

Challenges facing procurement and supply professions in Tanzania: higher education students' perceptions

Procurement
and supply
challenges

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Abstract

Purpose – Despite the fact that students in higher education contributes significantly to the number of professionals, little has been done to incorporate the students' perspectives on the status of procurement and supply professions in Tanzania. This study examined the challenges confronting the procurement and supply professions from the perspective of future procurement professionals enrolled in Tanzanian higher education.

Design/methodology/approach – A cross-sectional design was used to collect data from undergraduate students majoring in procurement and supply chain management in Tanzanian higher education using a structured questionnaire.

Findings – The findings revealed that the challenges affecting the procurement and supply professions were buyer- and supplier-related challenges as perceived by Tanzanian higher education students.

Research limitations/implications – The study's findings should be generalized with caution because the findings represent the perspectives of Tanzanian procurement and supply undergraduate business students. Furthermore, the included sample of procurement and supply undergraduates cannot represent all students' perceptions; thus, other studies may broaden the sample by including the opinions of other higher education students.

Originality/value – This is the first study that looks at how students in higher education institutions, who are considered future procurement and supply professionals, perceive the challenges of the procurement and supply professions in Tanzania.

Keywords Procurement and supply professions, Procurement and supply challenges, Higher education, Students' perceptions, Tanzania

Paper type Research paper

Introduction

In general, procurement entails activities related to the acquisition of goods, works and services. Procurement endeavours are conducted in both the private (profit-oriented organizations) and public (nonprofit-oriented organizations) sectors (Hawkins *et al.*, 2011). Public procurement has received enough attention in academia due to the huge amount of funds allocated to the function (Changalima *et al.*, 2022). In the same manner, procurement functions in private organizations also play a significant role in enhancing several



performance dimensions of the organization. In this regard, procurement remains to be a significant function for enhancing the development of the country, both through public procurement and through procurement conducted by individual private organizations in the private sector (Changalima *et al.*, 2021b; Hamza *et al.*, 2016).

Similarly, procurement operations are conducted in Tanzania in both the public and private sectors. These two sectors are the main sectors that utilize procurement and supply professionals in Tanzania. Like any other profession, the procurement and supply profession in Tanzania is under the professional board currently known as the Procurement and Supplies Professionals and Technicians Board (PSPTB) from the previous National Board of Materials Management (The United Republic of Tanzania (URT), 2007). In this aspect, procurement is considered a profession as it has a professional board with governing ethics and principles. The status of the procurement and supply profession is based on how the procurement function contributes to organizational and national development and how procurement and supply professionals play a role in making procurement more important.

The procurement function is important in many aspects of an organization and in the overall development of a country (Changalima *et al.*, 2021b; Mohamed, 2017). Even though the function consumes a huge amount of funds, it is responsible for ensuring the development of an individual organization and the whole economy. Professionals and practitioners play prominent roles in ensuring that the ultimate goal of the procurement function is achieved. Specifically, they are responsible for ensuring that the procurement objectives of an organization are strategically achieved to ensure the overall success of an organization in the industry (Tukuta and Saruchera, 2015). Therefore, procurement professionals and practitioners have to consider aspects of conduct that do not affect the overall performance of individual organizations and the national economy at large. However, the goal of ensuring that the conduct of individual professionals and the whole process of procurement are conducted systematically and efficiently is affected by notable challenges. These challenges affect the procurement system in general and have individual effects on professionals themselves. For instance, systemic challenges such as lack of supplier trust, an inadequate development plan for professionals and the public not recognizing the benefits of procurement are identified as the hindrances to an effective procurement system in Tanzania (Mohamed, 2016).

Also, individual professionals are affected by limited professional recognition, poor services that are offered by suppliers, poor regulations and variations in supplier standards (Tukuta and Saruchera, 2015). Additionally, political interference also affects the conduct of procurement professionals and the level of compliance with procurement laws and regulations, especially in the public sector (Chikwere *et al.*, 2019). As the function is sensitive to the spending of funds and the overall conduct of individual professionals has to adhere to ethical conduct, pieces of literature show that unethical conduct is a challenge to the procurement profession (Ebekozi, 2019; Israel *et al.*, 2019; Tukuta and Saruchera, 2015). Despite these challenges, governments and other stakeholders are making concerted efforts to ensure that the profession grows.

The function has passed through various reforms to ensure the challenges are controlled. The enactment and amendments of procurement legal procedures and other systematic procedures issued by the Public Procurement Regulatory Authority (PPRA) under the Public Procurement Act (PPA) are among the major notable efforts. Other efforts are related to professional development. Generally, professionals are developed through training and career developments that shape their conduct and profile (Ingvarson, 1998; Stewart, 2014). Tanzanian procurement and supply professionals are developed through training and career development as PSPTB, the country's responsible governing body of procurement and supply professionals, conducts examinations, training and workshops for procurement practitioners (URT, 2007). Furthermore, higher education institutions throughout the country offer training and seminars on various aspects of the procurement profession. Therefore,

trainers from the professional board and other higher education institutions are essential to the development of the procurement profession in Tanzania.

The literature emphasizes the importance of education in the formation of professional careers (Wardoyo *et al.*, 2020). In this regard, it is critical to investigate the perceptions and attitudes of higher education students as these are the future procurement and supply professionals. Despite the fact that students from various procurement programmes offered in Tanzanian higher education institutions comprise a large number of future procurement professional cadres upon completion of their studies, little is known about their perspectives on the status of the procurement and supply professions in the country. Given the importance of the procurement and supply professions, as well as the roles procurement and supply professionals play in the performance of organizations, it is critical to research future professionals' perceptions and attitudes. To address this gap, the research focuses on the following research question: *what are the challenges of procurement and supply professions in Tanzania as perceived by higher education students?*² Therefore, the current study focuses on evaluating higher education students' perceptions of the status of the procurement profession in Tanzania in terms of buyer-related and supplier-related challenges affecting the procurement profession in the country.

Methods

Research approach and design

This study utilized a quantitative approach because it involves the collection and statistical analysis of numerical data (Saunders *et al.*, 2019). In this instance, a cross-sectional design was utilized to collect data from undergraduates pursuing procurement-related programmes only once. Using a descriptive cross-sectional design, the study gathered information describing the status of phenomena or the relationships between phenomena at a specific point in time (Saunders *et al.*, 2019). The study was conducted at two Tanzanian higher education institutions that offer procurement and supply programmes. The finalist bachelor students were involved because they are the ones with sufficient experience in their respective training environments and because, as potential graduates, they are more focused on their profession.

Measurements, sampling and data collection

The questionnaire was designed to collect data on students' perceptions of the challenges that procurement and supply professionals face when carrying out procurement activities. On a five-point Likert scale, the items for the main part of the questionnaire were based on previously established theoretical measures of procurement challenges (Ambe and Badenhorst-Weiss, 2012; Anane and Kwarteng, 2019; Huka *et al.*, 2014; Mohamed, 2016; Musanzikwa, 2013). Before collecting data, a pilot study was conducted on four (4) procurement professionals and two (2) postgraduate students to determine the clarity of the survey tool and to improve the instrument's reliability and validity. The proportionate stratified sampling technique was used in this study, with two strata (higher education institutions majoring in procurement) involved, and respondents were drawn at random from each stratum for each given proportion. Therefore, the unit of inquiry only included third-year students (potential graduates) who had participated in field practical training during their studies. Because almost all procurement undergraduate programmes in the country have a maximum duration of three (3) years, a total of 200 structured questionnaires were distributed, and 174 responses were received, all of which were included in the final data analysis.

Reliability and validity

Internal consistency reliability of measurement scales was evaluated by using Cronbach's alpha coefficients, and constructs with values that are greater than 0.7 are considered to be

reliable (Tavakol and Dennick, 2011). The values of Cronbach’s alpha coefficients as presented in Table 1 are higher than 0.7, and then it was determined that the internal consistency reliability was achieved. In addition to that, an equivalent cut-off point of greater than 0.7 was used to evaluate the composite reliability (Hair et al., 2010). Again, composite reliability values as presented in Table 1 are above 0.7, which indicates reliability was achieved. Convergent validity was assessed using average value extracted (AVE) values and standardized factor loadings. Table 1 shows that factor loadings are above 0.7, and AVE values are greater than 0.5, indicating that convergent validity was achieved (Hair et al., 2010). Also, discriminant validity was confirmed as the value of square root of AVE by a construct (italicized values in Table 2) is greater than the correlation between the construct and any other construct (Fornell and Larcker, 1981).

Data analysis

The collected data in this study were analysed by using SPSS version 25 and AMOS version 21 for analysing the descriptive statistics and confirmatory factor analysis (CFA), respectively. Descriptive statistics were used to describe the data in terms of mean and standard deviations, while CFA was used to confirm the proposed structure of factors (Figure 1) between observed and latent variables, under which items representing challenges were confirmed for each respective latent construct. Also, the technique is useful in assessing the reliability and validity of measured items when latent and observed variables are involved (Hair et al., 2010).

Constructs/items	Factor loadings	AVE	Cronbach’s alpha	Construct reliability
<i>Buyer-related challenges</i>		<i>0.706</i>	<i>0.934</i>	<i>0.935</i>
• Inadequate or poor specifications (BRC1)	0.872			
• Inadequate planning and the linking of demand to the budget (BRC2)	0.844			
• Noncompliance with procurement procedures and regulations (BRC3)	0.778			
• Lack of innovation in public procurement (BRC4)	0.892			
• Application of uncompetitive methods of procurement (BRC5)	0.840			
• Inadequate user departments’ cooperation (BRC6)	0.810			
<i>Supplier-related challenges</i>		<i>0.644</i>	<i>0.898</i>	<i>0.900</i>
• Managing supplier tiering system (SRC1)	0.780			
• Inadequate linkage of buyer–supplier relationships (SRC2)	0.810			
• Longer lead times (SRC3)	0.877			
• Low capacity within private sector to participate in public procurement (SRC4)	0.745			
• Suppliers’ limited knowledge of public procurement laws and regulations (SRC5)	0.795			

Table 1. Reliability and validity

Discriminant validity using Fornell–Larcker criterion	AVE	Buyer-related challenges	Supplier-related challenges
Buyer-related challenges	0.706	<i>0.840</i>	
Supplier-related challenges	0.644	0.376	<i>0.802</i>

Table 2. Discriminant validity using Fornell–Larcker criterion

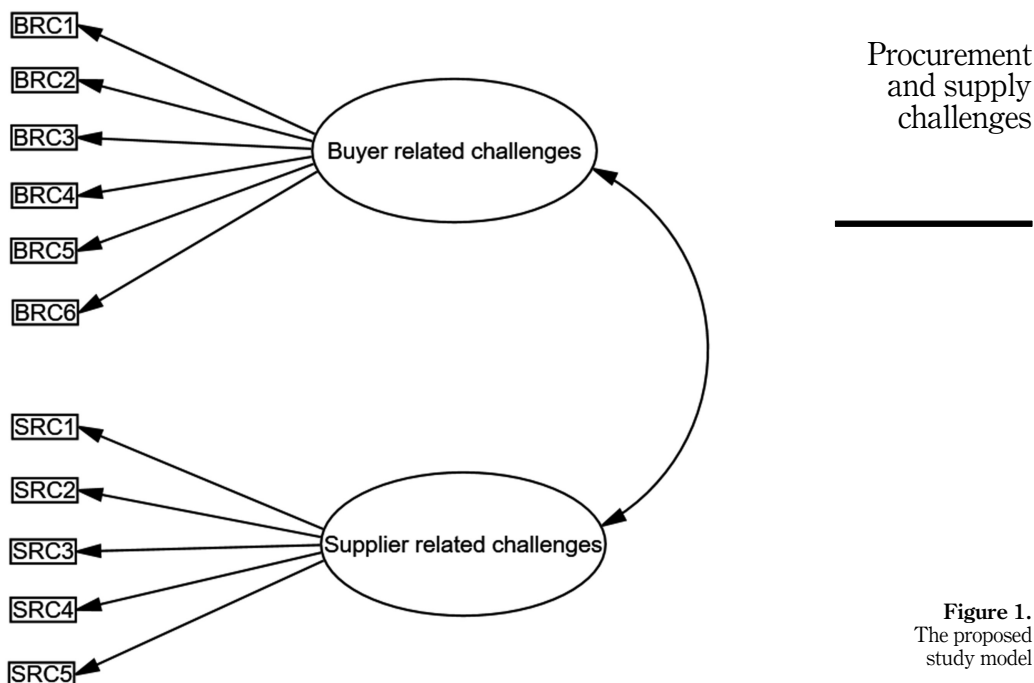


Figure 1.
The proposed study model

Results and discussion

Respondents' characteristics

The results in [Table 3](#) show that the majority of students who participated in this study were all Tanzanians, having an age between 21 and 26 years, 136 (78.2%), followed by 27–32 years, 31 (17.8%) and 33–38 years, 7 (4%). The results further show that most of them are from direct entry through advanced level education (form VI) 103 (59.2%) and 71 (40.8%) from equivalent qualifications (diplomas). These are the main entrance levels for bachelor's degrees in Tanzania. The respondents were 110 (63.2%) males and 64 (36.8%) females. Furthermore, they were all aware of the functions of PSPTB in the country. Therefore, these results indicate that the higher education students who participated in this study are aware of current procurement issues in the country and were thus able to provide the necessary information regarding procurement activities in the country.

Demographics	Categories	Frequency	Percentage
Age (in years)	21–26	136	78.2
	27–32	31	17.8
	33–38	7	4.0
Sex	Male	110	63.2
	Female	64	36.8
Entrance level	Form VI (direct entry)	103	59.2
	Diploma (equivalent entry)	71	40.8
Awareness with functions of PSPTB	Yes	174	100.0
	No	0	0.0

Table 3.
Respondents' characteristics

Descriptive statistics

The descriptive analysis was conducted to examine the mean score and standard deviation of rated responses from respondents. The results are presented in Table 4 and show that all challenges under the category of buyer-related challenges were rated slightly high, with a mean score of above 4.0. This finding indicates that students agreed with the fact that all buyer-related challenges affect procurement and supply professions in the country. Also, in the second category (supplier-related challenges), two challenges, which are in adequate linkage of buyer–supplier relationships and limited knowledge of public procurement law and regulations, were rated high, with a mean of 4.12 and 4.14, respectively. These findings imply that among supplier-related challenges, these two were the most important as perceived by higher education students. Moreover, the rest of the challenges were rated slightly higher, with a mean score of above 3.5. Thus, all challenges were perceived to exist for the procurement and supply professions in the country.

Common method variance

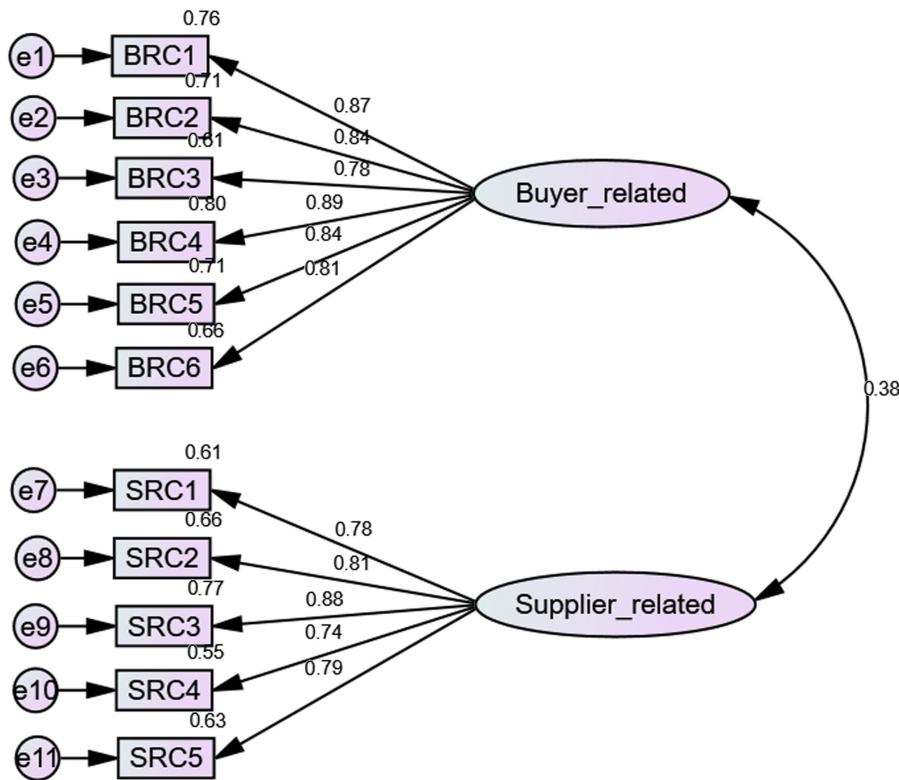
This study collected data by using a self-reported structured questionnaire, which is more likely to result in bias. Thus, a Harman's single factor test was used to determine whether or not there was any common method bias under which the proportion of the total variance that could be attributed to a single factor was approximately 44.17%. The conclusion that the common method bias was not a significant issue was drawn because this value is lower than the threshold, which is set at 50% (Podsakoff *et al.*, 2003).

CFA model measurements

CFA results provide model fit indices, which are used to determine how well the model fits the data. The model chi-square (X^2) value was found to be 64.055, and $df = 43$ at $p = 0.020$. Other model fit measures include $X^2/df = 1.490$, comparative fit index (CFI) = 0.984, standardized root mean square residual (SRMR) = 0.046, root mean square error of approximation (RMSEA) = 0.053, PClose = 0.399, goodness-of-fit index (GFI) = 0.939, normed fit index (NFI) = 0.954, relative fit index (RFI) = 0.941, incremental fit index (IFI) = 0.984 and Tucker-Lewis index (TLI) = 0.980, which are within the recommended thresholds, which suggests that the model provides an accurate representation of the data (Hooper *et al.*, 2008; Hu and Bentler, 1999). In addition, a correlation value of 0.38 as presented in Figure 2 demonstrates that there is no multicollinearity between the constructs since the value is below 0.8 (Mwagike and Changalima, 2022).

Constructs/items	Mean	Std. deviation
<i>Buyer-related challenges</i>		
• BRC1	4.52	0.803
• BRC2	4.64	0.791
• BRC3	4.49	0.788
• BRC4	4.53	0.851
• BRC5	4.47	0.878
• BRC6	4.39	0.824
<i>Supplier-related challenges</i>		
• SRC1	3.78	1.198
• SRC2	4.12	1.055
• SRC3	3.96	1.223
• SRC4	3.91	1.206
• SRC5	4.14	1.066

Table 4.
Descriptive statistics



Procurement and supply challenges

Figure 2. The CFA

Buyer-related challenges

Results in Figure 2 and Table 1 show that BRC1, which reflects “inadequate or poor specifications,” has a β value of 0.872. This result implies that inadequate and poor specifications of needed goods and services required by buyers in both public and private organizations adversely affected the overall conduct of procurement and supply activities in Tanzania. Based on the results of this study, poor and inadequate specifications hamper good procurement practices. Oenga *et al.* (2022) opined that the failure of users to provide adequate and complete specifications resulted in delays in the procurement process. Furthermore, research has shown that specifications in the procurement process play an important role in acquiring goods and services (Benaya, 2020). Buyers can acquire relevant and required suppliers through proper, detailed specifications. Thus, consequences related to poor quality products and increases in costs due to delivery of the underspecified supplies can be avoided through adequate and well-prepared specifications.

Also, BRC2, which presents “inadequate planning and the linking of demand to the budget,” has $\beta = 0.844$ as presented in Table 1 and Figure 2. The finding implies that the problem of inadequate planning and the linking of the requirements to the budget are perceived by students to explain about 84.4% of buyer-related challenges in the procurement profession in Tanzania. The finding is supported by Changalima *et al.* (2021b). Their study opines that poor planning and failure to match the requirements with the budget are major problems that buying organizations face in procurement activities. In this regard, procurement endeavours should be well planned and linked to the expenditure budget.

This is supported by the PPA, which requires public organizations in Tanzania to adequately plan their procurement activities in order to avoid problems caused by unrealistic budgets (URT, 2011).

Furthermore, noncompliance with procurement procedures and regulations is considered a significant challenge that faces the procurement profession in Tanzania. The results presented in Table 1 and Figure 2 show that BRC3 has a β value of 0.778. This result implies that students in higher education perceive that noncompliance with procurement procedures and regulations accounts for 77.8% of challenges on the side of the buyer that affect the procurement profession in Tanzania. Empirical evidence supports these results as there are issues related to noncompliance of procurement laws and regulations that affect the procurement undertaking within the country (Changalima and Ismail, 2019; Mrope, 2018). Furthermore, the procurement audits' report in the country has established undesirable consequences on noncompliance to procurement procedures and regulations to public procuring organizations (National Audit Office of Tanzania (NAOT), 2022; PPRA, 2021).

The results in Figure 2 and Table 1 show that BRC4, which reflects "lack of innovation in public procurement," has a β value of 0.892. The finding implies that about 89.2% of buyer-related challenges in Tanzanian public procurement are attributable to a lack of innovation in public procurement. Innovation in procurement endeavours is currently viewed as a tool for effective management of procurement operations. However, the empirical evidence from the majority of developing countries' adopting innovative procurement practices is limited. The results indicate that upcoming procurement professionals believe innovation in public sector procurement activities remains a challenge for the majority of public organizations in the country. In existing literature, innovation has been regarded as an important tool for public procurement practitioners and suppliers towards successful public procurement endeavours (Blind *et al.*, 2020; Uyarra and Flanagan, 2010). Therefore, this study can be a fascinating eye-opener for public procurement practitioners, especially in the reformation of existing law and regulations to allow innovative practices in public procurement without affecting the main intended public procurement outcomes.

Also, the results in Table 1 and Figure 2 show that the application of noncompetitive methods of procurement is a further impediment for the Tanzanian procurement profession. This factor (BRC5) accounts for approximately 84% of buyer-related challenges as perceived by upcoming professionals. Competition among bidders in procurement activities enables buyers to obtain desirable procurement deliverables. In this case, procurement professionals need to make certain that when the procurement opportunity is advertised, all potential suppliers have a fair opportunity to compete for the advertised tenders. This is supported by the URT (2011) as it requires procuring entities to ensure that maximum ways are utilized to attract potential bidders for public procurement opportunities. Also, as a result of competition, buyers are able to obtain the best prices for the required goods and services. Consequently, the degree to which organizations do not use competitive methods has an impact on procurement endeavours. This is supported by Bosio *et al.* (2020) who opined that the absence of competition in procurement indicates the inefficiency of the process.

Lastly, results in Table 1 and Figure 2 show that BRC5, which stands for "inadequate user departments' cooperation," has a β value of 0.810. The finding implies that students in higher education perceive that about 81% of challenges in procurement are explained by the inadequacy of cooperation between user departments and procurement departments. Thus, a lack of enough cooperation between procurement practitioners and user departments in organizations negatively impacts procurement activities. These results are supported by Brahim *et al.* (2014). Their study opined that when users and procurement professionals do not work together, problems like late submission and incomplete specifications of requirements happen, which hurt the quality of the goods and services that are needed. Procurement activities are conducted in relation to the collaboration of opinions from

procurement and user departments within organizations. Lack of cooperation between users and procurement staff affects the procurement deliverables with a mismatch between what was required and what was procured.

Supplier-related challenges

On the side of supplier-related challenges, results in [Table 1](#) and [Figure 2](#) show that higher education students perceive that managing supplier tiering systems is considered to be another challenge affecting the procurement and supply professions in Tanzania. This item (SRC1) has β value of 0.780, implying that about 78% of supplier-related procurement challenges are explained by challenges linked to managing supplier tiering systems. Managing supplier tiering involves aspects that relate to the link between buyers and suppliers of the primary suppliers. Thus, it was opined that buyers can save money on costs related to getting materials from second-tier to first-tier suppliers by managing their suppliers. Buying organizations must manage their first-tier suppliers because they act as agents, and their decisions regarding supplier selection can impact the supply operations ([Wilhelm et al., 2016](#)).

Also, SRC2 with $\beta = 0.810$, as presented in [Table 1](#) and [Figure 2](#), shows that inadequate linkage of buyer–supplier relationships was perceived as another supplier-related challenge in the procurement and supply profession in Tanzania. This finding implies that challenges linked to buyer–supplier relationships affect procurement activities in the country. Literature suggests that buyer–supplier relationships are important for improving procurement deliverables and that a lack of buyer–supplier relationships has a negative impact on procurement in terms of miscommunication of requirements and delays ([Mushi et al., 2021](#)). Buyer–supplier relationships encourage buyers to share relevant information between suppliers and buying organizations, which bridges the communication gap between them ([Ismail and Changalima, 2022](#)). Thus, the procurement environment in the country does not fully utilize the benefits of these relationships due to the challenge of inadequate linkage of buyer–supplier relationships in procurement activities, especially in the public sector where there are procedures and regulations that affect the way buyers interact with suppliers ([Changalima et al., 2021a, 2022](#)).

Furthermore, results in [Table 1](#) and [Figure 2](#) show that SRC3, which presents “longer lead times,” has a β value of 0.877, which is another supplier-related challenge affecting procurement and supply operations. Lead time refers to the length of time it takes the supplier to deliver the required goods and services to the buyer. The longer the time suppliers take in delivering goods and services, the more delays that buyers’ experience. Previous research has highlighted the challenges posed by longer lead times in procurement undertakings ([Changalima and Ismail, 2019](#); [Wachiuri, 2018](#)). Longer lead times result in delays in procurement deliverables and the whole process, which accelerates procurement costs and customer dissatisfaction. Thus, as perceived by surveyed higher education students, longer lead times are considered a challenge hampering the procurement and supply professions in Tanzania on the supply side.

The presented results in [Table 1](#) and [Figure 2](#) show that the item “SRC4” entails the low capacity within the private sector to participate in public procurement activities with $\beta = 0.745$. The finding implies that low capacity within the private sector to participate in public procurement is another supplier-related challenge affecting the procurement profession in Tanzania. In the existing literature, the contribution of private sector involvement in public procurement has been well articulated ([Israel and Kazungu, 2019](#); [Namagembe et al., 2021](#); [Siwandeti et al., 2021](#)), with other studies presenting barriers to private sector involvement in public procurement ([Di Mauro et al., 2020](#); [Orser et al., 2021](#)). Based on this study’s results, the extent to which the private sector (such as small- and medium-sized businesses) is not capable of participating in public procurement affects the

operations of public procurement. Hence, potential suppliers should ensure that they are capable of meeting the needs of public procuring entities to enhance private sector involvement in public procurement opportunities.

Lastly, "SRC5", which reflects suppliers' limited knowledge of public procurement laws and regulations with $\beta = 0.795$ as presented in [Table 1](#) and [Figure 2](#), was considered to be another supplier-related challenge affecting the procurement and supply profession. The finding implies that 79.5% of supplier-related challenges were associated with a supplier's lack of knowledge of public procurement laws and regulations. Even though previous research has demonstrated the need for procurement professionals in the buying organizations to be aware of procurement laws and regulations ([Mrope, 2018](#); [Mwagike and Changalima, 2022](#)), based on the current study's results, similar efforts are required to emphasize the same to suppliers. For instance, the problems associated with nonresponsive bids during the tendering process can be effectively mitigated by enhancing suppliers' knowledge of procurement laws and regulations. So, the current study suggests that the supplying organization's lack of knowledge of procurement laws and rules slows down procurement efforts in the country.

Conclusion

This study examines challenges faced by procurement and supply professions in Tanzania based on higher education students' perceptions who are considered future procurement professionals. The study concludes that buyer-related challenges include inadequate or poor specifications; inadequate planning and the linking of demand to the budget; noncompliance with procurement procedures and regulations; lack of innovation in public procurement; the application of uncompetitive methods of procurement and inadequate cooperation between user departments and procurement staff. On the other hand, supplier-related challenges include managing supplier tiering systems, inadequate linkage of buyer-supplier relationships, longer lead times, low capacity within the private sector to participate in public procurement and suppliers' limited knowledge of public procurement laws and regulations.

Implications

The examined challenges were categorized into two groups: buyer-related challenges and supplier-related challenges. These challenges were perceived by higher education students, who are considered to be future procurement professionals in Tanzania. Thus, the study contributes to the exciting literature on different perspectives in understanding the challenges affecting the procurement and supply professions. In regards to the analysed challenges, higher education institutions are required to play a significant role in elevating the status of the procurement profession in Tanzania. Through higher education institutions, future procurement professionals can be well prepared to meet the expected challenges of the procurement and supply professions. According to this study's results, procurement practitioners in Tanzania's public and private sectors must take actions to improve the seamless flow of procurement endeavours in the country's procurement environment. This could be a wake-up call for higher education institutions and other stakeholders, prompting them to hold training and workshops to improve the skills of procurement professionals in the country.

Limitations and areas for future studies

This study's findings should be interpreted with caution because they represent the opinions of Tanzanian undergraduates studying procurement and supply. Furthermore, the sample of

undergraduates specializing in procurement and supplies cannot adequately represent all students' perceptions. Therefore, future research may broaden the sample by incorporating perspectives from a diverse range of higher education students. The current findings pave the way for further investigation into the direct relationships between these challenges and students' willingness to pursue procurement programs in higher education institutions. The findings in this area are more likely to highlight higher education students' willingness to pursue procurement-related programmes despite the established challenges. This could provide higher education institutions with the information they need to improve the procurement profession. Furthermore, because the current study focused on the students' perceptions, the identified challenges can be studied further by investigating opinions from current procurement practitioners.

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