

# **THE ROLE OF GOVERNMENT INTERVENTIONS IN THE RELATIONSHIP BETWEEN PROCUREMENT PRACTICES AND PROCUREMENT PERFORMANCE IN PUBLIC SECONDARY SCHOOLS; A CASE OF WEST POKOT SUB-COUNTY, KENYA**

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## **ABSTRACT**

The study focused on the roles of government interventions in the relationship between procurement practices and procurement performance in public secondary schools in West Pokot Sub County, Kenya. The main/general objective of this study was to determine the role of government intervention in the relationship between procurement practices and procurement performance in public secondary schools, a case of West Pokot Sub County, Kenya. The specific objectives of this study were: to determine the extent to which compliance to procurement practices influence procurement performance in public secondary schools, to find out the influence of inventory management on procurement performance in public secondary schools, to establish the influence of supplier management on procurement performance in public secondary schools, and to evaluate the effect of training on procurement performance in public secondary schools. The study was informed by the Agency theory, Transaction Cost Economics Theory and Resource Based Theory. Descriptive research design was adopted. Stratified random sampling technique was adapted to research participants. A total of 150 respondents were involved in the study. Primary data was collected from

principals, Procurement Officers and chairmen of tender committees using questionnaires. Questionnaire underwent validation procedure to ensure that it accurately measures what it is purported. To ensure the reliability of the instruments, a test re-test technique was used. To establish reliability, an alpha coefficient of 0.7 was considered acceptable. Data analysis was done using descriptive statistics and inferential statistics. The result of the regression coefficient showed that the four variables were significant predictor to procurement performance in public secondary schools. Hypothesis was tested and the findings showed that null hypothesis was rejected, alternative hypothesis accepted and it was concluded that there was statistical significance between procurement practices and procurement performance in public secondary schools. A further study is suggested to include all other procurement practices that may influence procurement performance among public secondary schools.

**Keywords: Procurement practices, compliance to procurement practices, inventory management, training, procurement performance in public secondary schools.**

## **INTRODUCTION**

### **Background of the study**

Procurement is a core activity that has implications on the operations of an organization together with being an activity which cuts across all the departments in the organization. It is an activity that forms part of the key operations within the organization since it is through procurement that the organization acquires the various resources that ensure its continued existence. Procurement is generally defined as the process of obtaining goods or services in any way including borrowing or leasing (Lysons & Farrington, 2006).

Procurement practices are a set of activities undertaken by an organization to promote effective management of its supply chain (Coggburn, 2017). It entails the managerial actions undertaken to improve performance of the integrated supply chain. According to Marshall *et al.* (2017), procurement practices have been identified as customer orientation, strategic supplier partnership, level of information sharing, quality of information sharing, Reverse Logistics and Knowledge management. Other authorities use procurement practices interchangeably with supply chain management practices which is the approaches applied in integration, managing and coordination of supply, demand and relationships in order to satisfy clients in effective way (Wong, Boon-Itt & Wong, 2011); as tangible activities/technologies that have a relevant role in the collaboration of a focal firm with its suppliers and/or clients (de Sousa Jabbour *et al.*, 2011); and as a way of involving suppliers in decision making, encouraging information, sharing and looking for new ways to integrate upstream activities.

Evaluation in procurement performance is done by whether the firm receives competitive bids, and whether purchase price savings are higher than expected. Success in procurement is measured by the percent of savings achieved. However, by using this measure one would only focus on the price aspect of the sourcing event, neglecting some of the other objectives that may have been pursued, and which may have actually led to a higher price (Schoenherr & Mobet, 2011).

Contribution made in advancing government policies and priorities while achieving the best return and performance for the money spent is regarded as value for money (Bauld & McGuinness, 2006). Sometimes other criteria than the lowest price; for example, technical capabilities, qualifications of key personnel, and past performance records in awarding contracts to potential suppliers is considered by the government at liberty (Cummings & Qiao, 2003). The field of supply chain management particularly procurement is quite vulnerable to ethical issues, mainly because procurement personnel are entrusted to spend huge financial resources in many firms (Rottig, Koufteros & Umphress, 2011). The procurement professionals are highly exposed to external organizational environment, representing an important risk to the firm reputation and performance when engaged in unethical conducts.

Conducting procurement in a way that is competitive, fair and impartial is key. For the process to remain fairer, information needs to be available to all interested parties within the same time frame, and each tenderer need to have access to the same material within the process. Each bid also needs to be considered in a fair and impartial manner, with no conflicts of interest (Section 43, PPDA, 2015) or bias towards or against certain bidders. When communicating with bidders, it is important that all bidders are conducted not only in the same timeframe but also in the same manner. The access to key procurement information by civil society, the media and other stakeholders, and the ways in which these parties can use the information, directly affects accountability (UNDP, 2010) and transparency. Transparency is considered as one of the most effective deterrents to corruption and a pre-condition for ensuring public officials' accountability in public procurement since it's about information (OECD, 2007).

According to Kabaj (2003) advancement of African countries and concrete expression of their national commitments to making the best possible use of public resources is determined by efficient public procurement system. Equally, Kakwezi and Nyeko (2010) argues that the procurement departments of public entities in Uganda have a challenge of not having enough information about the procurement procedure, its inputs, outputs, resource consumption and results, and are therefore unable to determine their efficiency and effectiveness. This calls for establishment of clear procurement procedures and performance standards. Performance standards when clearly adopted can provide the decision-makers in the procurement department with unbiased and objective information regarding the performance of the procurement function.

In Kenya, to manage effectively and more efficiently the procurement process, procuring entities through the existing legal framework are required to firstly consolidate departmental procurement plans to provide the entity's corporate procurement plan which before its implementation must get the accounting officer's approval.

Procurement performance that also includes public procurement can be evaluated on the basis of cost measures, activity measures, customer responsiveness and flexibility (Wambaya, Oketch, Namusonge & Sakwa, 2018). Procurement therefore plays a central role to profitability and performance and its focus is fast shifting from cost centric approach to a larger recognition of the importance of procurement relationships.

Public secondary schools are therefore government owned and funded under the free (subsidized) secondary education jointly with other donors as well as the parents and sponsors of these institutions. Other sources that may fund these institutions are grants and fund raisers (Ministry of Education, 2012). Acquisition of goods and services in these institutions is therefore through public procurement. West Pokot Sub County is one of the sub-counties in the West Pokot County in Rift Valley Region. The Sub County has fifty-four (54) registered public secondary schools as at 2018. The schools in the Sub County fall into the following sub-categories: National Schools, Extra County Schools and Sub County Schools.

## **Statement of the Problem**

Government intervention in procurement plays a very vital role to the economy. In Kenya, government intervention for example in procurement reforms through enactment of procurement laws and establishment of watchdog body such as Public Procurement Oversight Authority (PPOA) has improved transparency, accountability and achievement of value for money in public expenditures (Migai, 2010). When procurement practices are put in place and moderated by Government interventions, then there would be procurement performance.

However, currently most schools and especially in West Pokot County, there are major problems with procurement performance. In most cases, procurement practices have been put in place moderated by Government intervention but still there is no evidence of procurement performance in the sector as evidenced by the following studies. A study by Odhiambo and Kamau (2005) the bulk of corrupt practices in Kenya have occurred in public procurement. Citing a report by Rapid Response Initiative (RRI) (2014) established that though most of the public procurement reforms have been achieved and procurement practices in institutions are in place, the level of implementation of such practices by public institutions was still low. The explanation for this state of affairs is to be found in the political dynamics of the state and its role in the economy. Corruption in public procurement in Kenya has been facilitated by opaque and unaccountable regulations. Public secondary schools being public institutions are not exceptional; this is so because procurement officials in public secondary schools are not keen in implementing the Act fully so that they can continue with the status quo where procurement of goods, works and services was left to school heads and management boards of schools. This gives them room to manipulate the process to award tenders to their preferred suppliers.

In response to the above, the researcher proposes to carry out this study titled the role of government interventions in the relationship between procurement practices and procurement performance in public secondary schools. Which further seeks to bridge the gap by answering the following questions: The extent to which compliance influence procurement performance in public secondary schools in West Pokot Sub County, how inventory management influence procurement performance in public secondary schools in West Pokot Sub County, The extent to which supplier's management influence procurement performance in public secondary schools in West Pokot Sub County, how training influence procurement performance in public secondary schools in West Pokot Sub County and moderating role of government intervention in procurement performance.

## **Research Objectives**

### **General Objective**

The main objective of the study was to determine the role of government interventions in the relationship between procurement practices and procurement performance in public secondary schools, a case of West Pokot Sub County, Kenya.

### **Specific Objectives**

The study was guided by the following objectives:

- i. To determine the extent to which compliance to procurement practices influence procurement performance in public secondary schools
- ii. To find out the influence of inventory management on procurement performance in public secondary schools
- iii. To establish the influence of supplier management on procurement performance in public secondary schools
- iv. To evaluate the effect of training on procurement performance in public secondary schools.

The moderating role of government intervention in the relationship between procurement **practices and procurement performance in public secondary schools.**

### **Research Hypotheses**

The study was guided by the following research hypotheses

- H0<sub>1</sub>** There is no statistical significance between compliance to procurement practices on procurement performance in Public secondary schools.
- H0<sub>2</sub>** There is no statistical significance between inventory management on procurement performance in Public secondary schools.
- H0<sub>3</sub>** There is no statistical significance between supplier management on procurement performance in Public secondary schools.
- H0<sub>4</sub>** There is no statistical significance between training on procurement performance in Public secondary schools.

**H0<sub>5</sub>** Government intervention has no significant moderating influence in the relationship between procurement practices and procurement performance in public secondary schools.

## **LITERATURE REVIEW**

### **Theoretical literature review**

#### **Agency Theory**

Agency theory is concerned with agency relationships, one party (the principal) delegates work to another party (the agent). Two parties' principal and agent have an agency relationship when they cooperate and engage in an association wherein one party (the principal) delegates decisions and/or work to another (an agent) to act on its behalf (Eisenhardt 2009; Rungtusanatham *et al.*, 2007). The important assumptions underlying agency theory is that; potential goal conflicts exist between principals and agents; each party acts in its own self-interest; information asymmetry frequently exists between principals and agents; agents are more risk averse than the principal; and efficiency is the effectiveness criterion. Two potential problems stemming from these assumptions may arise in agency relationships: an agency problem and a risk-sharing problem (Xingxing 2012). An agency problem appears when agents' goals differ from the principals' and it is difficult or expensive to verify whether agents have appropriately performed the delegated work (i.e. moral hazard). This problem also arises when it is difficult or expensive to verify that agents have the expertise to perform the delegated work that they claim to have. A risk-sharing problem arises when principals and agents have different attitudes towards risk that cause disagreements about actions to be taken (Xingxing 2012).

The assumptions and prescriptions of agency theory fit naturally in supply chain quality management. Buyers in agency relations are faced with potential problems in the process of managing supplier quality. By their nature, buyers expect suppliers to provide good quality and to improve the quality of supplied products and/or services, but suppliers may be reluctant to invest substantially in quality, especially if they perceive that buyers are reaping all the benefits. The difference between buyers and suppliers resulted in the two parties concerning themselves only with their self-interests (Xingxing 2012).

Agency theory determines how procurement managers carry out their day to day activities on behalf of Secondary Schools. In a scenario where there exists poor principle agent relationship, low level of top management commitment is experienced and this also affects the relationship between schools and the suppliers.

Waste of time in tendering and cancelling of tender advertised and loss of procurement fund is experienced in the existence of conflict of interest between the principals and agents leads to execution of procurement practices against the standard policies.

This theory clearly informs my study objective one, which is to determine the extent to which of compliance to procurement practices influence procurement performance of Public Secondary schools in West Pokot Sub County.

### **Transaction Cost Theory**

The transaction cost theory was set by Coase in 1937. Coase opined that short term contracts unsuitability arises due to the costs associated with collecting information and those incurred additional costs in negotiating contracts. The return is that long term contracts whereby remuneration is specified for contractee after obeying but within limits that come onto effect. Relationships between diverse market firms are governed by market prices; however operational decisions are made on a rather different basis from profit maximization subject to market prices. Grover and Malhotra (2003) deduce that transaction cost theory finds application in by advantage. Determination to build as well as to maintain relationship with firm suppliers is key. This helps in resolving problems that may arise in current business associations and supplier's engagement in an opportunistic behavior.

The transaction cost theory concerns itself with direct organizational economic factors hence fails in addressing some vital parts of organizational operations in the supply chain that is human, personal relations and other supply chain players. Nevertheless, there are many unanswered questions of a conceptual, theoretical and empirical nature. Even the term transaction cost" awaits an adequately precise definition. As Williamson (1995) himself notes: 'There is nonetheless a grave problem with broad, elastic and plausible concepts - of which "transaction costs" is one and "power" is another – in that they lend themselves to ex post rationalization.

It important to noted that concepts that explain everything explain nothing. "In dealing with the empirical evidence it is important to be clear about what is being tested, whether the broad and viable claim that transaction costs are important (Macher& Richman, 2008) or the more specific claims of particular approaches to transaction cost theory. The theory assumes that organizations spend less when they conduct business internally in comparison to externally in the market place. In practice, organizations seek innovative ways that they can use to carry out business internally hence reduce transaction cost which depletes organization resources.

The external doing business is expensive due to communication, coordination and transaction costs (Laundon & Laundon, 2006). This theory informs my study objective three on supplier management and its influence on procurement performance since it is presumed to reduce internal costs of transaction and improve efficiency and effectiveness of the procurement processes hence efficient procurement performance.

### **Empirical Literature Review**

#### **Procurement Practices Compliance.**



According to Onyinkwa's (2013) study on factors influencing compliance of procurement regulations in public secondary schools in Nyamache sub-county found that ethics, awareness and training influence the compliances of procurement regulations in public secondary schools. The study recommended that it is important to offer ethics education to school tendering committee members in order to ensure they are serving ultimate objectivity, accountability, and non- discrimination.

A study by Muli (2009) reveals that the public procurement reforms in Kenya have culminated in promulgation of the Public Procurement and Asset Disposal Act 2015 and the Public Procurement and Asset Disposal Regulations 2006 that provide a legal framework for regulating public procurement, with oversight functions carried out by the Public Procurement Oversight Authority (PPOA). The study found that many public training institutions in procurement practices do not fully comply with the procurement regulations and this leads to misappropriation of institutional funds.

The procurement regulations compliance which is contained in Public Procurement and Asset Disposal Act (2015), which is mainly used to govern all the public procurement and disposal process in the public sector was made through the act of parliament to establish procedures for efficient public procurement and for the disposal of unserviceable, obsolete or surplus stores, assets and equipment by public entities and to provide for other related matters.

In reference to Kenya Gazette Supplement for the Act (PPADA2015), the purpose to establish procedures for procurement and the disposal of unserviceable, obsolete or surplus stores and equipment by public entities to achieve the following objectives: to maximize economy and efficiency; to promote competition and ensure that competitions are treated fairly; to promote the integrity and fairness of those procedures; to increase transparency and accountability in those procedures; to increase public confidence in those procedures and to facilitate the promotion of local industry and economic development (Kinyanjui, 2012).

While there have been developments in the compliance to the Public Procurement and Disposal Regulations (Mukasa, 2014), there are still setbacks to be addressed in public secondary schools to realize full benefits of compliance to public procurement and Asset Disposal Regulations. Some of the notable challenges include; organizational culture lack of enforcements by the external Agencies, lack of staff training and awareness and procurement procedures.

### **Inventory Management**

Inventory management is the process of overseeing the constant flow of units into and out of an existing inventory efficiently (Elliot 2007). This process usually involves controlling the transfer of units in order to prevent the inventory from becoming too high, or dwindling to levels that could put the operation of the company into jeopardy. Competent inventory management also seeks to control the costs associated with the inventory, both from the

perspective of the total value of the goods included and the tax burden generated by the cumulative value of the inventory (Barcodesinc, 2012).

Bai and Zhong (2008) established that inventory management was very vital for most organizations especially small and medium enterprises because of their limited resources. The study concluded that a firm's competitive strength and profitability due to minimized costs, and customer satisfaction proper is enhanced by inventory management.

Chang (2007) noted that many organizations in Africa lack effective inventory management practices and this greatly influences application of effective procurement practices. Shalle, Guyo, and Amuhaya (2014) conducted a study on role of inventory optimization on e-procurement performance in State parastatals in Kenya, the findings of the study emphasize that continuous inventory replenishment policy takes a regular order.

Kitheka (2010) demonstrated performance of supermarkets is improved by inventory management automation, since automation led to improved customer service delivery levels and reduced operational costs.

### **Supplier Management**

Lee (2002) asserts that SRM is a discipline of working collaboratively with those suppliers that are key to the success of your organization in order to maximize the potential value of that relationship. SRM is about developing two-way, mutually beneficial relationships with your most strategic supply partners that deliver greater levels of innovation and competitive advantage than could be achieved by operating independently.

Peters (2004) argues that in order to devote sufficient time to each supplier, SRM managers should be responsible for managing no more than three supplier relationships. Staff involved in SRM activities had a good combination of commercial, technical and interpersonal skills. Coordinating operational activities through joint planning also results to inventory reduction, smoothing production, improve product quality, and lead time reduction. An effective strategy in enhancing supplier's commitment throughout product lifecycle and is an effective strategy in reducing supply uncertainty is the firm's integration. (Handfield, 2001).

A study by Findlay (2009) found that many public training institutions in USA faced supplier management challenges that hampered implementation of effective procurement practices. The key notable challenges encountered by many institutions included; supplier appraisal methods, supplier selection strategies and supplier rating methods. Gadde's (2007) study revealed that many public training institutions in India employed poor supplier appraisal methods which hindered implementation of effective procurement practices.

Mulwa (2009) found out that the use of poor supplier appraisal methods and application of ineffective suppliers' election process discourages implementation of effective procurement practices in many public training institutions in Kenya. According to Oyugi (2010) many

public training institutions lack effective supplier relationship management strategies and do not collaborate with suppliers and this impacts negatively towards implementation of cost-effective procurement practices.

## **Training**

Public sector procurement is governed by the UK regulations that implement the EU procurement directives, Contracting authorities need to deploy strong personal and organizational commercial leadership, and, in most cases, procurement activities need to be led by professionally trained staff (Anderson, 2001). Besides the fiduciary obligation to deliver goods and services to the constituents of the particular government administration, public procurement addresses a wide range of objectives (Uyarra, 2009). According to (Bolton, 2006) it has been used by governments to achieve socio-economic objectives such as stimulating economic activity; protecting national industries from foreign competition; improving the competitiveness of certain industrial sectors; and remedying national disparities

Compton (2007) asserts that effective execution of organization procurement procedures greatly depends on the level of employees' training since lack of professional trained staff on procurement functions limits the ability of the organizations to embrace procurement best practices through benchmarking.

According to Andrew (2008), new training ideas are developed because trends are towards making training more practical, realistic and pertaining to employees' jobs in order to achieve the organization objectives. Training is of essence since it gives employees broader knowledge to enable them to effectively use new technology and integrate it into the workplace. Once employees adapt to changes and are trained accordingly; lower costs, better quality, faster return on investment, increased productivity and long-term growth are all achieved.

A study by Handfield (2009) notes that in UK, many public training institutions have succeeded in embracing effective procurement practices as a result of continuous training of procurement officers and employment of professionally trained procurement officers. Training one another, or "train the trainer", is another important aspect of continuous learning (Christianne 2008).

According to Emmanuel (2007) in Africa, training of procurement personnel could greatly support effective implementation of procurement practices in many public training institutions. A study by Simpson and Power (2007) found that in many African government institutions, many procurement managers are not trained on implementation of effective procurement practices and this contributes to wastage of procurement funds thus poor procurement performance.

Findlay (2009) notes that in South Africa, many public training institutions have not been able to embrace effective procurement practices due to low level of staff competency, use of

poor training methods, lack of qualified procurement staff with technical knowledge and skills on the requirements of effective procurement practices. A study by Cristianne (2008) reveals that non implementation of procurement practices in many public institutions in developing nations is as a result of lack of professionally trained procurement officers and employment of unqualified and incompetent officers.

Arthur (2009), notes that minimization of procurement expenditure is hampered by many procurement managers in tertiary training institutions in Kenya who lack competitive knowledge and skills on how to effectively embrace effective procurement practices.

### **Procurement Performance**

According to Christopher (2005), there are several features of a responsive organization. Some of the relations in an organization include changes of products to information, performance from profit, services to customers, and relations from transactions and processes from mere functions. A study by Murray (2012) found out that the procurement activities are crucial in the supply chain of an organization hence measuring purchasing performance is important.

According to Achua (2011), employees need to have needed on job competence so that they can meet complex organizational procurement processes demands successfully. Employees carry out procurement tasks by adhering to various procurement codes of practices to attain performance (Tukamuhawa, 2012). The controlling and monitoring of the purchasing procedures is key way of measuring procurement performance. Guaranteed product delivery, cost minimization, increased profitability (Chimwani *et al.* 2014).

Wanyonyi and Muturi (2015) in their study that examined the determinants of performance of procurement function among public technical training institutions in Kisumu County, Kenya concluded that staff competency, information technology and ethics positively affect procurement function performance. To attain improvements in their procurement departments, organizations should strive to adopt modern technologies, promote employees' competence and enhance the implementation of good organizational moral code of conduct.

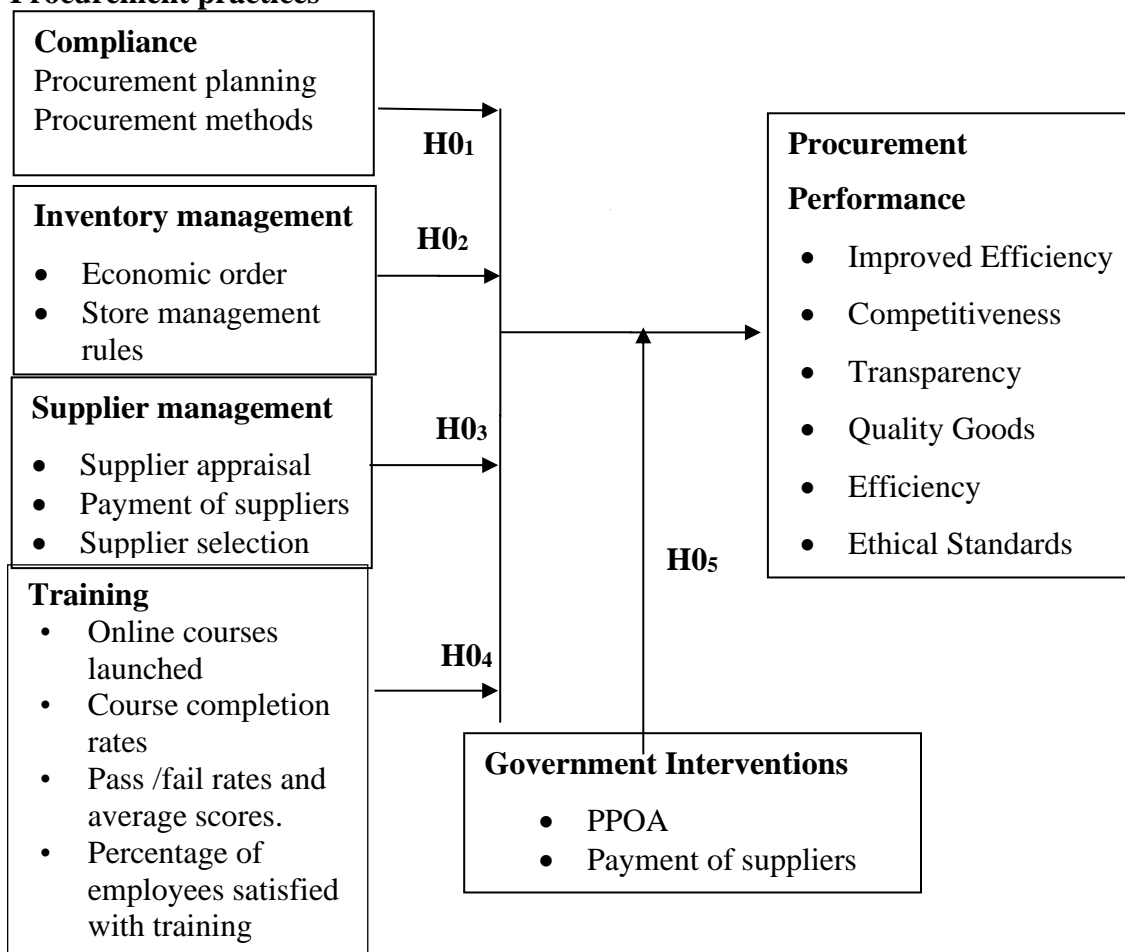
### **Conceptual Framework**

According to (Biklen 2003), a conceptual framework is a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation. In conducting this study, a conceptual framework is developed to show the relationship between the independent variables and dependent variable. In this study, the dependent variable is procurement performance and the independent variables are; procurement practices, inventory management, supplier management and training .The moderating variable is Government interventions. The constructs and relationships between research variables are illustrated in the figure1 below.

**Independent**

**Dependent Variable Variables**

**Procurement practices**



SOURCE: Researcher/author 2020

Moderating Variable

**Figure 2.1: Conceptual Framework**

It is conceptualized in this study that ‘Dependent variable which is procurement performance is dependent on these independent variables: procurement compliance practices, supplier management, inventory management and training in that an increase in training, compliance in procurement practices could positively influence procurement performance, and a decrease in training could negatively influence procurement performance. All these are moderated by Government Interventions.

**RESEARCH METHODOLOGY**

The present study employed a descriptive research design. Abagi (1995) argues that a descriptive research attempts to describe what was or what is in a social system such as an institution. The mixed method design was used to undertake the research in West Pokot Sub County. The study targeted 162 respondents comprised of public secondary school principals, procurement officers and tender committee chairmen involved in procurement and stores management in public secondary schools.

## **RESULTS AND DISCUSIONS**

### **Response rate**

As the sample size for the study was 150 the same number of questionnaires were distributed to the respondents, after data collection and data cleaning, some questionnaires were removed due to incomplete response, 140 questionnaires were analyzed, this gave a response rate of 93.33% and this was found to be sufficient. According to (Mugenda, 2003) a response rate of 70% and above is sufficient. The findings are as indicated in table 4.1.

**Table 4.1 Response rate**

<b>Questionnaire</b>	<b>Frequency</b>	<b>Percentage</b>
Returned	140	93.3
Not returned	10	6.7
<b>Total</b>	<b>150</b>	<b>100</b>

### **Field Data (2020)**

The results showed that that most respondents were able to provide information and willingly took part in the study.

### **Descriptive statistics of individual objective results.**

#### **Compliance to procurement**

The first objective of the study was to establish the effect of compliance on procurement performance in secondary schools in West Pokot Sub County

**Table 4.2 Compliance to procurement practices on procurement performance**

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
The school has highly complied with Public Procurement and Disposal Regulations (2006).	140	1	5	3.72	1.057

Procurement records kept are high accuracy and reliability	140	1	5	4.09	1.144
Preparation or implementation of procurement plans is done annually	140	1	5	3.93	1.036
The school fails to prepare the procurement progress reports as required annually	140	1	5	1.91	1.242
Failure to adhere to procurement policies leads to irregular and biased decisions	140	1	5	3.43	1.397
Procurement plans at schools enables efficient use of available resources	140	1	5	4.40	1.054
There is increased transparency of organizational (school) performance due to procurement law compliance	140	1	5	4.02	1.117
The school experiences efficiency in procurement due to compliance to public procurement laws and act	140	1	5	3.73	1.018

The school achieved ethical behavior and sound procurement management due to compliance by the procurement law	140	1	5	4.13	1.045
There is increased transparency of organizational (school) performance due to procurement law compliance	140	1	5	3.71	.976

**GRAND MEAN**

**3.7**

**Field Data (2020)**

Table 4.2 shows compliance to procurement practices as predictors on procurement performance in public secondary schools. It was concluded that schools highly complied with public and procurement and disposal regulations 2006. The findings were supported by its mean (M=3.72, SD=1.057). Majority of the respondents agree to the statement that procurement records kept have high accuracy and reliability. These findings were strengthened by the mean (M=4.09, SD=1.144). The agreed response were validated since deviation from its mean was less than mean value. This showed that procurement records are accuracy and reliable. On the statement that preparation or implementation of procurement plans is done annually most of the respondents agreed and the findings were supported by mean (M=3.93, SD=1.036). On the statement that the school fails to prepare the procurement progress reports as required majority of respondents disagreed. These findings were supported by mean (M=1.91, SD=1.242). On the statement that failure to adhere to procurement policies leads to irregular and biased decision, a majority of the respondents agreed giving a mean and a standard deviation of (M=3.43, SD=1.397) On the statement that procurement plans at schools enables efficient use of available resources majority did agreed. From the mean and standard deviation (M=4.4, SD=1.05). On the statement that there is increased transparency of school performance due to procurement law compliance majority of the respondents were in agreement indicating the mean and standard deviation (M=4.02, SD=1.117) On the statement that the school experience efficiency in procurement due to compliance to public procurement laws and act. Majority agreed giving a mean and standard deviation (M=3.73, SD=1.018). With regard to the statement that the school achieved ethical behavior and sound procurement management due to compliance by the procurement. Majority of the respondents agreed. The findings gave a mean and standard deviation of (M=4.13, SD=1.045). On the statement increased transparency of school performance due to procurement practices compliance. Most of the respondents agreed indicating a mean and



standard deviation of (M=3.71, SD =0.976).This implied that majority of the respondents agreed on the compliance of procurement practices on procurement performance in secondary schools in West Pokot Sub County with an average mean of 3.7 indicating that good procurement practices enhances procurement performance.

These finding are supported by the findings of George (2010) who agreed that the level of compliance with procurement regulations greatly influences the efficiency of the procurement procedures in public sector organizations. Also the study of Onyinkwa (2013) supported the findings that compliance to procurement regulations improved performance of public secondary schools.

### **Inventory management**

The second objective of the study was to establish the effect of inventory management on procurement performance of public secondary schools in West Pokot Sub County. This is presented in table 4.3

**Table 4.3 Inventory management on procurement performance**

	N	Minimum	Maximum	Mean	Std. Deviation
Management do not use economic order quantity on purchases.	140	1	5	4.15	.836
Inventory purchase do not meet just in time principal	140	1	5	3.86	1.062
Compliance on stores management practice is high	140	1	5	2.44	1.387
Reduction in inventory costs is high	140	1	5	3.30	1.568
Proper management of contracts positively affects inventory management.	140	1	5	4.42	.861
Proper inventory management contributes to procurement performance.	140	1	5	4.55	.798

Lack of staff training in the inventory management section at schools contribute greatly to the poor procurement performance.	140	1	5	4.48	.856
Inventory planning and scheduling procurement is regularly done.	140	1	5	4.06	1.280
Long Procurement procedures hampers inventory management and procurement performance.	140	1	5	4.47	1.087
Lack of funds towards Inventories contribute greatly to the poor procurement performance	140	1	5	3.75	1.012
<b>GRAND MEAN</b>				<b>3.95</b>	
<b>Field Data (2020)</b>					

From table 4.3 above, most of the respondents agreed that management do not use economic order quantity on purchase. The findings were indicated by mean and standard deviation (M=4.15, SD=0.836). Most of the respondents agreed that inventory purchase do not meet just in time principal giving a mean and standard deviation (M=3.86, SD=1.062). As to whether statement that compliance on store management practices is high most respondents disagreed. This was supported by mean and standard deviation (M=2.44, SD=1.387). Most of the respondents agreed that reduction in inventory cost is high indicating a mean and standard deviation (M=3.3, SD=1.568). On the statement that proper management of contracts positively affects inventory management, majority of the respondents were in agreement. The findings had a mean and standard deviation (M=4.42, SD=0.861). Most of the respondents agreed that proper inventory management contributes to procurement performance. These findings were supported by mean and standard deviation (M=4.55, SD=0.798). On whether lack of staff training in inventory management at schools contributes greatly to the poor management procurement performance most respondents were in agreement indicating a mean and standard deviation (M=4.48, SD=0.856). Most of the respondents agreed that inventory planning and scheduling procurement is regularly done as projected by mean and standard deviation (M=4.06, SD=1.28). Further, most of the respondents agreed that long

procurement procedures hampers inventory management and procurement as indicated by the mean and standard deviation (M=4.47, SD=1.09). Most respondents agreed that lack of funds towards inventories contributes to the poor procurement performance giving a mean and standard deviation (M=3.75, SD=1.012) .This implies that inventory management is a predictor of procurement performance in secondary schools, west pokot. This was supported by an average mean of 3.95.

These findings were supported by study of Shalle, Guyo, and Amuhaya (2014) by their study they emphasized that for procurement performance to be sustained continuous inventory should be carried out. Another study supporting these findings is that of Bai and Zhong (2008) who established that inventory management was vital because of its capability to minimize cost and enhance customer satisfaction.

### **Supply management**

The third objective of the study was to establish the effect of supply management on procurement performance in secondary schools in West Pokot Sub County.

**Table 4.4 Supplier management on procurement performance**

	N	Minimum	Maximum	Mean	Std. Deviation
The school often appraises the suppliers annually	140	1	5	3.56	1.078
Suppliers are often paid in time annually	140	1	5	3.38	1.066
The school gets after sale service from their suppliers annually	140	1	5	1.96	1.433
ISO certified school suppliers percentage is high.	140	1	5	3.48	1.115
Percentage of suppliers that offer credit facilities is high	140	1	5	3.36	1.107
Corruption influences suppliers management	140	1	5	3.71	1.204

Suppliers are involved early in product design process	140	1	5	3.69	.922
Suppliers manages inventory on behalf of the school.	140	1	5	1.86	1.173
The school uses fewer suppliers	140	1	5	4.18	1.217
Meetings between school inventory staff and the suppliers is done	140	1	5	3.82	.984
<b>GRAND MEAN</b>				<b>3.3</b>	

**Field Data (2020)**

From table 4.4 above majority of the respondents agreed that the school often appraises the suppliers annually giving a mean and standard deviation (M=3.56, SD=1.078). These findings show that the schools often appraise the suppliers. Majority respondents agreed that suppliers are often paid in time annually indicating a mean and standard deviation (M=3.38, SD=1.066). These findings showed that suppliers are often paid on time. Most respondents disagreed that suppliers offered after sale services to schools. The result gave a mean and standard deviation (M=1.96, SD=1.433). It was concluded that the schools do not get after sale service from suppliers. Majority agreed that ISO certified school suppliers percentage is high, producing a mean and standard deviation (M=3.48, SD=1.115). The study findings further revealed that suppliers are compliant with ISO certification. The findings of the mean and standard deviation were (M=3.36, SD 1.107). Then it was concluded that on average the suppliers offer credit facility to schools. Majority respondents agreed that corruption influences suppliers management as indicated by the mean and standard deviation (M=3.71, SD=1.204). The findings revealed that deviation from mean did not surpass its mean value therefore the agreed response of the majority were accepted and was concluded that corruption influenced suppliers management in public secondary schools. Majority of respondents agreed that suppliers are involved early in product design process, as revealed by the mean and standard deviation (M=3.69, SD=0.922). The findings showed that deviation from mean did not exceed mean value, hence the majority of the agreed response were accepted and it was concluded that supplier are involved in product design. Majority respondents disagreed that suppliers manages inventory on behalf of the school, giving a mean and standard deviation (M=1.86, SD=1.173). A majority of respondents agreed that the schools uses fewer suppliers, indicating a mean and standard deviation (M=4.18, SD=1.217). Majority of the respondents did agree that meetings between school inventory staff and the suppliers is done, this was indicated by the mean and standard deviation of (M=3.82, SD=.984). The deviation from mean did not exceed mean value therefore it was

concluded that meeting between school inventory staff and suppliers was carried out. Good supply management enhances procurement performance. This was supported by an average mean of 3.3 that the respondents agreed on the questionnaire statements on the effect of supply management on procurement performance in secondary schools in West Pokot Sub County.

The findings of the study are supported by Gadde (2007), and Findlay (2009), who found out that supply management practices such as supplier appraisal, supplier selection and supplier rating contributed to improved procurement performance.

### **Training**

The fourth objective of the study was to establish the effect of training management on performance in public secondary schools in West Pokot Sub County. The findings are presented in table 4.4.

**Table 4.4 Effect of training on procurement performance**

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
There are regular staffs training programmes for procurement staffs	140	1	5	2.31	1.488
On line courses launched	140	1	5	3.95	.843
Effective procurement activities is dependent on skills and experience of the employees	140	1	5	3.57	1.207
Course completion rates	140	1	5	3.58	1.180
More employees have professional skills in Procurement	140	1	5	2.30	1.573
Training employees enhances the level of competency in the procurement function	140	1	5	4.31	1.133
Percentage of employees satisfied with training	140	1	5	3.89	1.143
Training help reduce time wastage in procurement procedures	140	1	5	3.74	1.053
Training contributes to procurement performance.	140	1	5	4.47	.998

The school spends much on training of employees	140	1	5	2.23	1.543
<b>GRAND MEAN</b>				<b>3.44</b>	

**Field Data (2020)**

The result in table 4.9 indicates that majority of the respondents disagreed that there is regular training programs for procurement staff. This was revealed by mean and standard deviation (M=2.31, SD= 1.488) .The study also found out that most of the respondents agreed that online courses had been launched. The result of mean and standard deviation (M=3.95, SD=0.843) showed that the deviation from mean did not exceed its mean value. These findings validated the agreed response of the majority and it was concluded that online courses had been launched in public secondary schools. Further, majority of the respondent agreed that effective procurement activities is dependent on skills and experience of employees. The result of mean and standard deviation (M=3.6, SD=1.207) showed that the deviation from mean had less value than that of mean value, It was concluded that effective procurement activities was depended on skills and experience of employees. Majority of the respondents agreed on the statement course completion rate as shown by the mean and standard deviation (M=3.58, SD=1.18).On the statement that more employees have professional skills in procurement majority respondent disagreed, giving a mean and standard deviation (M=2.30, SD=1.573). Most of the respondents agreed that training employees enhances the level of competency in procurement function. The findings of mean and standard deviation (M=4.31, SD=1.133) showed that deviation from mean was less than mean value. The agreed response of the majority concluded that training employees enhanced competency in procurement function in secondary schools. Most of the respondents agreed that large proportion of employees are satisfied with training. This was indicated by the mean and standard deviation (M=3.89, SD=1.143) which revealed that the deviation from mean did not exceed its mean value. Hence the agreed response of the majority were upheld. Most of the respondents agreed that training reduce time wastage in procurement procedures. The findings of mean and standard deviation showed that (M=3.74, SD=1.053) deviation from mean did not surpass its mean value. These findings supported the agreed response and. As a result of this the study found out that time wastage on procurement procedures was reduced by training. Most of the respondents agreed that training contributes to procurement performance and this was indicated by the mean and standard deviation (M=4.47, SD=0.998). On the statement that the school spend much on training of employees, majority of the respondents disagreed. On mean and standard deviation (M=2.23, SD=1.543) showed that deviation from mean did not surpass its mean value. This finding supported the disagreed response of the majority and it was concluded that the school do not spend much on training of employees. These findings imply that training is a predictor of procurement performance among secondary schools in west pokot. This was supported by an average mean 3.44 indicating that the respondents agreed on the questionnaire statements the effect of training management on performance in public secondary schools in West Pokot Sub County.

This study is in line with the findings of Handfield (2009), Christianne (2008), Emmanuel (2007), they revealed success in public institutions as result of training on best practices on procurement.

### **Moderator role of government invention on the relationship between procurement practices and procurement performance**

The fifth objective of the study was to establish the effect of government intervention on performance in secondary schools in West Pokot Sub County. The results are presented in table 4.5

**Table 4.5 Government intervention in the relationship between procurement practices and procurement performance**

	<b>N</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Government practices guides inventory management in the school	140	1	5	3.86	1.002
Supply payment adheres to the government practices	140	1	5	3.82	1.033
The Tender Committee in the school is constituted as per guidelines in PPDA	140	1	5	3.67	1.088
A Disposal Committee with the mandate to dispose obsolete or non-usable items in the school is operational	140	1	5	1.60	1.118
Need for a product in the school is identified by the user department as required by government practices	140	1	5	4.01	1.204
Details of the specific goods and services required are analyzed by experts in the department concerned	140	1	5	4.04	1.177

Source of the required products/services/ works is identified through competitive bidding between selected suppliers	140	1	5	3.75	1.128
Identification of required goods/services/works is done through competitive bidding	140	1	5	3.61	1.103
Goods of high value are procured through open tendering through advertisement in daily newspapers of nationwide circulation and websites	140	1	5	3.66	1.152
Direct procurement is used for goods and services that require technical knowhow to identify, deliver and install	140	1	5	3.75	.965
<b>GRAND MEAN</b>				<b>3.6</b>	
<b>Field Data (2020)</b>					

The findings in table 4.5 indicated that most respondents agreed that government practices guides inventory management in the school indicating a mean and standard deviation (M=3.9, SD=1.002). Further, most respondents agreed that supply payment adheres to the government practices. The findings of mean and standard deviation (M=3.82, SD=1.033) showed that the deviation from mean did not surpass its mean value. This supported the agreed response of most of the majority of the respondents. It was concluded that supply management are in line with government practices. Most of the respondents also agreed that the tender committee in the school is constituted as per guidelines in PPDA. The result of mean and standard deviation (M=3.67, SD=1.088) showed that deviation from mean did not exceed its mean value. This resulted to the conclusion the tender committee in public secondary schools are constituted as per PPDA guidelines. Most of the respondents disagreed that a disposal committee with the mandate to dispose obsolete or non-usable items in school is operational. On mean and standard deviation (M=1.60, SD=1.118) revealed that deviation from mean did not exceed its mean value. This supported the disagreed response of most respondents and concluded that there is no disposal committee with mandate to dispose obsolete items in public secondary schools. Most of the respondents agreed that need for product in the schools is identified by the user department as per required by government practices. The



result of mean and standard deviation (M=4.01, SD=1.204) .Further, majority of the respondents agreed that details for specific goods and services required are analyzed by experts in the department concerned. The mean and standard deviation (M=4.04, SD=1.177) revealed that the deviation from mean did not surpass its mean value. These findings supported the agreed response and concluded that details for specific good and services are analyzed by experts in the department concerned. Most of the respondents agreed that source of the required products is identified through competitive bidding among selected suppliers. On mean and standard deviation (M=3.75, SD=1.128) showed that deviation from mean did not exceed its mean value. These findings supported the agreed response and concluded that source of required product was identified through competitive bidding. On whether identification goods/services/works is done through competitive bidding, majority of respondents were in agreement as indicated by mean and standard deviation (M=3.61, SD=1.103) . Most of the respondents agreed that goods of high value are procured through open tendering through advertisement in daily newspapers of nationwide circulation and website. On mean and standard deviation (M=3.66, SD=1.152) showed that deviation from mean did not exceed it mean value. These findings supported the agreed response and concluded that goods of high value were procured through open tender advertised through social media. Most of the respondents agreed that direct procurement is used for goods and services that require technical knowhow to identify, deliver and install, as this was given by mean and standard deviation (M=3.75, SD=0.965) showed deviation from did not exceed it mean value. This supported the agreed response and concluded that direct procurement was used for goods and service that required technical knowhow in identification, delivery and installation.

**Procurement performance of public secondary schools**

The dependent variable was procurement performance in public secondary. The respondents response were presented in Likert scale questionnaire in which they were to rate as Strongly Disagree (SD), Disagree (D), Neutral (N), Agree (A) and Strongly Agree (SA).

**Table 4.6 procurement performance of public secondary schools**

	N	Minimum	Maximum	Mean	Std. Deviation
Accountability of procurement funds determine effective procurement performance	140	1	5	3.82	.910
Minimization of procurement Expenditure helps in procurement performance.	140	1	5	3.65	1.062

Procurement activities are crucial in the supply chain of an organization hence measuring purchasing performance	140	1	5	3.74	.953
Controlling and monitoring of the purchasing procedures contributes to high performance.	140	1	5	4.48	.917
Adequate stock level helps in procurement performance	140	1	5	3.88	1.111
Improvement of supply performance help in effective procurement performance	140	1	5	3.75	1.093
Procurement planning is key in procurement performance	140	1	5	4.12	1.134
A well done inventory management contributes to effective procurement management	140	1	5	4.21	1.083
ICT contributes to efficient procurement performance	140	1	5	3.92	1.083
Compliance to procurement policies is key in procurement performance	140	1	5	4.32	.900
<b>GRAND MEAN</b>				<b>4.0</b>	
<b>Field Data (2020)</b>					

From table 4.6 majority of the respondents agreed that accountability of procurement funds determine effective procurement performance. The findings of mean and standard deviation (M=3.82, SD=0.910) revealed that deviation from mean did not surpass its mean value. These findings supported the agreed response of majority and concluded that accountability of the procurement funds determined effective procurement performance. Majority of the respondents also agreed that minimization of procurement expenditure helps in procurement performance as given by the mean and standard deviation (M=3.65, SD=1.062). Majority of the respondents agreed that procurement activities are crucial in the supply chain of the organization hence measuring purchasing performance. The findings of mean and standard deviation (M=3.73, SD=0.953) revealed that deviation from mean were less than its mean value. These findings supported the agreed response of the majority and concluded that procurement activities were crucial in supply chain; this measured purchasing performance of the organization. Majority of the respondents agreed that controlling and monitoring of purchasing procurement procedures contribute. The findings of mean and standard deviation (M=4.48, SD=0.917) showed that deviation from mean were less than its mean value. These findings strengthen the agreed response of the majority and it was concluded that controlling and monitoring of purchasing procurement procedures contributed to procurement performance. Majority of the respondent agreed that adequate stock level helps in procurement performance. The findings of mean and standard deviation (M=3.88, SD=1.111) showed that deviation from mean were less than its mean value. These findings strengthened the agreed response of the majority and it was concluded that adequate stock levels helped in improving procurement performance. Majority of the respondents agreed that improvement of supply performance help in effective procurement performance. The findings of mean and standard deviation (M=3.8, SD=1.1) showed that the deviation from mean did not surpass its mean value. These findings supported the agreed response of the majority. It was concluded that improvement of supply performance helped to achieve effective procurement performance. Majority of the respondents agreed that procurement planning is key procurement performance. The findings of mean and standard deviation (M=4.0, SD=1.1) revealed that deviation from mean did not exceed it mean value. These findings supported the agreed response of majority and concluded that procurement planning was key in procurement performance. Majority of the respondents agreed that well done inventory management contributes to effective procurement performance. The findings of mean and standard deviation (M=4.21, SD=1.083) showed that deviation from mean did not surpass its mean value. These findings strengthened the agreed response of the majority and it was concluded that well done inventory management contributed to effective procurement performance. Majority of the respondents agreed that ICT contributes to effective procurement performance. The findings of mean and standard deviation (M=3.92, SD=1.083) revealed that deviation from was less than its mean value. These findings supported the agreed response of majority and it was concluded that ICT contributed to effective procurement performance. Majority of the respondents agreed that compliance to procurement policies is important in procurement performance. The findings of mean and standard deviation (M=4.32, 1.01) revealed that deviation from mean did not exceed its mean value. These findings supported the agreed response of majority. It was concluded that compliance to procurement policies was key in procurement performance. This study was in

line with the findings of other studies for instance Achua (2011), Murray (2012), Wanyonyi and Muturi (2015) found out that procurement activities, staff competence, and information technology, were determinants of the procurement performance.

### **Inferential statistics**

The study used inferential statistics which included; Pearson’s correlations and multiple regressions. This was meant to find out whether there exists relationship between the variables. Multiple regression was used to test the hypothesis so as to estimate the coefficients of linear equations, with the independent variables and hence predict the value of the dependent variable.

### **Correlation analysis**

The study conducted correlation analysis to establish the relationship between variables. The general objective of this study was to determine the role of government intervention in the relationship between procurement practices and procurement performance in public secondary schools in West Pokot Sub County.

**Table 4.7 Correlations matrix of variables under study**

		Compliance	Inventory	Supplier	Training	Procurement performance
Compliance	Pearson Correlation	1	.554**	.442**	.504**	.542**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	140	140	140	140	140
Inventory	Pearson Correlation	.554**	1	.377**	.249**	.346**
	Sig. (2-tailed)	.000		.000	.004	.000
	N	140	140	140	140	140
Supplier	Pearson Correlation	.442**	.377**	1	.242**	.315**
	Sig. (2-tailed)	.000	.000		.005	.000
	N	140	140	140	140	140
Training	Pearson Correlation	.504**	.249**	.242**	1	.413**

	Sig. (2-tailed)	.000	.004	.005	.000
	N	140	140	140	140
Procurement performance	Pearson Correlation	.542**	.346**	.315**	.413**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	140	140	140	140

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

**Source: Field data, (2020)**

These study findings indicated that the relationship between compliance and procurement performance was positive and statistically significant ( $r = 0.542$ ;  $p < 0.05$ ). This implies compliance positively and significantly influences procurement performance among public secondary schools in West Pokot Sub County. The findings indicated that the relationship between inventory management and procurement performance was positive and statistically significant ( $r = 0.346$ ;  $p < 0.05$ ). Further, the relationship between supplier management and procurement performance was positive and statistically significant ( $r = 0.315$ ;  $p < 0.05$ ). The study also established a positive and significant relationship between training and procurement performance ( $r = 0.413$ ;  $p < 0.05$ ).

**Regression analysis**

Regression analysis was conducted in order to predict the effect of the independent on the dependent variable. Multiple regression was computed at 95% confidence level (0.05 margin error) to show the multiple linear relationship.

**Regression model summary**

**Table 4.8 regression model summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.548 <sup>a</sup>	.301	.280	.31827

a. Predictors: (Constant), Training, Supplier Management, Inventory Management, Compliance

From table 4.8, the R square showed that the combined effect of independent variable on dependent variable was  $R^2=0.301$ . These findings revealed that the independent variable; compliance, inventory management, supply management and training predicts 30.1% on change in the dependent variable; procurement performance of public secondary schools. The

study therefore concluded that the four independent variables explained 30.1% of procurement performance in public secondary school the remaining percentage 69.9 % is explained by other factors not considered in this study.

**ANOVA for independent variables on dependent variable**

**Table 4.8 ANOVA for independent variable on dependent variable**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.878	4	1.469	14.506	.000 <sup>b</sup>
	Residual	13.675	135	.101		
	Total	19.553	139			

a. Dependent Variable: Procurement performance

b. Predictors: (Constant), Training, Supplier Management, Inventory Management, Compliance

The analysis of variance ANOVA was used to determine whether the data collected fit the regression model. The ANOVA results in table 4.15 above showed that F=14.506, p=0.00. This showed that p value was less than 0.05 significance level indicating that the data fitted the regression model.

**Coefficient for independent variables on dependent variable**

**Table 4.9 Regression coefficient**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.266	.291		7.786	.000
	Compliance	.227	.062	.357	3.666	.000
	Inventory Management	.123	.053	.125	.626	.033
	Supplier Management	.144	.073	.142	.766	.009
	Training	.158	.062	.209	2.556	.012

a. Dependent Variable: Procurement performance

The coefficient showed contribution of each independent variable on the dependent variable. The result showed that compliance ( $\beta=0.227$ ,  $p<0.05$ ), Inventory ( $\beta=0.123$ ,  $p<0.05$ ), Supplier ( $\beta=0.144$ ,  $p<0.05$ ) and training ( $\beta=0.158$ ,  $p<0.05$ ) showed that all independent variables significantly predict procurement performance in public secondary schools. From table 4.16 above, the findings were used to model each variable Compliance ( $X_1$ ) Inventory management ( $X_2$ ), Supplier management ( $X_3$ ) and Training ( $X_4$ ). Model  $X_1$  was defined

$Y=2.266+0.227X_1$  indicating that every unit increase in compliance led to 0.227 unit increase in procurement performance. Model  $X_2$   $Y=2.266+0.123X_2$ . This showed that every unit increase in inventory management led to 0.123 unit increase in procurement performance. Model  $X_3$ ,  $Y=2.266+0.144X_3$ . These findings showed that for every unit increase in supplier management led to 0.144 unit increase in procurement performance. Model  $X_4$   $Y= 2.266 +0.158X_4$ . These findings revealed that for every unit increase in Training led to 0.158 unit increase in procurement performance The combined study model was

$$Y=\beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+\beta_4X_4+\varepsilon$$

Where  $Y$ =Procurement performance

$\beta_0$ =Constant

$\beta_1, \beta_2, \beta_3, \beta_4$  = coefficients while  $\varepsilon$ =error term

$X_1$ = Compliance,  $X_2$ = Inventory,  $X_3$ =Supplier, and  $X_4$ = Training

$$Y= 2.266+0.227X_1+0.123X_2+0.144X_3+0.158X_4 +\varepsilon \text{ (Model 1)}$$

These findings concur with those of Onyinkwa’s (2013), Bai and Zhong (2008) and Handfield (2009) that with proper compliance, good inventory management system, supplier management and enhanced training can improve procurement performance to a greater extent. However the findings also agree with Oyugi (2010), who opined that many public training institutions lack effective supplier relationship management strategies and do not collaborate with hence impacting negatively towards implementation of cost-effective procurement practices. This can be witnessed in the little effect supplier management contributes to procurement performance.

### **Multiple Regression Model the Role of Government Interventions in the Relationship between Procurement Practices and Procurement Performance**

Multiple regression of compliance, inventory management, supplier management and training moderated by government invention was undertaken using multivariate linear regression analysis to predict procurement performance in public secondary schools. The coefficient of determination R square ( $R^2=0.456$ ) showed the proportion variation in procurement performance from table 4.10 revealed that from adding the moderator government invention the variation in procurement performance increased from 30.1% to 45.6 %.

**Table 4.10: Multiple regression model with moderator**

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.548 <sup>a</sup>	.301	.280	.31827
2	.674 <sup>b</sup>	.456	.441	.48762
a.	Predictor (Constant), Compliance, Inventory, supplier and Training			
b.	Predictor (Constant), Compliance, Inventory, supplier, training and			

government invention

c. Dependent variable Procurement performance

**ANOVA for Independent variables and moderator on dependent variable.**

Table 4.11, shows ANOVA analysis for Compliance to procurement practices, inventory management, supplier management, training and government intervention on procurement performance. The result showed that it had statistical significance by F statistics (F=10.432, p=0.01, p<0.05) with p value less than significance levels. This showed that the combined regression model was statistically significant and good predictor of procurement performance.

**Table 4.11 ANOVA for independent variables, and moderator on dependent variable**

Model		Sum of Squares	DF	Mean square	F	Sig
1	Regression	5.878	4	1.469	14.506	.000 <sup>b</sup>
	Residual	13.675	135	.101		
	Total	19.553	139			
2	Regression	4.932	4	1.286	10.432	0.01 <sup>c</sup>
	Residual	13.675	135	.101		
	Total	19.553	139			

- a. Predictor(Constant) Compliance, Inventory, Supplier, Training
- b. Predictor (Constant) Compliance, Inventory, Supplier, Training, Government intervention
- c. Dependent variable procurement performance

**Beta coefficient for independent variables and moderator on Procurement performance**

The coefficients of compliance, inventory, supplier, training and government intervention in table 4.12 below revealed that beta (β) represented the mean change in the response on the predictor when holding other predictors constant.

**Table 4.12 Regression coefficient**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig
		B	Std. Error	Beta		
1	(Constant)	2.266	.291		7.786	.000
	Compliance	.227	.062	.357	3.666	.000
	Inventory	.123	.053	.125	.626	.033



	Management					
	Supplier	.144	.073	.142	.766	.009
	Management					
	Training	.158	.062	.209	2.556	0.012
2	(Constant)	1.951	.320		6.025	0.000
	Compliance	0.210	.080	.048	2.669	0.006
	Inventory	0.110	.060	.018	0.189	0.003
	Supplier	0.106	.053	.014	0.167	0.031
	Training	.130	.059	.017	0.271	0.020
	Government	.456	.154	.389	3.870	0.001
	intervention					

a. Dependent variable: Procurement performance

In the first model below revealed that there was statistical significance in the influence of compliance practices, inventory management, supplier management and training on the procurement performance

$$Y = 2.266 + 0.227X_1 + 0.123X_2 + 0.144X_3 + 0.158X_4 + \varepsilon \dots\dots I$$

The second model was obtained after adding moderator, government intervention the four predictors variable; compliance practices, inventory management, supplier management and training improved procurement performance.

$$Y = 1.951 + 0.210X_1 + 0.110X_2 + 0.106X_3 + 0.130X_4 + 0.456 \dots\dots II$$

The moderating effect was determined through; conducting a regression model to test the effect of procurement Practices on procurement performance and secondly between procurement practices, product variables ( $X_1, X_2, X_3, X_4, m$  = Product variable of procurement practices and government interventions) and procurement performance to establish the relationship between procurement Practices on procurement performance. The results established a significant effect of government intervention.

## **CONCLUSION AND RECOMMENDATION**

### **Conclusion**

The findings of the study found out that most public secondary schools in West Pokot Sub County improved their procurement performance because they have fully complied with procurement practices. The findings of the mean and standard deviation showed that deviation from mean did not exceed its mean value. It was concluded that compliance to procurement practices had significant positive effect on procurement performance. These

findings were supported by regression analysis which showed positive linear relationship between compliance to procurement practices and procurement performance.

The findings of the study revealed that inventory management contributed to procurement performance of public secondary schools in West Pokot Sub County. These findings were supported by findings of the mean and standard deviation which showed that deviation from mean did not exceed its mean value. It was concluded that inventory management had significant positive effect on procurement performance. These findings were supported by regression analysis which showed positive linear relationship between inventory management and procurement performance.

The findings of the study revealed that supplier management contributed to procurement performance in public secondary schools in West Pokot Sub County. These findings were supported by the findings of mean and standard deviation which showed that deviation from mean did not exceed its mean value. It was concluded that supplier management had positive significant effect on procurement performance of public secondary schools in West Pokot Sub County. These findings were supported by regression analysis which showed positive linear relationship between supplier management and procurement performance.

The findings of the study revealed that training contributed to procurement performance of public secondary schools in West Pokot Sub County. These findings were supported by the findings of mean and standard deviation which showed that deviation from mean did not exceed its mean value. It was concluded that training had positive significant effect on procurement performance. These findings were supported by regression analysis which showed positive linear relationship between training and procurement performance.

The findings of the study showed that government intervention moderated on the procurement performance in public secondary schools in West Pokot Sub County. This was supported by the result of mean and standard deviation which showed that deviation from mean did not exceed its mean value. It was concluded that government intervention had positive significant moderating effect on the relationship between independent variables and the dependent variable. This was supported by the finding of the regression analysis which showed change in R square of all independent variable after the introduction of the moderating variable. It was concluded that government intervention as the moderating variable increased the influence of the independent variables on procurement performance in public secondary schools in West Pokot Sub County.

## **Recommendations of study**

### **Recommendation for policy and practice**

It was established that majority of the schools had complied with procurement practices. The study recommends that public secondary schools should regularly prepare compliance reports and share such reports among themselves. This would assist in establishing best compliance

practices that would enable all public secondary schools are at par in procurement performance.

It was established that every aspect of inventory management had different effect on procurement performance. Schools management should thus take very keen interest in each aspects of inventory management to ensure that the summative benefits are embraced. The study recommends that inventory management should reduce in inventory cost through ensuring that best store management practices are put in place and regularly practiced.

The study established that public secondary schools use fewer suppliers while procuring goods and services. This may have compromise quality of goods and services offered to schools. The study therefore recommended that all public secondary schools should use many suppliers so as to encourage competition which would improve quality of goods and services. The study recommends transparency of the tendering process so as to reduce corruption in supply of goods and services.

The study found out that public secondary schools spend less on training of employees especially on procurement. This has led to fewer employees with professional skills in procurement. This reduces procurement performance in public secondary schools. The study therefore recommended policy framework that would increase financial resource to train procurement staff so as to acquire professional skills.

The study found out that there was positive significant moderating influence of government intervention on procurement performance in public secondary schools. The study recommends that public secondary schools should continue working closely with government so as to improve procurement performance. The study recommends that the government should provide technical and professional assistance to procurement management in public secondary schools.

### **Theoretical Implication**

These findings have important theoretical implications, using agency theory that determines how procurement managers carry out their day to day activities on behalf of public secondary schools. In a scenario where there exists poor principle agent relationship, low level of top management commitment is experienced and this also affects the relationship between schools and the suppliers.

In addition, the transaction cost theory which explains that there is need for every organization to spend less when they conduct business internally in comparison to externally in the market place. In practice, organizations seek innovative ways that they can use to carry out business internally hence reduce transaction cost which depletes organization resources.

### **Suggestions for further study**

There is need to carry out a similar study in private secondary schools in West Pokot Sub County as well as public secondary schools in other sub counties in Kenya. This would enable a comparison of the findings to establish a common stand on the relationship between procurement practices and procurement performance. This will justify resources invested in public secondary schools for procurement management.

The result of regression analysis for all independent variables put together explained 59.8% of the variation in procurement performance thus there is 40.2 % of variation explained by other variables not considered in this study. Therefore this study did not include all procurement practices that influence procurement performance in public secondary schools; further study is suggested to include all other procurement practices that may influence procurement performance among public secondary schools.

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