning and VfM in public procurement.

5. Theoretical and managerial implications

The overall results of this study have both theoretical and managerial implications:

5.1 Theoretical implications

By investigating the influence of procurement regulatory compliance on the relationship of the study's variables in the context of public procurement in Tanzania, our current study makes a significant contribution to the body of literature. This contributes to a greater understanding of the perspective of VfM in public procurement in Tanzania, which is beneficial. In addition, a theoretical model to better understand the VfM in public procurement from the perspective of procurement regulatory compliance is also being developed. This contributes to the already existing body of literature (Dimitri, 2013; Hamzah *et al.*, 2020; Matto *et al.*, 2021b; Mchopa, 2015) that provides the relevance of VfM in procurement activities in the public sector.

Our current research also contributes to the theory of regulatory compliance, which emphasizes the importance and significance of complying with rules or regulations in practices related to the delivery of human services and the economy as a whole. Thus, the study adds to the theory of compliance to procurement laws and regulations in procurement activities, especially in procurement planning in the public sector. Similar literature concentrates on the theory of regulatory compliance in procurement activities (Sarawa and Mas'ud, 2020). As a result, compliance with procurement laws and regulations enhances the reduction of procurement flaws and misconducts that affect the overall objective of the procurement function in the public sector. Furthermore, our study responds to the call for mediation effect of compliance in public procurement literature (Mwelu *et al.*, 2020).

5.2 Managerial implications

This study points out some vital managerial insights public organizations should consider when planning for procurement activities. The insight relates to the importance of procurement planning in ensuring regulatory compliance in public procurement. Procurement practitioners are assured of achieving a satisfactory level of compliance through proper procurement planning. In this regard, prepared procurement plans should be ensured to comply with legal requirements to improve procurement regulatory compliance. In addition, the level of staff competence for actors involved in procurement planning should be adequate to enhance compliance with the regulatory framework relating to procurement actions. Finally, the same could be achieved by providing education and training related to procurement laws and compliance.

Also, the findings of this study enable procurement practitioners to grasp the advantages of procurement regulatory compliance when planning to enhance the achievement of VfM in procurement. Therefore, procurement practitioners and managers who are willing to enhance VfM in procurement should emphasize the importance of increasing procurement regulatory compliance when planning. Furthermore, the study suggests the same boosts VfM in

procurement. This will likely save the government from mismanagement of public funds and save funds that can be redirected to other development programs. This could be accomplished by improving professional procurement training; regular in-house training can be provided to remind practitioners of critical compliance issues; information sharing within organizations and communication among supervisors; and improving proper internal control systems to increase and control the level of compliance procurement laws and regulations.

6. Conclusion and suggestions for further studies

Our study examined the mediating role of procurement regulatory compliance on the relationship between procurement planning and VfM in public procurement in Tanzania. This study shows that procurement regulatory compliance plays an important role in the study's variables of interest. Specifically, the results of our study show that procurement planning is significantly related to VfM. Also, procurement planning relates to procurement regulatory compliance, and procurement regulatory compliance relates to VfM. Also, the overall objective was achieved, and the study concludes that procurement regulatory compliance mediates the effect of procurement planning on VfM in public procurement. The study suggests that public procurement practitioners in Tanzania are more likely to enhance VfM in public procurement. This can be effectively done by enhancing procurement regulatory compliance in public procurement procedures.

Future researchers are encouraged to conduct empirical studies on the mediating effect of procurement regulatory compliance on procurement planning and the performance of procurement function in the public sector. Since then, a growing body of research has demonstrated that VfM in public procurement is linked to the measurement of procurement performance in the public sector (Obura, 2020). Similarly, performance is defined as methods intended to optimize VfM. Therefore, the outcomes that will be obtained from this area may further extend our research into the role of procurement regulatory compliance in procurement planning and procurement performance in the public sector. In addition, other empirical studies can choose from various mediators other than procurement regulatory compliance that are more likely to investigate our independent and dependent variables.

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