



THE INFLUENCE OF STAFF TECHNICAL SKILLS ON PUBLIC PROCUREMENT PERFORMANCE IN TANZANIA: A CASE OF CHAMWINO DISTRICT COUNCIL

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Received: Nov 17, 2024

Accepted: Jan 05, 2025

Published: June 01, 2025

Abstract:

This study investigated the relationship between staff technical skills and Public Procurement Performance within Local Government Authorities (LGAs) in Tanzania. The study was conducted in Chamwino District Council, chosen due to persistent suboptimal procurement performance trends indicated in the 2021 CAG Report. Employing a cross-sectional survey design, data was collected using structured questionnaires administered to staff members. Probability sampling techniques were utilized for selecting respondents, and a pre-test survey was conducted to ensure data reliability. Data analysis involved quantitative and qualitative methods, including descriptive, multiple regression, and content analysis. The key findings revealed a statistically significant impact on staff technical skills on public procurement performance. The study concluded that there are substantial gaps in staff technical skills and training, which impact procurement performance. Recommendations include targeted training programs to enhance staff competency and improve procurement outcomes.

Keywords:

Staff technical skills; Public procurement performance; Local Government Authorities (LGAs)

1. Introduction

In a global context, staff competence assumes paramount importance in shaping the performance of organizations, especially within the realm of public procurement (Smith, 2020). As nations worldwide strive for sustainable development, the imperative of staff competence emerges as a linchpin, ensuring that procurement processes are adeptly managed, in compliance with regulations, and optimized for value in public expenditures (Brown, 2019). As a crucial pillar in African national budgets, public procurement significantly contributing to service delivery and infrastructure development (Wilson, 2017). Despite this pivotal role, the continent grapples with challenges such as mismanagement and malpractices that undermine optimal procurement performance (Roberts, 2022).

In the Tanzanian context, public procurement constitutes a substantial share of the national budget, underscoring its critical role in local-level development and socio-economic progress (Anderson, 2018). The intricate staff technical skills, marked by human resources capacity, poses a significant challenge in attempting to navigate the complexities of procurement processes (Kapoor, 2017). Furthermore, a historical legacy of staff inefficiencies in Tanzania's public sector has created an environment where the potential for mismanagement and malpractices within procurement remains a critical concern (Makundi, 2019). These challenges are compounded by limited resources and funding constraints, placing additional strain on procurement to pursue optimal performance (Mbunda, 2020).

To address the challenges in Tanzania's public procurement, it is essential to draw insights from international best practices. Successful models in other countries, such as Singapore's efficient procurement system or Sweden's emphasis on transparency, can offer valuable lessons for enhancing Tanzanian procurement practices (OECD, 2018). Integrating such global best practices within the Tanzanian context can provide a roadmap for improving staff skills and procurement performance.

In the modern era, technology plays a transformative role in public procurement. Adopting e-procurement systems, as witnessed in countries like Estonia and South Korea, has streamlined processes, reduced corruption risks, and enhanced overall procurement efficiency (World Bank, 2019). Assessing the applicability of such technological

advancements within Tanzania becomes pivotal in the pursuit of not only staff skills but also the broader modernization of procurement practices.

Recognizing the importance of staff technical skills, various training and capacity-building initiatives have been implemented globally. Lessons from initiatives in Ghana and Rwanda focused on enhancing procurement skills and fostering a culture of continuous learning among staff can inform strategies for Tanzanian procurement (AfDB, 2020). Investing in professional development can empower Tanzanian procurement professionals to navigate complexities and contribute effectively to successful procurement outcomes.

The effective utilization of human resources hinges significantly on the Public Procurement Performance within Local Government Authorities in Tanzania. However, a growing concern revolves around the potential impact of staff technical skills on the outcomes, efficiency, and transparency of these units, as highlighted by scholarly works such as Chagalima and Mdee (2023) and Eliah & Athumani (2020). The existing gap in comprehensive research on this critical aspect impedes the understanding of how staff technical skills levels directly influence the procurement process. The urgency and importance of this research are underscored by the potential impact of staff competence on project execution and service delivery at the local level.

Current studies, including those by Bairo (2020), Bitesigirwe (2019), Casteel and Bridier (2021), Nasra (2014), and Chang'a (2019), on public procurement in Tanzania predominantly focus on legal and procedural dimensions. They tend to overlook the assessment of staff technical skills and its correlation with procurement performance, as earlier observed by Rasheli (2016) and Walter, Odhiambo, and Paul (2013). While these studies contribute valuable insights, the absence of a thorough examination of staff technical skills creates a significant empirical gap. Commenting on this, Jaffu and Chagalima (2023) and Adjepong and Anane (2022) emphasize that your understanding of the relationship between staff capacity and procurement outcomes is indispensable for pinpointing areas requiring enhancement and formulating evidence-based strategies to improve procurement practices, efficiency, transparency, and, consequently, the successful execution of projects and services at the local level. Your role in this understanding is crucial and valued.

The government of Tanzania has initiated commendable efforts, including legislative and procedural frameworks such as those reported by Rasheli (2016), to address challenges like insufficient skills, inadequate training, and lack of experience within the public procurement landscape. These efforts by the government of Tanzania, including capacity-building initiatives, training programs, and policy reforms, signal a commitment to transparent and accountable practices.

In light of these considerations, this study intends to delve into the intricate interplay of staff technical skills influencing public procurement performance within local government authorities in Tanzania. This study aimed to bridge the identified empirical gap by conducting an in-depth examination of staff technical skills and its influence on the overall public procurement performance of local government authorities in Tanzania. Going beyond the legal and procedural dimensions, the research aims to provide nuanced insights into the intricacies of staff skills and its implications for procurement outcomes. The intent was not merely to diagnose problems but to inform actionable recommendations and interventions that can enhance staff technical skills and the overall effectiveness of public procurement practices in Tanzania. Through this nuanced exploration, the study aspired to contribute valuable insights to both academic discourse and practical policymaking, fostering positive transformations in Tanzania's public procurement landscape.

2. Literature Review

2.1 Theoretical Review

Management of Skills Theory

The study was guided by the Management Skills Theory, which can be associated with the works of David McClelland, an American psychologist, and his colleagues. McClelland initially proposed the theory in the early 1970s. Management Skills Theory emphasizes the significance of specific technical skills and competencies individuals possess in leadership or managerial positions. McClelland identified three critical competencies for effective management: technical, human, and conceptual skills.

The theory posits that technical skills involve specialized knowledge and expertise in a particular field. On the other hand, human skills encompass working effectively with others, understanding their needs, and motivating them. Conceptual technical skills involve thinking strategically, analyzing complex situations, and making sound decisions.

According to McClelland, the relative importance of these competencies may vary depending on the managerial level and organizational context.

Recent studies in public procurement, such as the one by Changalima and Mdee (2023), have not only recognized the importance of management skills but also highlighted the mediating role of specific competencies, such as procurement planning, in the relationship between procurement skills and performance in public organizations. These findings underscore the crucial role of these competencies in mediating the overall impact of staff skills on procurement outcomes, a key aspect of your work in management and public procurement. Rasheli (2016), in a study focused on procurement contract management in Tanzanian local government authorities (LGAs), applied a transaction cost approach to examine how management competencies influence the effectiveness of procurement processes. This approach not only adds depth to our understanding of how specific competencies impact different aspects of procurement management within the public sector but also provides valuable insights that can significantly enhance your research in this field. Furthermore, studies by Eliah and Athumani (2020) and Matunga et al. (2021) explored the influence of staff technical skills on the performance of procurement management units in the public sector. These works delve into the practical implications of management skills theory in specific public procurement, providing valuable insights into the day-to-day application of competencies.

In the context of this study, the Management Skills Theory is relevant as it provides a framework for understanding the essential technical skills and competencies required for effective management within public procurement. The theory's emphasis on technical aligns with the multifaceted nature of staff competency in the public procurement sector. By applying this theory, the study aims to assess how these technical competencies contribute to procurement performance in Local Government Authorities in Tanzania, shedding light on the specific skills and knowledge areas critical for successful procurement.

2.2 Empirical review

Mutesi and Safari (2021) determined the impact of staff skills in executing procurement work. Results indicated that research based on research objectives shows a significant relationship between staff competencies and procurement performance at Rwanda Public Procurement Authority, as noted in a coefficient of 0.350 with an R square of 0.059, which is positive. Results demonstrated that the coefficient for each independent variable was zero. This meant that all independent variables influenced the dependent variable.

Matunga et al. (2021) analyzed the relationship between staff skills and the implementation level of public procurement regulatory framework in the devolved governments in Kenya. Methodology: The study's findings indicate a positive significant relationship between Procurement Staff Skills and the implementation level of public procurement regulatory framework in the devolved governments in Kenya. The findings were substantial, with a p-value of 0.00000, less than 0.05. This means that Procurement Staff Skills significantly affects the Implementation level of public procurement regulatory framework in the devolved governments in Kenya. The findings, therefore, implied that procurement staff skills was an essential factor in determining the level of implementation of public procurement regulatory framework in the devolved governments in Kenya. The study recommended the adoption of procurement staff skills as a way of improving the implementation level of public procurement regulations. The study, therefore, suggested that the county government heavily invests in procurement staff capacity building as an essential factor in improving the implementation of public procurement regulatory frameworks in devolved governments in Kenya. Since some staff members needed more technical skills beyond secondary education, the study recommended that the county governments identify, support, and organize in-service training for the procurement staff officers to improve their knowledge and skills capacity. The study found that the Skills theory model applied to the study can provide more knowledge to future researchers and scholars.

Ketemaw (2020) assessed factors affecting public procurement performance in a case study of Wollega University. Specifically, the study examines supplier management, staff skills, and inventory management variables that affect Public Procurement Performance. The study used an explanatory research design. Findings indicate that supplier Management, inventory management, and staff skills are the major factors that affect public procurement and have a significant positive effect on procurement performance. Finally, the study recommends choosing suppliers who can deliver, building authentic relationships with them, improving their store management system by assigning qualified staff, and applying a collective effort to develop continuous training programs to perform the effectiveness of procurement practice in the institution.

2.3 Statement of Hypothesis

Based on the research objective and with reference to the empirical review, the study was aimed to test for the following hypothesis (Hn);

- i. H1: Staff experience has a significance influence on the public procurement performance in Tanzania

3. Research Methodology

In the context of this study, the Management Skills Theory is relevant as it provides a framework for understanding the essential technical skills and competencies required for effective management within public procurement. The theory's emphasis on technical aligns with the multifaceted nature of staff competency in the public procurement sector. By applying this theory, the study aims to assess how these technical competencies contribute to procurement performance in Local Government Authorities in Tanzania, shedding light on the specific skills and knowledge areas critical for successful procurement.

3.1 Research design

This study employed a mixed-methods approach to comprehensively explore the relationship between staff technical skills and Public Procurement Performance within Local Government Authorities in Tanzania. The mixed-methods design combined qualitative and quantitative research techniques, allowing for a multifaceted investigation. Qualitative methods, such as interviews and content analysis, were employed to gain in-depth insights into the subjective experiences, perceptions, and challenges faced by procurement staff. Concurrently, quantitative methods, including surveys and statistical analysis, were utilized to quantify the impact of staff competency on key performance indicators. This approach enabled a holistic understanding of the research problem, offering both breadth and depth in examining the intricate dynamics between staff competency and procurement unit performance within the specific context of Local Government Authorities.

The proposed study adopted a cross-sectional survey design to test hypothesis indicated in section 2.3 concerning the relationship between staff technical skills and Public Procurement Performance—consequently, the research involved testing various hypotheses within a specific timeframe. Saunders et al. (2005) supported this design, emphasizing that it gave the researcher greater control over the research process. In the proposed study, the population comprised all staff members working in Local Government Authorities (LGAs) in Tanzania. According to the Chamwino District Council Report (2022), the council had 180 employees

3.2 Sampling technique

The study adopted probability sampling technique, particularly simple random sampling to sample a sample size of 123 respondents from the procurement departments in the Chamwino District Council. Those individuals were used for collecting quantitative data using structured questionnaires that were administered to sampled populations. Also, the study adopted non-probability sampling involving purposive sampling was also used to select four key informants. This technique offered advantages such as faster data collection, lower survey costs, and easier accessibility to potential respondents, as emphasised by Kim (2022). Through purposive sampling was used to select four (4) Key Informants (KIIs) that included Head of Procurement department, Head of Human Resource Department, Chamwino District Commissioner, and Chamwino district executive director (DED).

3.3 Data collection

The study utilized a structured questionnaire containing both close-ended and open-ended questions, which was administered to respondents. While, interviews with critical informants like Heads of Department (HODs) of Procurement to gather qualitative primary data. This method was appropriate because key informants possessed crucial information and knowledge relevant to the issues under discussion (Skarmas et al., 2002).

4. Findings of the Study

4.1 Data Analysis

This study was represented by one independent variable of the Staff Technical Skills, which was regressed with public procurement performance as the dependent variable. The study used descriptive statistics and bivariate regression analysis using Chi-Square test. Furthermore, qualitative analysis was employed to explore the influence of staff technical skills on procurement performance. Interviews provided rich, contextual information. Descriptive

analysis was then applied to organize and summaries the quantitative data, which are statistical in nature, to identify the trends and relationships among its proxies; for the qualitative data, Content Analysis was used to facilitate the identification of the content within the patterns and themes related to the influence of technical skills on procurement outcomes. The thematic analysis approach systematically examines data to identify patterns and meaningful concepts, this begins with familiarizing with the data by transcribing audio, reading through the text, and taking initial notes based on identified themes and research questions. Also, it involved data coding and generating themes based on the objective which providing descriptive narratives for each theme

4.2 Demographics Characteristics of Respondents

The description of respondents' demographic characteristics offers a nuanced understanding of the diverse makeup of individuals involved in the study. Through Table 1, readers gain insights into various demographic variables such as age, gender, educational attainment, professional experience, and organizational roles held by the participants. These demographic attributes provide valuable context for interpreting the research findings, as they shed light on the backgrounds and contexts from which respondents approach issues related to public procurement. For instance, age and professional experience may influence participants' expertise and familiarity with procurement practices, while educational background could shape their understanding of relevant concepts and regulations.

Furthermore, examining the distribution of respondents across different organizational positions offers insights into how perspectives on procurement may vary among stakeholders occupying distinct roles within public procurement. Overall, the detailed presentation of demographic data in Table 1 enriches the analysis by highlighting the diversity and complexity within the respondent pool, thereby enhancing the robustness and applicability of the study's findings.

Table 1: Demographic characteristics of respondents

Demographic data	Categories	Frequency	Percent
Gender	Male	72	59.5
	Female	49	40.5
Age	18-30	25	20.7
	31-45	79	65.3
	46-55	17	14.0
Education	Certificate	10	8.3
	Diploma	48	39.7
	Bachelor degree	61	50.4
	Master degree	2	1.7
Experience	0-2 Years	28	23.1
	3-5 Years	89	73.6
	6-9 Years	4	3.3
Total		121	100.0

Source: Field Data, 2024

Results from Table 1 reveal several notable patterns among the respondents. Firstly, in terms of gender distribution, the majority of participants were male, comprising 59.5% of the sample, while females accounted for 40.5%. This gender imbalance suggests a potential disparity in representation within the public procurement sector, reflecting broader gender dynamics that may influence organizational dynamics and decision-making processes. This finding aligns with research by Mutesi and Safari (2021), who similarly observed a predominance of male participants in their study on procurement performance, highlighting persistent gender disparities in the sector.

Regarding age distribution, the data indicate that most respondents fell within the age range of 31-45 years, constituting 65.3% of the sample. This age group represents individuals in the prime of their professional careers, likely possessing substantial experience and expertise in public procurement practices. However, it is noteworthy that

a considerable proportion of participants (20.7%) were aged 18-30 years, suggesting the presence of younger professionals entering the field. This demographic trend corresponds with findings from Adjepong and Anane (2022), who noted a similar distribution of age groups among procurement professionals in municipal assemblies, underscoring the diverse age demographics within the sector.

Regarding educational qualifications, the majority of respondents held bachelor's degrees, comprising 50.4% of the sample, followed by diploma holders at 39.7%. This distribution reflects a relatively high level of educational attainment among participants, indicating a well-educated workforce within the public procurement. However, it is notable that a smaller proportion possessed master's degrees (1.7%) or certificates (8.3%), suggesting variability in educational backgrounds among practitioners in the field. This finding resonates with the observations of Nasra (2014), who found that procurement professionals in the telecommunication industry exhibited diverse educational qualifications, emphasizing the importance of a multidisciplinary approach to procurement management.

In terms of work experience, the data indicate that the majority of respondents had 3-5 years of experience, accounting for 73.6% of the sample, while 23.1% reported 0-2 years of experience. This distribution suggests a workforce with varying levels of tenure within the public procurement sector, with a substantial proportion of relatively junior professionals. However, a small percentage (3.3%) reported 6-9 years of experience, indicating the presence of mid-career practitioners with moderate levels of experience. This distribution of work experience aligns with the findings of Eliah and Athumani (2020), who similarly observed a concentration of procurement professionals with mid-level experience in their study on staff competency and performance.

In discussing the findings, it is evident that the demographic characteristics of the respondents reflect a diverse and dynamic workforce within the public procurement sector in Tanzania. The predominance of male participants underscores ongoing gender disparities in the field, mirroring broader societal trends. However, the presence of younger professionals and individuals with diverse educational backgrounds suggests a growing interest and engagement in procurement among various demographics. This aligns with global trends highlighted by Casteel and Bridier (2021), who emphasized the importance of cultivating a diverse talent pool to drive innovation and effectiveness in procurement practices.

The concentration of respondents within the age range of 31-45 years indicates a significant cohort of experienced professionals, likely contributing to the depth of knowledge and expertise within public procurement. However, the presence of junior practitioners with limited experience underscores the need for ongoing professional development and mentorship programs to nurture talent and enhance succession planning in the sector. This finding resonates with the recommendations of Jaffu and Changalima (2023), who advocated for implementing human resource development practices to strengthen procurement effectiveness.

Moreover, the educational profile of respondents suggests a relatively high level of academic achievement within the workforce, which may contribute to enhanced decision-making capabilities and strategic thinking in procurement processes. However, the variability in educational qualifications highlights the importance of inclusive recruitment and training initiatives to accommodate individuals with diverse backgrounds and skill sets. This finding aligns with the insights of Orio (2019), who emphasized the role of strategic procurement practices in leveraging human capital for organizational success.

Overall, the demographic characteristics of respondents provide valuable insights into the composition of the public procurement workforce in Tanzania and underscore the need for targeted interventions to address gender disparities, promote professional development, and harness the diverse talents of individuals across different age groups and educational backgrounds.

4.3 Descriptive Statistics Results

4.3.1 Diagnostic Test for Normality Assumption

To measure the validity of the regression model that the data residual is normally distributed across the MLR model, the study uses the normality assumption described by indicating skewness and kurtosis distribution. Bun and Harrison (2019) suggested that absolute skewness index values greater than 3.0 indicate extreme skewness, while kurtosis index values greater than 8.0 indicate extreme kurtosis. Another study by Ho (2017) provided assumption that for model to be considered normal, its skewness should range between -3 and +2 and its kurtosis should be greater than +7 to indicate normal MLR model distributions. This study utilized histogram residual to determine normality of the model, the result is presented in Figure 2 which show that histogram has a bell-shaped curve with

skewness and kurtosis ranging from - 4 to +4. This indicate that normality assumption adhered to the assumption provided by Bun and Harrison (2019), thus, the study concluded that normality assumption was found and met.

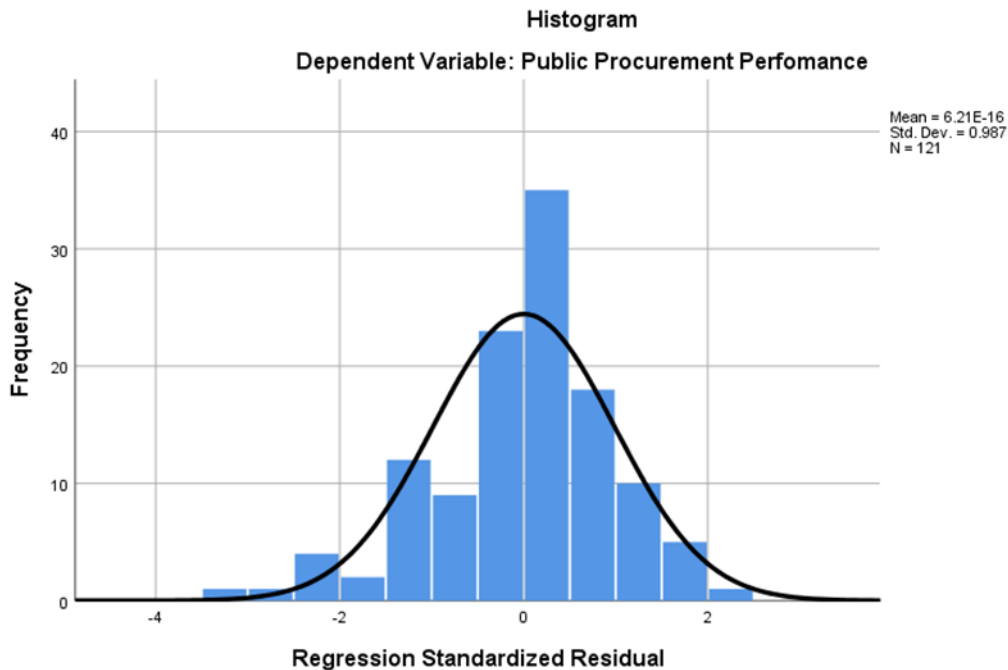


Figure 2: Normality test

4.3.2 Descriptive Outcome for Staff technical skills

Objective of this study delved into examining the influence of staff technical skills (STS) on the Public Procurement Performance. In the dynamic procurement landscape of the past, technical skills played a pivotal role in ensuring efficiency, accuracy, and compliance with regulations. Table 2 presented the data related to various indicators assessing the technical skills of staff members within procurement. Through descriptive analysis using Likert scale responses, this objective aimed to provide insights into how the level of technical expertise among staff members correlated with the overall Public Procurement Performance. This section comprehensively interpreted and discussed the findings presented in Table 2, shedding light on the significance of staff technical skills in enhancing procurement outcomes and aligning them with existing literature and scholarly discourse.

Table 2: Descriptive Outcome on Staff technical skills

Indicators	Mean	Std. Deviation
Understand procurement regulations and procedures	3.3967	1.35695
Familiarity with legal framework	3.4380	1.32849
Confidence in applying procurement regulations	3.5041	1.33619
Knowledge updates of procurement laws	3.5455	1.19722
Proficient using procurement software	3.6777	1.33051
Effective utilization of procurement tools	3.5702	1.21673
Adequate training	3.4876	1.29818
Comfortable using procurement technology	3.3967	1.26807

Procurement data analysis	3.2645	1.36485
Analytical skills for procurement decision	3.4215	1.38896
Interpretation of complex procurement information	3.5620	1.27078
Data analysis techniques optimization	3.6612	1.28162
Negotiation skills.	3.8430	1.04090
Contract management	3.8760	1.14434
Experience in resolving contract disputes	3.8017	1.09255
Valid N (listwise)		

Source: Field Data, 2024

The data presented in Table 2 offered insights into the staff's technical skills and their impact on the Public Procurement Performance. Upon examining the responses, it became evident that a significant proportion of respondents agreed with certain statements related to technical skills, while others showed more neutral (mean range 2.7 to 3.6). For instance, regarding understanding procurement regulations and procedures, familiar with legal framework, confident in applying procurement regulations, updating procurement knowledge and proficient in using procurement software

Similarly, receiving adequate training, comfortable using technology to enhance procurement activities, analyze procurement data to identify trends and patterns, analytical skills to support informed procurement decisions, and interpret complex procurement information accurately. These findings suggested a potential gap in the understanding and application of procurement regulations and legal frameworks among staff members, as commented on by Rasheli (2016). This implied that there might have been a need for targeted training programs to enhance staff knowledge and adherence to procurement regulations, ultimately improving procurement performance. Moreover, it was found that indicators such as proficient using procurement software, negotiating favorable terms and conditions with suppliers, effectively manage contracts throughout their lifecycle, and experience in resolving contract disputes have the mean score above 3.7, this shows that majority of respondent claimed to have technical skills significant to enhance procurement outcomes. Therefore, although staff members may have possessed some technical skills, the lack of comprehensive training could have hindered their ability to maximize the benefits of technological tools in procurement processes. Furthermore, regarding analytical skills and data utilization, the data showed mixed responses. While a considerable proportion of respondents believed they could analyze procurement data to identify trends and patterns, as also commented on by Kim (2022), there were indications of limited confidence in possessing strong analytical skills to support informed procurement decisions.

Regarding contract management skills, the data revealed varying levels of agreement among respondents, and this was in line with the findings of Mwaipopo (2017). Similarly, there were mixed responses regarding the ability to effectively manage contracts throughout their lifecycle and resolve contract disputes and issues. These findings implied that there may have been inconsistencies in contract management practices across different procurement. The descriptive results were supported by the qualitative data gathered using interview, one of a KII reported that; We had a technological system once, but it has never been used for many years, you know it needs some budget including hosting and maintenance payments. Therefore, the system is there but never being paid to be utilized. (Anonymous KII-6, 17th April 2024)

Comparing these findings with existing literature, it was evident that there was a consistent emphasis on the importance of staff training and proficiency in procurement software and tools for enhancing procurement efficiency and effectiveness (Bairo, 2020). Similarly, the need for continuous skill development in data analysis and interpretation to support informed procurement decision-making had been highlighted in previous studies (Mutesi & Safari, 2021). These findings resonated with the implications drawn from Statements 5, 7, 9, 10, 11, and 12, suggesting a need for targeted training programs to address the identified gaps in technical skills among procurement staff, as emphasized by Bairo (2020).

The findings of the indicated that enhancement of staff technical skills in various areas such as regulatory understanding, technological proficiency, and contract management improve the overall Public Procurement Performance. Addressing the identified gaps through comprehensive training and skill development initiatives could

enable staff members to leverage technology effectively, make informed decisions, and enhance the efficiency and compliance of procurement processes.

4.4 Bivariate Correlation analysis

The study further conducted a bivariate analysis using Chi-Square to test the relationship between public procurement performance and staff technical skills. The Chi-Square was performed to determine the degree of association between metrics of staff technical skills and public procurement performance, the aim was to determine which metric has high influence on better procurement outcome. The overall Chi-square for staff technical skills was 753.816 with its P-Value of 0.000. This highlighted a robust positive relationship between staff technical skills and procurement performance, signifying that effective staff technical skills markedly improved overall procurement performance.

Table 3. Chi-Square Analysis

Metrics Variables	Pearson Chi-Square	Asymptotic Significance (2-sided)	Overall Pearson Chi-Square	Overall Asymptotic Significance (2-sided)
Understand procurement regulations and procedures	72.729	.012	753.816	.000
Familiarity with legal framework	102.772	.000		
Confidence in applying procurement regulations	93.423	.000		
Knowledge updates of procurement laws	90.467	.000		
Proficient using procurement software	102.632	.000		
Effective utilization of procurement tools	127.385	.000		
Adequate training	110.287	.000		
Comfortable using procurement technology	98.259	.000		
Procurement data analysis	69.338	.000		
Analytical skills for procurement decision	92.091	.000		
Interpretation of complex procurement information	134.556	.000		
Data analysis techniques optimization	128.358			
Negotiation skills.	108.895	.000		
Contract management	131.996	.000		
Experience in resolving contract disputes	120.672	.000		

The findings of the study shows that comprehensive knowledge of procurement regulations and legal requirements that pertain to procurement processes is very important for Public Procurement Performance (PPP). A high Pearson chi-square for comprehensive understanding of procurement regulations and procedures and familiarity with the legal framework governing procurement processes (72.729 and 102.772), which indicates that individual with these competencies is more effective in their roles. Furthermore, the ability to apply the procurement laws and the willingness to keep the professional knowledge up to date are important to maintain the high PPP standards (Chi-Square = 93.423 and 90.467). Technology also a crucial factor in procurement efficiency as it was found to have a high Chi-Square values concerning the proficiency in using procurement software (102.632) and the comfort in technology (98.259), which indicate the need to incorporate the technology into procurement to enhance efficiency. Such competencies lead to better handling of data and decision making and in conformity to this, skills in data analysis strongly correlate with PPP with a Chi-Square value of 69.338. Also, the improved interpretation of complex procurement information (Chi-Square = 134.556) and the use of data analysis techniques (Chi-Square = 128.358) show that to achieve better procurement results, a person with analytical and data-driven decision-making skills is needed. Also, it was found that proper handling of procurement contracts and bargaining with the suppliers, powerful contract management, and negotiation skills are significantly essential (Chi-Square = 131.996 and 108.895). The study indicated significant relationship between PPP and procurement related competencies suggest that organizations should consider the enhancement of training and capacities development programs. This shows that procurement officers should undergo frequent training on procurement laws, regulations, and the use of digital tools to improve their performance. Also, the adoption of technology within procurement activities should also be a strategic plan of any organization that wants to optimize procurement function. These results provide insight that procurement departments should pay extra attention to the ways of building up the analytical skills of their employees. These would enhance decision-making regarding procurement data trends and boost organizational performance. Also, it shows that the regulatory bodies should encourage professional development and the use of procurement software to improve the outcomes of the procurement activities with regard to efficiency, transparency, and compliance with the best practices. The results of the study were consistent with the findings of many previous researches. The findings of the study were in align with various past studies, Mutesi and Safari (2021) indicated that research based on research objectives shows a significant relationship between staff competencies and procurement performance at Rwanda Public Procurement Authority. Matunga et al. (2021) indicate a positive significant relationship between Procurement Staff Skills and the implementation level of public procurement regulatory framework in the devolved governments in Kenya. Ketemaw (2020) indicate that supplier Management, inventory management, and staff skills are the major factors that affect public procurement and have a significant positive effect on procurement performance.

5. Summary of the Findings

The study investigated the influence of staff technical skills on Public Procurement Performance, focusing on aspects such as familiarity with procurement regulations, proficiency in using procurement software, and analytical skills. Regression analysis shows a significant statistical relationship between staff technical skills and public procurement performance. The findings further show a mixed picture, with some staff members demonstrating proficiency in specific technical skills while others exhibited gaps in analytical capabilities and contract management skills. It was found that, all these proxies for staff technical skills have significant positive influence in public procurement performance in Tanzania because their P-Values were less than 0.05 significance level.

5.1 Conclusion

In conclusion, this study offers significant insights into the determinants of public procurement performance in Tanzania, emphasizing the critical role of staff experience, training, and technical skills. Several key findings have emerged through a rigorous analysis of data collected from public procurement.

The bivariate analysis underscored the significant positive impact of staff technical skills to the public procurement performance. This highlights the importance of technical skills among staff and targeted training programs to address these knowledge deficiencies and enhance staff competency. The findings emphasize the significance of continuous learning and skill development in keeping pace with evolving procurement practices and regulations. Moreover, the study identified challenges related to data analysis and contract management skills among

procurement staff, indicating areas requiring further attention and investment. Strengthening analytical capabilities and enhancing contract management practices are crucial for optimizing procurement outcomes and ensuring compliance with regulatory requirements. Public procurement can improve efficiency, transparency, and accountability by addressing these challenges through targeted capacity-building initiatives and adopting best data utilization and contract management practices.

Overall, the findings of this study underscore the multifaceted nature of procurement performance and the importance of a holistic approach to capacity-building and technical skill development. The study concluded that empowering procurement staff with the requisite technical skills, and tools, public procurement can navigate complex procurement landscapes more effectively, contributing to the efficient allocation of resources, improved service delivery, and, ultimately, the socio-economic development of Tanzania.

5.2 Implication of the Study

5.2.1 Practical Implications

The study has made a positive contribution to the practical appraisal of public procurement performance, taking into consideration the enhancement of technical skills of staff. This implies that when specific training initiatives are directed towards procurement team the public procurement regime can be made more effective, more transparent and more compliant with the law. The practical implications stress concerns like the necessity for ongoing education and the use of technology like procurement software for procurement processes to lower risk results of undesirable performance.

5.2.2 Managerial Implications

The study findings have significant implications to the managers within procurement departments as it shows the need for investing in staff development. Therefore, managers are encouraged to engage their institutions in capacity building and developments that empower the staff with the technicality on how to deal with procurement procedures to fairly implement the laws, regulations and technology.

5.2.3 Social Implications

The study focused on the social concerns arising from enhanced procurement systems on the delivery of public services. The improvement of the procurement performance through the increase of the number of skilled staff may result in efficient provision of resources necessary for infrastructure development and service delivery in communities. Therefore, through ensuring the procurement is done in the right manner there are societal benefits for instance the eradication of the vice of corruption and acquisition of the public resources fairly.

5.3 Recommendations

In light of the findings elucidated in the preceding sections, the recommendations outlined herein aim to provide actionable steps for enhancing the Public Procurement Performance in Tanzania. These recommendations are informed by the identified challenges and opportunities revealed by analyzing staff technical skills. By addressing these recommendations, stakeholders within public procurement entities can effectively navigate the complexities of procurement processes, foster a culture of continuous improvement, and ultimately contribute to the attainment of organizational objectives and the broader socio-economic development goals of the nation. The following are the recommendations from the findings of this study:

The study recommends for the government, particularly, PO-RALG to invest in modern technological infrastructure and procurement software to streamline procurement processes, enhance data management capabilities, and improve efficiency. This investment should be accompanied by adequate training and technical support to ensure staff members can leverage these tools effectively.

Also, the study recommends for Institutions to encourage a culture of continuous learning and professional development within public procurement by incentivizing staff members to pursue further education, certifications, and training courses related to procurement. This can be achieved by offering scholarships, grants, and recognition programs for individuals who are committed to enhancing their skills and knowledge in the field.

Furthermore, the study recommends for the stakeholders to emphasize on enhancing contract management practices within public procurement to ensure the effective negotiation, execution, and oversight of contracts throughout their lifecycle. PO-RALG should develop standardized contract management frameworks, provide training on contract

administration, and implement monitoring mechanisms to mitigate risks and maximize value for money in procurement transactions.

5.4 Study Limitations

There were various constraints like unavailability of some respondents at the required time. Some respondents were occupied at the time the researcher wants to see or talk to them. In addition to that, some other respondents were not ready to provide full participation and cooperation to the researcher due to their tight schedules. This would affect the task of gathering information to some extent. To mitigate those limitations, the researcher planned data collection timeframe to be more flexible and adjustable to the timetable of the respondents so it does not interfere with their working schedule as well as that allow collection of data within the time limit. For example, the researcher conducted phone interview for those who were not possible to set meeting in working time. Also, questionnaire was shared digitally using KOBO toolkit to allow the respondent fill them in their relevant time.

5.5 Areas for Further Study

Considering the focus of this study was on the effect of staff technical skills on public procurement performance within LGAs in Tanzania, various areas has been outlined that can be improved for the further research.

This research focused on the LGAs situated only within the Tanzanian context, and more precisely, within the Chamwino District Council area. Future research could focus on comparative studies by studying other geographical areas or other public institutions in Tanzania other than LGAs. Comparative research would enable cross-sectional analysis on the performance of procurement with regard to geographical regions such as rural and urban or public institutions.

Also, this study was conducted using cross-sectional design which gave a single picture of the impact that technical skills of staff had on procurement performance at a certain time. Therefore, future studies might consider conducting a long-term study design to compare the changes that take place over time. Across-sectional study designs would enable one to see how factors influencing procurement performance change with over time as staff accumulates experience or after some have been trained or promoted.

Moreover, while this study was centered on the staff technical skills as a critical predictor of procurement performance, future researchers can focus on examine other variables that this current study did not consider but could greatly influence procurement performance. For example, variables such as staff engagement, business culture, managerial behavior, and the impact of factors from outside the organization, or policies like political or legal issues.

5.6 Study Contribution

The findings of this study offer insight to the government and PO-RALG that can foster a more conducive environment for effective public procurement practices, promote transparency, accountability, and integrity, and ultimately contribute to the efficient delivery of public services and the sustainable development of Tanzania.

Conflict of Interest Statement

Under policy and ethical obligations as a researcher, I have no conflict of interest in this work or any company affected by the research reported in the enclosed paper. Also, I received no direct funding for this research

Acknowledgement

The author expresses her sincere gratitude to the anonymous reviewers and the editorial team of the article for their insightful feedback that improved the caliber of this work.

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