INFORMATION INTEGRATION, PROCUREMENT INTERNAL CONTROLS, MATERIAL AND PURCHASING PROCEDURE STANDARDIZATION AND PROCUREMENT PERFORMANCE IN HUMANITARIAN ORGANIZATIONS

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ABSTRACT

Objective–It was found that over 65% of the costs connected with relief efforts go toward acquiring goods and services, which is a substantial problem for humanitarian organizations (HOs). Information and procurement are the intended outcomes of this article's examination of the effects of material standardization, buying methods, and procurement internal controls.

Methodology: For this study, we analyzed data from 170 HOs using multigroup analysis and structural equation modeling using partial least squares.

Results- The results show that the connection between information integration and procurement performance is entirely mediated by procurement internal controls and the standardization of materials and buying methods.

Implications for Future Research: This study only includes HOs, or hospitality organizations. Due to the multi-year nature of humanitarian procurement projects, it is difficult to determine the effects of procurement performance, material and process standardization, internal controls, and information integration in the long run. The availability of funding determines whether a longitudinal research may be carried out.

Implications for practice: In order to improve procurement performance, managers should standardize material and buying procedures and implement ways to integrate information within the framework of internal controls already in place.

Originality- In a humanitarian setting, procurement performance may be systematically improved by standardizing material and buying methods and combining information via procurement internal controls.

Keywords- Integrating data, procurement, material and purchase method standardization, procurement performance, Ugandan humanitarian organization.

INTRODUCTION

Both natural and man-made disasters are becoming more common and devastating. Natural catastrophes, earthquakes, political unrest, and disease outbreaks like COVID-19 all worsen chronic vulnerabilities, which in turn affect a large portion of the world's population and cause deaths (Girling and Urquhart, 2021). Because of this, HOs all over the globe come together to help those in need and help them get back on their feet (United Nations, 2020; The Sphere Project, 2018).

Disaster relief groups are working hard to aid victims despite dwindling funding (UNOCHA et al.,2020). Humanitarian aid must be efficiently and cheaply procured owing to declining contributions and increasing expenditures (Panel, 2016). Because it accounts for more than 65% of the costs linked to relief operations, the purchase of goods and services is crucial (Moshtari et al., 2021). According to Abolbashari (2018) procurement is an important tool for gaining a competitive advantage and achieving operational or corporate goals. Enhancing value for money and promoting long-term sustainability, it enables supplier evaluation, optimizes supply chain expenditures, generates substantial savings, mitigates risks, and ensures the acquisition of quality products while executing tasks promptly. The United Nations High Commissioner for Refugees (UNHCR) has noted that humanitarian organizations' procurement procedures are inefficient and ineffective, which results in the arrival of inferior products and delays in relief operations. Reports indicate that in March 2019, there were concerns about the quality of the fortified food items purchased and supplied by the World Food Program (WFP) from a single Turkish supplier. A second incident occurred in Karamoja, Uganda, when food products were believed to be linked to a disease epidemic. The World Food Program (WFP) has halted the delivery of super cereal to all government community-based supplemental feeding initiatives in camps, after the tragic death of four persons (WFP, 2019a). Consequently, officials from the World Food Programme in Uganda claimed that their office had a zero-tolerance policy for substandard food, but when they bought super cereal, the product seemed to have been compromised, calling into question the effectiveness of WFP's procurement (Akena et al., 2019). In response, the Ugandan government and WFP management checked whether the acquired, distributed, and transported fortified food supplies followed the correct procedures (WFP, 2019b). According to Zou et al. (2019), firms in the hotel industry may improve their procurement efficiency by focusing on core competencies and bringing in service providers to handle supporting duties. When it comes to interorganizational collaborations, opportunism and knowledge asymmetry are inevitable. In order to improve procurement effectiveness, HOs need to have governance

systems in place to handle these issues. Sharing information and working together to plan the acquisition of goods and services in humanitarian situations is very difficult, despite the fact that there are potential benefits to supplier and buyer engagement in procurement. Such intricacy of the problem makes it practically hard to synchronize procurement performance with collaborative aims (Kovacs and Falagara Sigala, 2021). Complication of the situation is needed to procure because of the need to ease pain and restore normality for patients in crises (Safarpour et al., 2020), but it makes procurement more complex (UNICEF, 2017). James (2017) also points one of the reasons why the process with suppliers become complicated and time consuming because of inherent complexity in humanitarian operation. There will be different victims may have different demands on the specifications and context dependence. Based upon the transaction cost economics (Ketokivi et al., 2020) process encourages opportunism to the supplier interactions leading to procurement performance. Therefore procurers should develop governance mechanisms. The imbalance between buyers and suppliers therefore influences procurement performance because providers depend on buyers to articulate their needs, criteria and context. Another lack of communication may occur in the context of emergency purchase where buyers are unable to communicate the described details to providers (Handfield et al., 2015). As reported by Lumineau and Oliveira (2019) in their literature review about Transaction Cost Economics, opportunism is related with a lack of transparency between the buyer and the sellers in a purchase. As a result, Covacs and Falagara Sigala (2021) find procurement performance to decline. In the case of emergencies, procurement delivery through contractual language is not so easy because procurement delivery articulates to victims' diverse needs and operational uncertainties (UNHCR, 2019). Due to the lack of clarity in the specifications of what is required, it is vague for HOs to know just how the emergency items are supposed to perform and what they will cost (James, 2017). Moreover, there is the case of emergency procurement when suppliers have to furnish things and then axed them up in the event of procurement (James, 2017; Nawei et al., 2017) or if there is opportunistic behavior by suppliers that may cause procurement products to be

delivered insufficiently (Rmirio(2021). However, these challenges raise the question of how HOs need to apply internal controls over procurement, standardize products, and streamline the process (Kovcs, 2021). sManagers may optimize transaction management, promote value exchange with suppliers, and decide make-or-buy choices with TCE. By taking production capacity, supply chain management, and exchange efficiency into account, TCE seeks to identify the best governance option for a transaction (Grover et al.,2003). The roots of humanitarian procurement performance remain a mystery to many specialists. Methods of procurement and related activities like mobilization, standardization, innovation, and cooperation are all part of this (Kovacs and Falagara Sigala, 2021). A few people have used relief prepositioning tactics that include enhancement (Wankmüller, 2021). But plenty of researchers have shed light on it from a variety of angles, including ethics quantity flexibility contracts , reverse auction frameworks IT impact , local resources and procurement methods. There is a dearth of empirical study on the causes of procurement performance in humanitarian operations in Uganda, despite the abundance of literature explaining the many ways in which procurement performance affects HROs. Rather than focusing on the humanitarian sector, most studies that examine the origins of public procurement have focused on banks, state-owned companies, and central government procurement and disposal agencies. Nevertheless this, a significant number of refugees from all over the globe are still being hosted by Uganda (Mutebi, 2020). Even if procurement prices are considerable, this emphasizes the importance of increasing procurement efficiency in humanitarian operations to maximize limited resources (Moshtari et al., 2021). More research on procurement in the humanitarian sector is needed, We examine how material and buying method standardization, internal controls in procurement, and information integration affect procurement performance in answer to Moshtari's request. To further understand how information integration affects procurement performance, this research applies TCE theory. This study extends the research model of Transaction Cost Economics (TCE) to investigate governance methods that decrease opportunism and information asymmetry, as TCE does not

adequately describe how information integration might enhance the efficiency of procurement. Lumineau (2019) states that this will ensure that both providers and purchasers meet their responsibilities. This research is contribution to Transaction Cost Economics of how procurement material and buying process standardization, and also the procurement internal controls, effects procurement performance. Unproven research suggests that procurement internal controls, as they relate to buyers and suppliers, will improve relationships between them as well as the procurement process, coordination, and administrative alignment. Procurement internal controls have enabled many companies to achieve its main objectives according to COSO (2013). As the UN Procurement Practitioners' (2022) report shows, HOs still ignore the importance of strategic purchasing management, even if they've improved acquisition oversight indicates, This research is needed for the deficiencies mentioned before. Another consequence of poor information integration between suppliers and buyers is that they take too long to respond to material requirements (Jahre et al., 2016). According to Ghadge et al. (2019), procurement may be enhanced to higher performance by combining information with particular governance bodies like control environment, monitoring activities and material and purchasing technique standardization. However, materials and procuring somatures have also been difficult to standardize, however, there has been collaboration of the Ugandan government in many humanitarian organizations such as UNICEF to collaborate with other related groups (Bongyereirwe, 2019; UNICEF, 2019). In this research, procurement performance of information integration, material uniformity, and procurement internal controls is examined. In this research, I analyze information integration and procurement performance through a mediating role of procurement internal control and standardization of materials and buying methods. In order to do this, data from 170 Ugandan health institutions is analyzed via partial least squares structural equation modelling (PLS-SEM). The results indicate that information integration does not yield a statistically significant impact on the procurement performance. It enables the standardization of materials and buying processes as well as the internal controls in procurement, which help improve the

procurement performance. Section 2 puts forth the theoretical framework and formulation of the hypothesis. Section 3 details the methodology. The study's results are presented in Section 4. The findings, conclusions, and consequences are discussed in Section 5. The references are located in Section 6. 2. Developing the Theory and Proposing Hypotheses 2.1 A Foundational Theory The theory of Transaction Cost Economics (TCE) provides the foundation for the link between procurement performance, material and process standardization, internal controls in procurement, and information integration (Williamson, 1996). According to the theory, all the participating businesses want to maximize value creation by arranging transactions in the most cost-effective manner possible. Cooperation and coordination (information integration) with internal controls, standardization of materials and purchasing procedures, and the ability for transacting parties to share procurement performance outcomes are all necessary for efficient governance mechanisms to be in place, according to Ketokivi and Mahoney (2020). As Williamson (1985) has pointed out these instruments for governance facilitate identification, understanding and mitigation of any type of risk contingent on contracts. When buyer and supplier long term relationship is required but not fully elastic to the buyers needs, there are problems in procurement speech that imply trying to specify the collaboration and information sharing needed outcomes of the supplier buyer relationship contract, in a long term procurement contract. According to Transaction Cost Economics (TCE) theory, there are three main types of transaction costs which affect the procurement performance: 1976). the expenses associated with information sharing, negotiations, and monitoring. Therefore, in addition to the conventional transactional component, a comprehensive analysis of purchasing efficiency should include a governance system that can account for the expenses associated with integrating both vendor and customer information. Acquisition effectiveness in buyer-supplier interactions necessitates that both parties assess the efficacy of the interfirm connection with respect to the provided procurements' explicit and implicit components (Ketokivi, 2020). All episodes of a procurement transaction, or episodes of performance review, are the main emphasis here it is stated that buyers

should revitalize in different aspects the efficacy of working partners in a regular basis. Considering that the overall procurement success is one of the key results of a functional partnership, we explore the contribution of information integration in achieving procurement performance (WFP, 2016). In prior studies on the literature, they have already seen that this is the case (Ketokivi and Mahoney, 2020). The idea is useful to understand the links between the integration of information, internal procurement control, process of material purchasing and standardized buying process and procurement performance in HOs.

Hypothesis Development

With collaborative planning and information sharing (Cai et al., 2010), information integration, internal controls in procurement and procurement performance may be operationalized. Measures of cost, quality, and delivery time are used to measure how well performance relates to procurement performance (Caniato et al., 2012). Based on evidence from a number of studies (Bockerman, 2020), the relevant data sources have to be integrated to enable effective procurement management and coordination. It is stated that information integration does not automatically lead to the beneficial results of cost savings and improved efficiency. Among other things, the TCE paradigm requires disseminating information and coordinating efforts, each of which requires costs. Further, the expenditures involve asset specificity, measurement problems, and uncertainty (Jensen, 1976). It is defined one as the asset specific investment (resources) that can support the exchange of information among the related transaction parties between the two parties. One party's investment may prompt the other to attempt to get an edge by reducing acquisition quality or increasing price, as pointed out by Ketokivi and Mahoney (2020). The dangers are intensified since it is difficult to assess the performance of acquisitions. Occasionally, the provider may cut corners on quality when performance is difficult to monitor, such in urgent humanitarian operations (Safarpour et al., 2020). An organization's acquisition efficiency may improve if its experts are able to reduce transaction costs via governance mechanisms such as procurement internal controls and the standardization of materials and procuring procedures. However, contrary to popular belief,

combining data may actually backfire (Zou et al., 2019). What follows is the recommended solution: The first hypothesis is the belief that data cooperation has a negative correlation with the success of procurement. Lotfi et al. (2013) states that in order to reduce risks like information asymmetry and opportunistic behaviors, which are common in procurement, internal safeguards such as COSO's comprehensive organizational architecture are essential (Ramiri, 2021). A hospital's ability to identify and mitigate risks associated with procurement depends on its procurement-specific internal control system. Internal controls of procurement grants HOs to conduct procurement operations in an effective and efficient way, by ensuring that procurement procedures are trustworthy and combatting humanitariansase laws and rules. Information integration, according to Shipley Tomas (2019), allows for the interchange of data about procurement internal controls between internal and external parties. According to COSO, the control environment, management of risk, control actions, and communication and information are all part of procurement internal controls. Integration of data, according to Pakura(2019), encourages continuous cooperation among procurement stakeholders to improve techniques of internal control. Management responsible for procurement procedures must consistently and continuously work together to ensure an effective procurement internal control system. Ponisio et al. (2017) state that opportunistic attachments will not take the system away from its predictions. Apart from saving money, performing HOs based on standard operating procedure when purchasing reduces the possible risks and guarantees the veracity of the results (Khan et al., 2019). First, procurement data sharing enables the development of control goals and indicators for risk monitoring and assessment that can be integrated into operation procurement processes and units. In a 1982 research, Monteverde and Teece made use of Transaction Cost Economics (TCE) to explain the efficient car assembly process. The company was able to save costs by integrating information and implementing internal controls. Improving procurement performance among HOs is another area that shares the same concepts. In addition, the dissemination of procurement-related data to the stakeholders involved in procurement internal controls is ensured by

information integration (Ponisio et al., 2017). There is a lack of direct evidence linking supply chain integration and internal control in Jordanian banks, since only a small amount of study has examined this topic (Pakurar et al., 2019). By applying the principles of Transaction Cost Economics to the relationship between integrated data and internal procurement controls, this presented a chance to enrich the literature on procurement performance. This leads us to our second hypothesis: H2. There is a robust relationship between procurement internal controls and data integration. In order to make procurement performance more reliable, Rendon & Rendon (2016) stress the need of strengthening the components of procurement internal controls. Systems of internal control in procurement include audits of procurement, both direct and indirect, with the goal of increasing transparency and accountability within the procurement unit and with the company's external service providers. Procurement internal control gives an objective evaluation of the management performance in the context of their abilities of execution of their responsibilities (Shrestha et al., 2019). As mentioned by Zakaria et al. (2016), organizations with a very strong internal control system are more likely to achieve their procurement performance goals. An important part of effective procurement internal control is reevaluating the steps that were taken to secure organizational assets. Even though integration of data is useful for continuous reviewing of procurement data for accuracy and reliability, as well as reviewing of compliance policies and processes and corresponding applicable laws and regulations, it may be hard for them to make sense of the data until they are integrated, limiting the continuous review capability. All organization heads should ensure that their procurement staff, will be sensitive to and well versed in using internal control systems. This is due because the better the procurement internal control is worked; the more skill, knowledge and candor of those being used to use procurement internal control. Preventative, investigative, remedial and directive controls may be system of internal controls (Lartey et al., 2019). The primary aim of preventive controls is to anticipate when a problem may be at hand, how to fix it, improve on it, and stop people from erred. What detective controls look for is when things go wrong, and why, to lower the risk, find

causes of problems, and change ineffective controls when they're found. Corrective actions include the board and management and are needed in order to address the major setbacks that have occurred as a result of operational system monitoring and assessment. While directive controls are concerned with manufacture of suggestions towards supposed effects, problem-solving controls are the preserve of management (Lartey et al,. 2019). Humanitarian organizations, especially those under the umbrella of United Nations (UN) have set strict internal controls in place in attempt to minimise impact of potential risks in procurement operations and create the highest possible performance. In 2015, the United Nations High Commissioner for Refugees (UNHCR) discovered that many of the UN field offices did not have the controls and measurement tools that can assist them conduct their procurement operations using the most efficient and cost effective manner. Some of the issues concerning the procurement performance of the organizations included the issues of short requisition timeliness; reduced procure to pay lead times; and need for long term agreement to simplify and reduce costs for low value and high volume items. In order to achieve fair pricing, TCE suggests negotiating from a position of strength. Players with sway in the supply chain are usually the ones who get the most attention; they may set up internal controls to make sure resources are used efficiently even when they don't really own any of them. To illustrate the point, consider a large final assembler that has the power to "squeeze" its smaller suppliers by setting pricing on their own. According to the power perspective, supply chain participants work to reduce their dependency on any one company or actor (Wang et al., 2018). Then this implies that TCE offers insight into how HOs' performance of procurement is strengthened by the use of internal controls in TCE. In the light of this, the main objective of this study was to investigate the relationship between HOs in Uganda and their procurement performance and real time application of internal controls. Here is what we suggest: H3. In this area, there is a positive correlation between procurement performance and internal controls. Based on the Transaction Cost Economics (TCE) and prior literature reviews, task one, two, and three propose that procurement internal controls may assist to

decrease transaction cost associated with information integration, leading to improved procurement performance. As governance mechanisms, the policies and procedures used by firms as internal controls, monitoring activities, a control environment, and risk assessment are all conducted in order to achieve the desired outcomes through procurement (Zou et al., 2019). It is stated that the relationship between information integration and procurement performance is partially mediated by procurement internal control and its effect with the independent variable is positive. Thus, hypothesis 4. Internal control in procurement moderates the relationship between information integration and procurement performance in a positive way as reported in Turkulainen (2011). Second, procurement performance, information integration, and standardisation are reported to be related in Turkulainen (2011). Electronic links and other forms of information sharing infrastructure are central to the idea of information integration, which aims to facilitate the standardization, timeliness, and accuracy of data exchange within and between organizations and internal supply chains (Baihaqi, 2012). External organizations are sometimes involved in incorporating data when boundary crossing between internal functional units and electronic links occurs. The employment of standardized and digitalized platforms for information sharing between internal organizations and their exterior distribution counterparts increases communication. Conventional systems for business resource planning are used to do this, as mentioned before by Wong et al. (2011). Along with improving visibility and consistency in priorities, information integration helps managers grasp internal supply chain interdependencies via merging established linkages based on internal and external data. According to Barra (2011). Costs associated with researching and negotiating with suppliers, as well as with approving and writing contracts, conducting quality control, and enforcing them, should be standardized or benchmarked in order to improve efficiency, according to the TCE hypothesis (Costantino et al., 2006). When it comes to assessing the transaction costs of public procurement, the approaches used are mostly applicable at the micro level, for individual businesses or projects. Obtaining sufficiently detailed information on

humanitarian assistance may be challenging for humanitarian organizations, especially when working at a macro level (H5). There is a favorable correlation between information integration and material and buying process homogeneity. Researchers from all over the world have shown a great deal of interest in the role that material and purchasing procedure standardization plays in improving procurement performance in supply chain management (Patrucco, 2021). According to Patrucco et al. (2019) ,this research looks at material and buying method uniformity. When materials and procedures are standardized, it becomes possible to buy a variety of name-brand materials in bulk, which in turn lowers unit costs due to quantity discounts. This, in turn, reduces transportation, procurement, and materials management expenses. Improvements in delivery dependability (Nawi, 2017), management time conservation for strategic initiatives (Johnson et al., 2014), and buying process accuracy and effectiveness leading to higher purchasing performance (Patrucco et al., 2019) are further benefits. Inconsistent results concerning the connection between standardization and procurement performance have been found in the existing literature, even though the function has been acknowledged (Patrucco , 2021). While studying the relationship between public procurement configuration and performance in Italian and American municipal governments, Patrucco et al. (2020) found no connection between standardization and procurement performance. Indonesian local government procurement spending and performance data is scattered and lacks uniformity, according to Nurmandi and Kim (2015). A favorable association between the standardization of materials and buying methods and procurement performance was found by Munyimi (2019), Glock and Broens (2013), Croom and Brandon-Jones (2007), and Sanchez-Rodríguez et al. (2006). While Munyimi looked at how quality controls in procurement affected performance in Zimbabwe's energy industry, Glock and Broens (2013) looked at how structure and size affected buying in German municipalities. To improve the coordination of procurement efforts, they found that centralization and formalization are crucial. Sanchez-Rodríguez et al. (2006) studied 306 Spanish manufacturing enterprises to determine the impact of material standardization and buying

processes on procurement and company performance, while Croom and Brandon-Jones (2007) looked at the implications of e-procurement in the UK public sector. According to several studies (Broens, 2013), there is a lack of consensus regarding the role of standardization in procurement management. According to the TCE hypothesis, public customers and suppliers must adhere to uniform standards for materials, buying procedures, and procurement transaction costs. The whole procurement process is included in this, as are all the related costs, such as search costs, procurement planning and rationale costs, preparation costs, administration costs, contract drafting and finalization costs, and costs for resolving procurement-related conflicts (Baleeva et al., 2020). Finally, the available evidence suggests that standardization has an effect on procurement success; yet, it has the potential to bring about an excess of red tape, which might have a negative effect on performance (Van Den Hurk and Verhoest, 2016). The following hypothesis, H6, is derived from the unanswered questions about the relationship between these gaps in research and procurement performance in a humanitarian setting. There is a favorable correlation between procurement performance and material and buying method homogeneity. According to Baihaqi and Sohal (2012) and Neubert et al. (2004), integrating information is crucial for building and improving collaborative planning frameworks, like electronic connections, that allow for standardized, accurate, and time-sensitive data exchange within and between internal supply chains. Material and procurement process uniformity is impacted by information integration. An organization's strategic endeavor to standardize its materials and buying methods is to condense several components into one single component that performs all the functions of the replacement materials. At the same time, according to Sanchez-Rodríguez et al. (2006), standardizing buying operations means creating consistent rules for things like ordering, expediting, receiving, inspecting items, and assessing vendors. Reduced product complexity and improved uniformity of information transmission are two outcomes of information integration, both of which are critical for reducing uncertainty (Wong et al., 2015). The integration of information will improve the efficiency and effectiveness of procurement performance when HOs standardize their

procedures and data management systems (Mutebi, 2020). Based on the assertion that general-purpose supplies have lower risk and governance costs than special-purpose supplies, we look at TCE's central idea, asset specificity: "the degree to which an asset can be utilized for alternative purposes and by different users without loss of productive value" (Williams, 1996). We find references to this idea in Williamson (1985). The asset's specificity increases as the loss of productive value (from non redeployability) increases. Consequently, HO procurement performance is improved by the integration of information made possible by the standardization of materials and buying methods. Because of this, the phenomena that have been studied and tested have a broader range of potential uses. Improved standardization may come via incremental learning that integrates data, which in turn gives useful feedback for future tweaks and process improvement (David and Rothwell, 1996). So, according to Roger (2003) , Conventional practices are progressively adjusted to see innovation as an ongoing process of creation that enhances acquisition efficiency. Despite the interconnected nature of knowledge insertion, standardization, and purchasing efficiency, few have a firm grasp on how to implement controls in a manner that promotes all three. Hypothesis 7 of the research proposes that standardization acts as a go-between for the two variables data integration and buying efficiency. Material and purchasing process standardization mediates the link between information integration and effectiveness in procurement.

Methodology
Sample description
According to the 2019 UNHCR information sheet, 196 HOs were chosen for the sample frame from the Ugandan database. Managers in charge of supply chain, logistics, operations, and acquiring were selected as the most appropriate subjects for the investigation due to their extensive knowledge of internal auditing, working together efforts to plan, standardization of purchasing procedures, and acquiring results that occur at their headquarters. Three mailings were used to conduct the survey, which followed a modified version of Dillman's (1978) comprehensive design for survey research. This included sending out survey questionnaires to everyone in the sample frame along with a cover letter explaining the

purpose of the research. Four weeks later, another email was sent to those who did not answer, requesting that they participate in the study. The remaining nonrespondents were sent a second survey along with a cover letter eight weeks after the first delivery. Out of the 523 genuine replies we obtained from the inquiry unit, 280 were matched to the first mailing and 243 to the second. After the data was aggregated to the HO level, 523 valid replies were received, giving a total response rate of 86.73% and indicating that 170 HOs were involved in the research. The participating HOs represent a global presence with 54.7% and a local presence with 45.3%. There is a strong emphasis on international coordination and financing methods to enhance service delivery in humanitarian operations. These efforts are in line with common goals including health promotion and peacekeeping, among others. In addition, eighty percent of these nonprofits facilitate initiatives that improve access to nutritious food, clean water, quality education, and medical care. They prioritize raising living standards above environmental responsibility. Additionally, 95.8% have been involved in humanitarian activities for more than a decade, which shows a high level of competence and the ability to provide reliable answers. In the end, 77.6% of humanitarian organizations have more than 100 employees, which shows that they can keep running and even expand service delivery in areas where people have been displaced. In addition, since most relief operations take place in outlying areas, these groups need a large personnel to ensure that aid arrives on schedule (see Table 1 for details). Out of the whole sample of responders, 17% were male and 58.5% were female. Within the operational environment, procurement-related tasks are prioritized and trusted more by female employees due to the perception that they exhibit greater integrity, which is necessary for the delicate nature of procurement operations. The results show that almost 95% of the people who took part had a bachelor's degree or above. Because of this, we can be certain that they will be able to evaluate and comprehend the studied phenomenon's components and provide reliable, specific information for making informed decisions. The majority of responders were also young adults (aged 25–54), according to the data. In accordance with donor-imposed restrictive

covenants, HOs are obligated to recruit a greater number of young persons for their operations, thereby supporting a long-term goal of the Government and the World Bank to decrease youth unemployment. More than 90% of those who took the survey had been in their current

position for at least five years. This shows that they are well-versed in the study variables, which allows them to provide credible data that, according to Table 2, clearly defines a way to quantify procurement performance.

Table 1 Showing humanitarian organizations' characteristics

Type of humanitarian organizations	F	%
Local	77	45.3
International	93	54.7
Total	170	100
Relief sector		
Food security and nutrition	54	31.8
Water and sanitation	24	14.1
Education	26	15.3
Health	34	20
Shelter, settlements and NFIs	16	9.4
Energy and environment	16	9.4
Total	170	100
Operational tenure		
5–10 years	7	4.1
11–15 years	39	22.9
16 years and above	124	72.9
Total	170	100
No. of employees		
26–50	2	1.2
51–100	36	21.2
100 and above	132	77.6
Total	170	100

Source: Table created by the authors after analyzing demographic characteristics

Designing instruments and Measuring variables
The literature review served as the basis for the development of a survey instrument that measures procurement performance, standardization, internal control, and information integration. Humanitarian supply chain management academics checked the study's materials for accuracy in evaluating the constructions. We questioned five purchasing managers from HOs to find any possible linguistic mistakes or omissions. Only minor revisions were made to the survey questionnaire based on the feedback provided by faculty members and procurement managers, since no substantial adjustments were suggested. The study's survey instrument included 60 items: 15 questions on procurement performance, 30 questions about procurement internal controls, 5

questions about material and buying process uniformity, and 5

questions about information integration. Internal controls for procurement were based on COSO (2013), while metrics for material and process standardization were taken from Munyimi (2019). In addition, the COSO (2013) framework, and Arjan and Weely (2010) all outline how procurement performance and internal controls are high-order reflective-formative entities. As part of this research, we asked participants to rate how much they agreed or disagreed with items using a Likert scale from 1 (strongly disagree) to 6 (strongly agree). The goal was to get rid of center tendency bias-inducing middle answer categories (Taherdoost, 2019).

Table 2 Showing respondents' demographic characteristics in the humanitarian organizations

Education level	F	%	Respondents age	F	%	Employee tenure	F	%	Gender	F	%
Diploma	26	5	Below 25 years	9	1.7	Less than five years	47	9	Male	217	41.5
Degree	223	42.6	25–34 years	108	20.7	5–10 years	251	48	Female	306	58.5
Masters	226	43.2	35–44 years	227	43.4	10–14 years	163	31.2	*Total*	*523*	*100*
Professional qualification	38	7.3	45–54 years	119	22.8	15 years and above	62	11.9			
PhD	10	1.9	55 years and above	60	11.5	*Total*	*523*	*100*			
Total	*523*	*100*	*Total*	*523*	*100*						

Source: Table created by the authors after the analysis of demographic characteristics
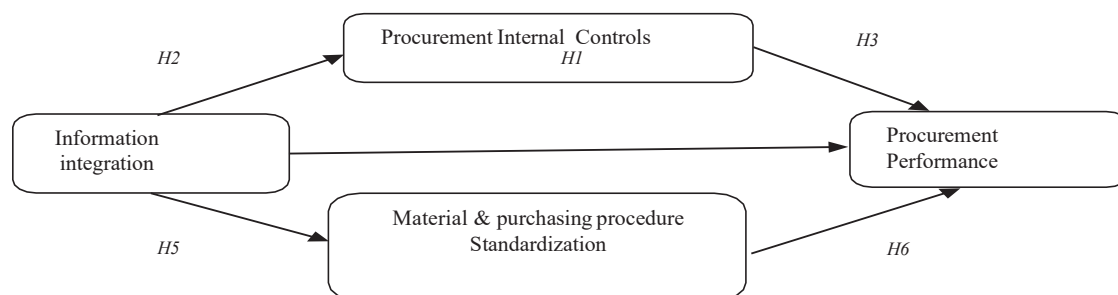
Measurement validation

Therefore, we validated the research variables and then checked whether the sample was suitable and acceptable. Bartlett's test and the Kaiser Meyer Olkin measure were used to find out whether the sample is adequate.

To learn do a sphericity test. As reported by Li et al. (2020), all variables had sample inadequacy measures from kaiser moyer olkin greater than the pleading requirement of 0.7. Furthermore, Bartlett's test of sphericity gave t=the, t=the relevant findings at the 0.000 level. Therefore, in order to ensure the measurement accuracy, the confirmatory composite analysis was used to create composite models of the study's variables composed of information integration, procurement internal controls, material and procedure standardization and procurement performance variables (Hairet al., 2020; Schuberth, 2020). Researches in this area have found such secondary high-order reflective formative structures as information integration,

procurement internal control, and procurement performance. The higher order build procurement performance is measured in terms of three elements, which are cost, quality and delivery time, and evaluated against the eight components. These items are TC2, TC3, QP2, QP3, DS6, DS7, and DS8. Six items are used to test the larger higher order construct information integration, i.e. CP1, CP2, CP3, IS2, IS3, IS4. This construct consists of two information sharing and collaborative planning LOCs. Furthermore, the LOCs of the whole procurement internal control construct consisting of policies and procedures; promotion activities; information, engagement; a control environment; and risk assessment are made up of thirteen items (RA2, RA5, CE3, CE4, CA2, CA3, CA5, IC1, IC2, IC3, MA2, MA3, and MA4). Items SO2 and SO3 reflect the constant of materials and buying methods, the reflecting latent variable. Repeated indicators approach was used to build and test the measurement models.

Figure 1 Theoretical framework

H4: Mediating role of PIC between II & PP

H7: Mediating role of materials & purchasing procedure standardization between II & PP

Source: The theoretical framework was drawn by the authors after review of literature

Following the recommendations, all measurement items for each dimension of the research variables were loaded into their respective global variables

(Sarstedt et al., 2019; Henseler et al., 2015) in order to integrate information, procurement internal controls, and procurement performance. To evaluate the LOC measurement models, we looked at items' loading and significance,

reliability, discriminant validity, AVE, and composite reliability. Composite reliability should be between 0.70 and 0.95, item reliability is found by squaring the item loading, and item loading importance is established when item loading reaches 0.708, according to Hair et al. (2020). According to Hessler et al. (2014), independent variables are considered unique in their predictive power for dependent variables when HTMT scores are less than 0.85 and AVE values are larger than 0.50. Also assessed were the HOC's (high order constructs) validity and reliability in PLS-SEM. To evaluate internal consistency, we used composite reliability (rc) and Cronbach's alpha (α) > 0.7. When evaluating convergent and divergent validity, we used AVE > 0.5 and HTMT < 0.85. The metrics of standardization LOC, convergence validity for item loading, AVE, and internal consistency reliability, as well as information integration and procurement internal control, are all shown in Table 5 as having adequate levels. In addition, as both the composite reliability and Cronbach's alpha indices exceeded the suggested threshold of 0.7, along with convergent validity.

Statistical significance

The ratio, which shows how distinct the observed component is from others, is a measure of discriminant validity. As can be seen from the tables, both the LOCs and the higher-order structures exhibit successful discrimination. The findings from the empirical data corroborate the recommendations. In order to establish the research construct link's nominal validity, one must compare the correlational outcomes to the theoretical foundations. In contrast, to demonstrate predictive validity, one must demonstrate this study's component score was not predictive of the results of the other component assessments. Table 10 shows that there is a link among the research variables, which is consistent with theoretical assumptions (Hair et al., 2020). Additionally, each study variable should not load onto others. As a result, our research variable's nomological and predictive properties are confirmed.

Common method bias

Figure 2 Partial least square structural equation model (PLS-SEM) HOC and LOC measurement model for the study variables
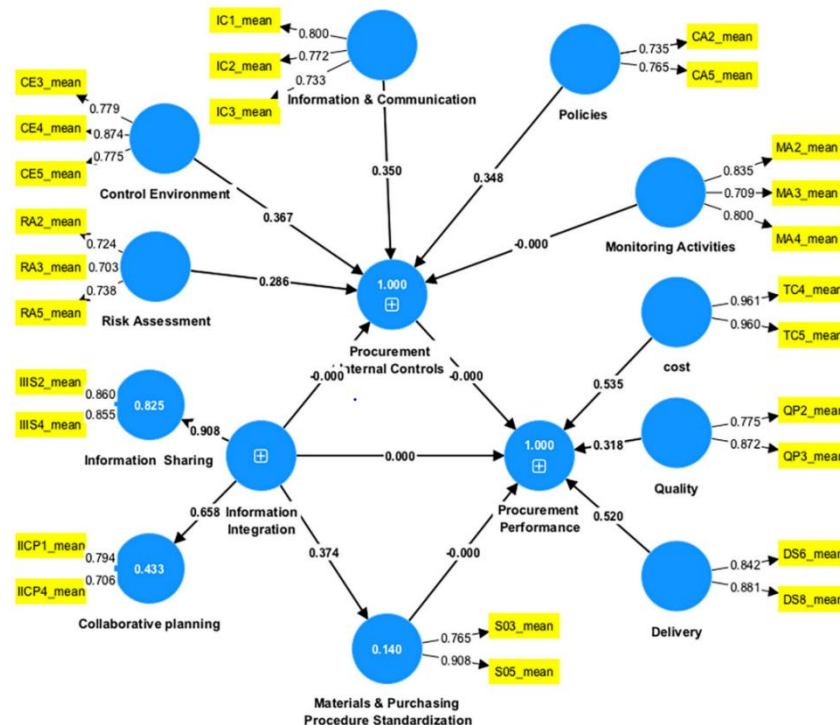
Source: Figure was created by the authors by running PLS-measurement model using SmartPLS

When using surveys, it is important to address concerns. We used procedural and poststatistical methods to solve these problems. We interviewed, consulted, and pilot tested with prominent procurement managers and academics as part of our thorough pretest, following the guidelines laid forth by Podsakoff et al. (2003). The statistical approaches were used for both the single-factor

test by Harman (1967) and the full collinearity test by Kok (2015). At first, we used a rotating component factor analysis to include all of the study variables in Harman's (1967) single-factor test. There is no common method variance in this research, since 20 components explain 73.55% of the covariance among the measures, which is much more than the 50% criterion (Greene and Organ, 1973) according to the main component matrix. After that, we checked for lateral and vertical collinearity among the criteria variable and all of the study variables using a thorough collinearity analysis. All models' inner VIF values were below the 3.3 threshold, as recommended by Kock (2015), hence there is no common method variance, as shown in Table 9. We conclude that the possible common approach variance is little based on the data.

Zero-order correlations among study variables

To find the relationships between the variables that were being studied, a correlation analysis was carried out. According to Table 10, there is a positive, moderate, linear, and statistically significant correlation between the research variables. Thus, this laid the groundwork for doing a variance-based PLS-SEM.

Findings from the theory

To test our hypotheses, we used SmartPls 4.0.9.0, which use bootstrapping to determine significance levels and standard errors. Employing a non-significant option at a 95% bias-corrected confidence interval, 10,000 subsamples are used to achieve significance. The model's coefficient and values are shown below, and the results are considered statistically significant when the p-value is less than 0.05. Table 11 shows that there is a positive and significant correlation between different variables. This finding supports hypotheses 2, 3, 5, and 6, respectively. There is evidence of a negative but insignificant relationship between information integration and procurement performance, thereby rejecting Hypothesis 1.

Table

5   Reliability and validity statistics lower order constructs

LOC	IC	SIL	IR	αc	rc	AVE
CP	Collaborate with the supplier on product development long-term planning (CP1)	0.87	0.75	0.64	0.85	0.73
	Participate in supplier-led long-term planning for product development (CP1)	0.84	0.71			
IS	We provide vendors data that could be useful for delivering (IS2)	0.85	0.72	0.64	0.85	0.74
	Maintain consistent communication with our suppliers about the forecast of both supply and demand (IS4)	0.87	0.76			
CA	Chooses and cultivates basic command of technology (CA2)	0.76	0.53	0.65	0.81	0.59
	The rules and procedures outlined below are used to conduct procurement operations (CA3)	0.8	0.63			
	Evaluates actual performance in comparison to predetermined objectives at both the executive and functional levels (CA5)	0.78	0.6			
CE	Continually executes assigned tasks in accordance with predetermined protocols (CE3)	0.79	0.62	0.74	0.85	0.65
	Presents evidence of dedication to competency (CE4)	0.87	0.75			
	Accountability is enforced by this organization (CE5)	0.77	0.59			
IC	Communicates both internally and externally (IC1)	0.80	0.65	0.65	0.81	0.59
	Timely Information(IC2)	0.78	0.6	0.81		
	There is a system in place for gathering, distributing, and presenting the required data (IC3)	0.73	0.53			
MA	There are systems in place to deal with problems as soon as they arise (MA2)	0.84	0.71	0.70	0.83	0.62
	Ensures that suppliers are monitored and overseen in order to achieve the intended objectives (MA3)	0.74	0.55			
	Frequently assesses the efficacy of risk treatment	0.77	0.60			

LOC	Indicator					
	(MA4)					
RA	Risk analysis and identification procedures are in place(RA2)	0.72	0.52	0.56	0.76	0.76
	Risk assessment is an ongoing process for this company. (RA3)	0.68	0.47			
	Keep an eye out for potentially major changes and evaluate them thoroughly (RA5)	0.75	0.57			
STD	For all supplier sourcing, our company follows a consistent buying procedure.(S03)	0.77	0.59	0.60	0.83	0.71
	A standardized set of resources and requirements are purchased by my organization (S05)	0.91	0.82			
Deliv	Suppliers are accomodating (DS6)	0.84	0.71	0.66	0.85	0.74
	Suppliers may make as many deliveries as needed(DS8)	0.88	0.78			
Qual	(QP2)	0.78	0.6	0.54	0.81	0.68
	Suppliers provide performance securities during the provision of goods and services contracts (QP3	0.87	0.76			
Cost	Low product prices are offered by suppliers in this organization (TC4)	0.96	0.92	0.92	0.96	0.92
	The firm spends a significant amount of money on its suppliers (TC5)	0.96	0.92			

(Notes: LOC = lower order construct; IC = indicator codes; SIL = standardized item loading; IR = indicator reliability; a = cronbach's alpha; rc = composite reliability; AVE = average variance extractedSource: Table was created by the authors after PLS-A analysis)

Table 6 Reliability and validity statistics higher order constructs (HOC)

Study variables	a	rc	AVE
Information Integration	0.715	0.824	0.539
Procurement internal controls	0.809	0.849	0.594
Material and purchasing procedure standardization	0.596	0.826	0.705
Procurement performance	0.694	0.797	0.782

Source: Table was created by the authors after PLS-A analysis

Table 6 indicates that both procurement internal via the establishment of uniform material and purchasing procedures and controls, manages the connection between data integration and procurement efficiency. Table 11's results provide credence to hypothesis 4 and 7. As per Baron and Kenny (1986), when two variables have a strong indirect correlation but no substantial direct association, the mediating variable facilitates a comprehensive interaction between the two variables. Even though there was no statistically significant correlation between information integration and procurement performance in this study, the researchers did find that standardizing materials and purchasing procedures and implementing procurement internal controls helped strengthen the relationship between the two.

Furthermore, it is essential to mention Q2, F2, and R2, as emphasized by Hair et al. (2016). The R2 score demonstrates the explanatory power of endogenous structures. Values of R2 between 0 and 1 indicate predictive importance. We are predictively relevant, as shown by our rather strong R2 values of 0.406 for procurement internal controls, 0.116 for materials and purchasing process standardization, and 0.346 for procurement performance. The effect sizes (F2) of the predictors were also included in our presentation. High(0.63), medium (0.10), small(0.09), very small (0.07), and insignificant (0.01) are the ways in which F2 values are categorized by Cohen (1988). According to Peng and Lai (2012), a blindfolded test with an omission distance of seven was used to evaluate the model's predictive capacity (Q2). Here are the findings from the blindfolded test:

that the model is statistically significant for predicting procurement performance.

Table 7 Discriminant validity assessment using HTMT criterion for LOC

Constructs	CP	CE	Cost	Del	IC	IS	MA	CA	Qual	RA
CP										
CE	0.53									
Cost	0.20	0.25								
Del	0.45	0.56	0.42							
IC	0.57	0.43	0.43	0.34						
IS	0.73	0.5	0.26	0.42	0.6					
MA	0.37	0.37	0.26	0.36	0.35	0.49				
CA	0.64	0.52	0.36	0.53	0.79	0.61	0.48			
Qual	0.40	0.42	0.04	0.8	0.39	0.35	0.23	0.54		
RA	0.63	0.51	0.2	0.76	0.7	0.39	0.41	0.46	0.67	

Notes: Legend: CP = collaborative planning; CE = control environment; Del = delivery; IC = information and communication; IS = information sharing; MA = monitoring activities; CA = control activities; qual = quality; RA = risk assessment
Source: Table was created by the authors after PLS-A analysis

Table 11 Showing results of direct, indirect and total effect

Direct effect	β	T stat	p-values	CIBaC	VIF	f2
II → PICs	0.559	11.637	0.000	0.526–0.732	1.000	0.626**
II → PP	−0.067	0.346	0.341	−0.067–0.298	1.627	0.011
II → MPPS	0.374	6.355	0.000	0.167–0.486	1.000	0.096
PICs → PP	0.315	4.358	0.000	0.201–0.572	1.802	0.086
MPPS → PP	0.521	9.711	0.000	0.070–0.360	1.212	0.067
Indirect effect	β	T stat	p-values	CIBaC	VAF	
II → PICs → PP	0.176	3.974	0.000	0.125–0.392	57.89%	Full Mediation
II → MPPS → PP	0.195	4.425	0.000	0.000–0.148	64.14%	Full Mediation
Total effect	β	T stat	p-values	CIBaC		
II → PICs	0.559	10.857	0.000	0.526–0.732		
II → PP	0.304	4.237	0.000	0.287–0.554		
II → MPPS	0.374	5.397	0.000	0.167–0.486		
PICs → PP	0.315	4.358	0.000	0.201–0.572		
MPPS → PP	0.521	9.711	0.000	0.070–0.360		
Prediction quality criteria	R^2	AdjR^2	Q^2	RMSE	MAE	Q^2_predict
PP	0.502	0.493	0.404	0.967	0.772	0.074
PICs	0.313	0.309	0.303	0.841	0.628	0.302
MPPS	0.140	0.135	0.107	0.942	0.732	0.123

Notes: Legend: II = information integration; PICs = procurement internal controls; PP = procurement performance; MPPS = materials and purchasing procedure standardization; $**p < 0.001$
Source: Table was created by the authors after analysis for hypotheses test through PLS-SEM in SmartPLS

Standardization of purchasing procedures is necessary (0.107). Applying the PLSpredict method, which comprises tenfold cross-validation with ten repetitions, as described by Shmueli et al. (2016), we evaluated our model's out-of-sample prediction capability with respect to procurement success. Sarstedt et al. (2019) found that the PLS-SEM analysis, in contrast to the naïve linear benchmark model, results in lower predictive errors, especially when looking at Mean Absolute Error (MAE) and Root Mean Square Error (RMSE) (Figure 3). This provides further evidence that the model can accurately predict PP in the PLSpredict analysis. Part 4.6.1 An examination of several fields By comparing subsamples of local and international NGOs to the whole population across various research linkages, we used a multigroup analysis and discovered no significant differences. When it comes to the study's assumptions, local and foreign NGOs are not significantly different (Table 12). This is derived from a comparison of path coefficient estimations done using the method suggested by Henseler (2007) between local and international HOs.

Discussion

The research shows that there is a weak negative association between procurement performance and information integration. This finding suggests that HOs still may not be able to successfully acquire products and services at fair prices, with adequate quality, and on time, even though they depend on internal and external collaborative planning, including coordination between departments and organizations. Kim et al. (2005) argues that the common goal of effectively addressing beneficiaries' welfare is hindered since information integration does not always lead to good results like cost reduction and better efficiency This might be due to opportunism and

information asymmetry. In order to reap the benefits of information integration on procurement performance, HOs need to establish procedures and guidelines, build a control environment, communicate and distribute information effectively, supervise operations, and conduct risk assessments(Limuneau, 2019). It is critical that they establish uniformity in their procurement procedures, methods, and the goods and services that are purchased. UNHCR are working together to organize food delivery to victims in settlements. Improved vendor collaboration and prompt support delivery are outcomes of integrated procurement systems. Case in point: the United Nations global marketplace platform; Shibin et al. (2017) argue that efficient platforms for exchanging information may boost organizational effectiveness.

Raising awareness, creating robust processes, increasing operational efficiency, enhancing responsiveness, and eliminating waste are all important goals. According to TCE theory, information alignment with governance frameworks is made more difficult since governance choices are positioned within broader institutional settings. Consequently, procurement performance might be significantly impacted by opportunistic conduct and information asymmetry. Further study shows that procurement internal controls benefit from information integration. Researchers discovered that HOs use intangible resources such stakeholder information exchange, collaborative planning, and risk assessment to improve operations. This money can only be used for certain things because of the donor-imposed restrictions. Consequently, goals are attained and information is disseminated more effectively. Enterprise risk management integrates several facets of organizational management, including strategy planning, operations management, performance management, and internal controls (Arnold et al., 2015). Additionally, they say that companies may create value for their shareholders by proactively identifying and managing current risks and opportunities. As a result, supply chains are better controlled and resources are better allocated. Due to their limited resources and finances, humanitarian organizations must have robust internal controls, according to Howard and Best (2010). That is why they are the first line of defense against fraud, mistakes, and misbehavior, and for the protection of the organization's assets. As a result, effective procurement internal controls are highly predictive of positive procurement performance. When HOs adhere to established procurement norms and legislation, utilize benchmark budgets, and use other procurement internal controls, the outcomes are illuminating. These statutes lessen the risks of procurement-related fraud and misappropriation. The end result is streamlined operations, which means less money spent and help gets to those in need faster. The need of improving procurement internal controls to raise procurement performance is emphasized by Rendon and Rendon (2016), who agree with this viewpoint. Even with well planned and executed strong procurement internal controls, fraudulent acts and risks might still be there (Zakaria et al., 2016). According to the TCE theory, internal controls outline the activities that occur inside supply chains, including who owns what, how they are controlled, and what types of contracts regulate transactions. The findings reveal that the correlation between procurement performance and information integration is totally mitigated by procurement internal controls. Findings suggest that, via procurement's internal controls, information integration may have an indirect effect on procurement performance. This discovery has the consequent contextual importance(Cachon, 2003). To better manage interrelated procurement material expenditures and reduce losses, internal controls in procurement provide reliable information. One way the HO has tried to level the playing field for its constituents is by instituting internal controls for procurement. Equally important, procurement internal control aids several HOs in achieving procurement goals by providing improved insight into operational, financial, and strategic decision-making. According to studies, procurement internal control helps to reduce the agency issue in settings where there is a strong emphasis on social responsibility. The results prove the TCE theory right by showing that strong internal controls improve procurement performance by reducing uncertainty risk, increasing cost efficiency, and easing HOs' opportunistic conduct and information asymmetry. Equally important in HOs is the integration of information, which determines whether materials and purchase

methods are standardized. This means that in order to standardize materials and procurement procedures, HOs must integrate information, collaborate on plans, and share information. Our research shows that HOs work with their suppliers to plan ahead and gauge interest in new services aimed at beneficiaries. To achieve this goal, they include after-sale services in their procurement agreements with vendors. In addition, the results imply that firms in the hospitality industry may create standardized processes for sharing supply and demand forecasts with their suppliers. These lay forth the rules and procedures that HOs follow. Effective cooperation towards shared goals is made possible via standardizing the information-sharing process, which improves safe and responsible dissemination, enables parties to reduce risks, and cultivates trust. Humanitarian groups develop memorandums of understanding with suppliers and share informational resources to boost the effectiveness of humanitarian activities. The findings highlight the importance of material and procedural homogeneity as a key performance indicator in procurement. Critical components of procurement performance include increased competition, decreased costs, improved product quality as a result of standardized requirements, and accelerated disaster response made possible by timely deliveries; these outcomes are more likely to occur when HOs participate in cross-border purchasing, especially in the global market. Supervising service quality is crucial to ensuring adherence to standard operating procedures. Setting quality standards is critical to guarantee the efficient delivery of aid, as humanitarian organizations rely on a wide range of service providers to bring life-saving relief supplies to disaster zones. According to Ozturk (2020), in today's cutthroat global marketplaces, consumers want low-priced, high-quality goods regardless of where they were made. As a result, businesses are always looking for ways to save costs and gain an edge in the market, which increases variety as a result of globalization. When comparing standardization to regional or local procurement processes and agreements, Plotkin and Tweardy (2018) find that the former results in material savings of at least 15%. There is room for improvement beyond only quality, supplier response, and technology developments. Therefore, relationship specificity may change over time, impacting switching costs and contract renegotiation, even in situations with standard components and different vendors. According to TCE, a major change has taken place, giving established suppliers an advantage over new bids in contract renegotiations. As a consequence, being particular leads to small numbers bargaining (Williamson, 1985). In order to explain the correlation between data integration and procurement performance, the data show that materials and purchasing process consistency play a mediating role. Since materials and procedures are standardized, it becomes simpler to exchange information and collaborate on procurement strategies. By standardizing materials and buying methods, management aims to enhance communication and cooperation among all parties involved in procurement, whether they are internal or external.

This helps to decrease opportunistic behaviors, costs associated with monitoring and negotiations, and the difficulty in identifying potential suppliers. In turn, this helps firms gain the trust of their stakeholders by consistently producing effective procurement outcomes. Findings indicate positive relationship between the improvement of procurement performance and the standardization of materials and buying methods. This suggests that humanitarian organizations' procurement effectiveness is impacted by the consistency of materials and buying methods when it comes to delivering assistance supplies. Economic research of supplier-buyer exchanges lends credence to the TCE idea. Finding the best transaction governance solution among the ones that are accessible is what TCE is all about. Without a doubt, it shows how HOs may improve procurement performance by using productive standardization.

Conclusion

Performance in procurement, information integration, material and purchase process standardization, and procurement internal controls were all examined in this research. Additionally, we examined how these two factors mediated the connection between procurement performance and information integration. Our results show that standardizing internal controls, materials, and procurement procedures is positively correlated with information integration. This correlation is also statistically significant. The impact of integration on procurement

performance is negative, but not statistically significant. In addition to procurement internal controls, standardized materials and purchasing processes can lead to better procurement performance.

Possible Consequences

Specifically focusing on developing nations, this research aims to add to our knowledge of procurement performance as it pertains to humanitarian efforts. Through standardization of materials and buying procedures, integration of procurement data, and procurement internal controls, the TCE theory adds to our knowledge of procurement performance. The research found no statistically significant negative relationship between procurement performance and information integration. Timely delivery of high-quality commodities at affordable prices may be achieved via collaborative planning and information exchange, which is supported by procurement internal controls, material standardization, and buying processes. We have made a theoretical contribution with this. Reason being, the link between data integration and procurement performance is fully mediated by internal controls for standardized materials and processes as well as procurement. An effective procurement is built around three pillars: procurement internal controls, supplier delivery flexibility, and material and procedural uniformity. Thus, for stakeholders to have faith in an organization's procurement performance, governance mechanisms should be put in place to standardize materials and buying methods, decrease transaction costs associated with information integration, and develop procurement internal controls. This study advances the state of the art in HO procurement performance research by using Uganda as a case study.

Implications for Practice

Many policymakers, practitioners, and managers of HOs will benefit from this research. Managers should know that the key to good procurement performance is standardizing materials and buying processes. In order to prevent monopolies and ensure that all suppliers have an equal chance to compete for procurement opportunities, managers should work towards standardizing materials and buying methods Speedier relief may be provided

by suppliers without compromising on the quality to meet the delivery dates and reduce prices. Furthermore, procurement internal control results into an efficient performance. To avoid any opportunism or other risks, the managers of HOs should have good robust procurement internal controls in place to ensure that the restrictive covenants are adhered to. The way for collaboration in planning and sharing of information is through donor rules that encourage the use of generally recognized procurement processes. Due to this fact transaction costs and delays should be reduced by minimizing procurement risks such as information asymmetry and ambiguity. Additionally, the manager needs to constantly perceive and appraise major changes within the procurement terrain. This can be through monitoring supplier sourcing process, getting them to comply with given goals and rewards strong suppliers who deliver, and motivating responsibility.

Two ways in which information integration improved procurement performance were standardizing materials and buying techniques and standardsizing procurement internal controls.To reap the rewards of collaborative planning and information sharing—including supplier delivery, minimized procurement costs, and attainment of quality products—managers in HOs should have procurement internal controls, such as rules and procedures for risk assessment and procurement monitoring, an accountability enforcement system, a commitment to procurement competence, and a control environment where established structures, authority, and responsibilities are followed. Value for money is an important metric used to assess the effectiveness of HO procurement functions. Management should make procurement performance reviews a top priority as a means of internal control, and that is the final piece of advice I can provide. The process of conducting performance reviews needs to be more organized and consistent. More operational efficiency and continual improvement might result from improved measurement, analysis, monitoring, and management of the procurement department's performance. Businesses may save money without sacrificing quality if they take a financial view of their purchasing department.

Constraints and avenues for additional Research

The generalizability of this study may be affected by its constraints, as is the case with any survey research. This research delves into the relationship between procurement performance, internal controls, standardization, and integration of information. Future research should expand its focus to include other antecedents that impact procurement success. If you just look at procurement performance once and use quantitative trajectories, you won't be able to see how performance changes over time. Therefore, interviews and longitudinal studies, which are more complex and extensive, are necessary. Examining a company's purchasing record over five to ten years might reveal small shifts or anomalies. Only participants from Uganda were included in this research. The results may not be representative of all humanitarian groups, even though the country has some of the most lenient rules in the world when it comes to welcoming individuals in need and participating in humanitarian efforts. To make this more applicable to various humanitarian populations in Uganda, including all kinds of businesses and NGOs, further study is required.

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