Compliance with Public Procurement Act and its Correlation with Procurement Performance of Senior High Schools in Ghana

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Abstract

Globally, governments and other public-funded entities adopt processes to acquire goods, works, and services needed to implement public projects, this is commonly referred to as Public Procurement. In Ghana, the government has taken steps to reform the public procurement system to improve its performance in all government and other public-funded institutions. The purpose of this study was to assess compliance with the Public Procurement Act and its correlation with procurement performance of Senior High Schools in Ghana. Eighteen Senior High Schools (SHS) within the Ashanti Region were randomly selected, with bursars and procurement officers of each of these eighteen schools purposively sampled for data collection in addition to fifteen key suppliers to the various schools. Method was used to draw sample from the population. The study revealed that compliance with the management systems and contract management, individually, had a high correlation with SHS procurement performance. Information and communication and procurement processes, individually, had a moderate relationship with the level Senior High Schools' procurement performance. Altogether, there was a high level of relationship between the level of compliance with the Public Procurement Act and the level of procurement performance of the various institutions. The compliance with management systems of procurement was the most significant impact on the procurement performance.

Keywords: Compliance; Procurement; Management Systems; Procurement Performance; Senior High Schools

1. Introduction

Globally, governments and other public entities adopt processes to acquire goods, works, and services needed to implement public projects, this is commonly referred to as Public Procurement. In Ghana, the government has taken steps to reform the public procurement system to improve its performance in all government and other public institutions. However, lack of funds, bureaucracy, and unqualified procurement staff continues to impede procuring activities of Senior High Schools in Ghana to hinder their operations, and created a general tendency to discourage proper procurement procedures. The need for an efficient, non-corrupt and transparent public purchasing system is one of the main drives behind most procurement practice reforms. Since independence, Ghana has attempted to address weaknesses in public procurement process through several financial laws, rules and policies. The procurement reforms have come in the form of constitutional re-engineering, Acts of Parliament, legislative instruments, administrative instructions and financial circulars. Prior to the enactment of the Public Procurement Act, 2003 (Act 663), Ghana National Procurement Agency (GNPA) and Ghana Supply Company Limited (GSCL) were the main agents that procured all public goods for the government since there was no comprehensive procurement guidance (Verhage & Boateng, 2002; Anvuur, Kumaraswamy, & Male, 2006). These bodies did not regulate procurement but purchase goods and services on behalf of public entities.

In 1960, the Government enacted the Ghana Supply Commission Act which was reviewed later in 1990 by PNDC law 245 to protect public resources in procurements. In the same year, the Contracts Act, Act 25 of 1960 was also passed. In 1976, the National Procurement Agency Decree, Supreme Military Council Decree (SMCD) 55 was passed by the Supreme Military Council. In 1979, another law, the Financial Administration Decree SMCD 221 and Financial Administration Regulation (FAR) (LI. 1234) 1979 was also passed to address weaknesses in public procurements. All these laws, decrees and instruments which were meant to provide a comprehensive framework to regulate procurements within the public sector did not work to achieve government's objectives in procurements (Adjei, 2006).

The Public Procurement Act establishes bodies such as the Public Procurement Board, Entity Tender Committees and Tender Review Boards. It specifies rules for procurement methods, procedures, appeals by tenderers and disposal of stores. It states offences and applicable penalties. It also specifies procurement thresholds in schedules to the Act. It also authorizes the issues of regulations, which are enforceable under the Act. The Act mentions the roles of various institutions such as the central management agencies; Ministries, Departments and Agencies (MDAs), subverted agencies and governance institutions. Others include state owned enterprises; public universities, schools, colleges and hospitals, the Bank of Ghana and financial institutions owned or where government is a majority shareholder as well as institutions established by Government for the general welfare of the public. The Public Procurement Act (Act, 663) in its effort to make public procurement transparent, efficient, and fair, established five basic pillars of the public procurement (Anvuur, Kumaraswamy, & Male, 2006).

Due to principles of market competition, the current study has the paramount significance of investigating the public procurement reform and its impact on the procurement performance of Senior High Schools in Ghana. The focus is on the procurement practices of Senior High Schools. This study is important given that it will provide essential information to policy makers about the impact of the procurement law in the educational sector.

2. Materials and Methods

This study was conducted in eighteen Senior High Schools within the Ashanti Region. The study was explanatory in nature; to explain the impact of procurement reforms on the procurement performance of Senior High Schools. The population for this study comprised the bursars, procurement officers and the suppliers of the selected Senior High Schools. Purposive sampling technique was used to draw a sample size was fifty-one (51) participants.

There are two kinds of data used in this study. The study gathered and made use of primary quantitative data through the administration of structured questionnaires because Saunders et al. (2009) indicated that both experiment and case study research strategies can make use of this research instrument. It was also used because data collected using questions can be stable, constant and has uniform measure without variation. It also reduces bias caused by the researcher's presentation of issues. Part of the questionnaire was adapted from (World Bank, 2004).

The data was analysed with the Statistical Package for Social Science (SPSS) 17.0. Frequencies, percentages, mean, standard deviations were used in the analysis. Results were also ranked to show the relative importance of each variable against others in the same category. A correlation and a multiple regression was also conducted.

3. Results

After data cleaning, 48 out of the 51 questionnaires administrated among the participants were considered valid for analysis. This constituted 94.1% coverage of data collection process.

3.1 Level of Compliance of the Public Procurement Act

The Public Procurement Act, 2003 (Act 663) of Ghana, stipulates five methods/procedures through which procurement must be conducted. The study indicates that the most dominant procurement procedures used by the second cycle institutions were 'national competitive bidding, single-source procurement and price quotation'. These had a mean of approximately 2. National competitive Bidding procedure is where the Senior High Schools decides that only domestic suppliers or contractors may submit tenders either by nature or by value of contract. Section 44 of the Act indicates that, the time allowed for this bidding and deadline for submission of bids is at least thirty (30) days from the date of publication or the date of availability of the tender documents. The single-source allows procurement through placing direct orders. According to section 40 of the Public Procurement Act, single-source procurement is not encouraged, however, where it is necessary it was used. The study revealed that to be able to use the single-source procurement method, a prior approval must be sought from the Public Procurement Board.

The Senior High Schools used price quotation for procuring readily available off-the-shelf good of standard specifications of commodities that are small in value, Section 42 of the Public Procurement Act indicates that this must not exceed the threshold of Twenty Thousand Ghana Cedis (Gh¢20,000) for goods, Fifty Thousand Ghana Cedis (Gh¢50,000) works and Twenty Thousand Ghana Cedis (Gh¢20,000) for technical services.

The mean of 'restricted tendering' and 'international competitive bidding' from Table 1 had a mean of approximately 3. This is an indication that these are seldomly used procurement methods by the Senior High Schools.

On the dimension of compliance, the study adopted the scale from (World Bank, 2004). The scale had four major dimensions namely, management system, information communication, procurement procedures and contract management. Each of these also had sub-divisions as shown in Table 2.

From Table 2, the study shown that under the management system, the highest compliance was the 'monitoring and control system'. This comprised putting proper payment systems in place for every contract, capturing procurement transactions in cash budgets, putting in place quality control mechanisms for contracts and the effective use of available procurement information dissemination systems.

The human resources development compliance includes having Staff with professional procurement qualification, putting internal auditors in place and giving them procurement training and evaluation of performance of procurement staff.

The effectiveness of leadership was the last item under the management systems. This comprised the availability of training programme(s) in the various Senior High Schools, Senior High Schools seeking technical

support from the body with oversight role like the procurement board, carrying out internal procurement auditing and good record keeping.

The second dimension of the compliance scale adapted was information communication. This had two other items under it, of which respondents responded favourably to all. The mean for all the items were approximately 2. For the interaction with marketplace, the study realized most of the procurement officers had knowledge of and interacted with the marketplace. They also interact with all procurement stakeholders. For procurement information searching and dimension, the study pointed out that, the respondents were aware of the use procurement website, procurement internal notice boards and newspapers. Officers also had the capacity to use the procurement information dissemination systems.

The third component was the procurement procedure. The first item under this was the submission, opening and evaluation of bids. With this, the study showed that, stating date, time and venue for bid submission was always clearly outlined. The venue for bids opening was also made known. The various Senior High Schools had a secured tender box in place, and tender opening register was available. The Senior High Schools kept minutes of bid opening including all opening records and evaluating tenders in accordance with tendering requirements.

Under the award of contract, it was noticed that winner of contract were notified in time, contract awards were publicized and the losers to the contract were also informed. The study realized that, during bids preparation and invitation, the various Senior High Schools used a standard tender document (STDs), all bid documents contained same evaluation criteria and the reasonable date and time for bid opening was also stated.

During the procurement planning, the Senior High Schools adequately defined procurement plan and post plan on the net. In the area of procurement publicity, tender invitations were advertised, information for placement in procurement bulletin were sent and the use of internal notice boards to display procurement information.

Contract management was the last dimension under the compliance scale. Under the inspection and inventory control, there was the preparation of project monitoring reports by the various Senior High Schools, organization of project progress meetings and the comparing and analysing planned progress against actual. In terms of disposal, there was the formation of the required membership of Board of survey, keeping minutes of meetings of Board of survey and keeping records of items disposed. During the project implementation and supervision, there was a preparation of project monitoring reports, the organization of project progress meetings and comparing and analysing planned progress against actual. The project planning and mobilization comprised taking works programme from executers and taking advance payment Guarantees for advance payments made. The analysis above indicates that, there was a high level of compliance at the various second cycle institutions used for the survey. This was based on the mean of the various items given the respondents to answer. The mean of the various items were all approximately 2.

Even though there was a high level of compliance among the Senior High Schools, the study indicated procurement processes as the highest compliance dimension in Table 3. This was followed by information and communication, management systems and contract management.

3.2 Correlation between Compliance with Public Procurement Act and Procurement Performance of Senior High Schools

The study found out that, compliance with management systems in the Public Procurement Act had a high correlation with the level of procurement performance of the Senior High Schools (r=0.838). The compliance with the information and communication provisions in the Public Procurement Act, had a moderate relationship with the procurement performance of the various institutions (r=0.497). The level of compliance with the procurement process, as detailed by the Public Procurement Act had a moderate relationship with the level of procurement performance (r=0.488). The last dimension of compliance was the contract management itself. This also had a high correlation with the level of procurement performance of the various institutions. The study indicates that all these dimensions had a positive value. This is an indication that, the compliance dimensions moved in the same direction with the procurement performance. A decrease in the compliance would lead to a decrease in the procurement performance and the vice versa. All these results were statistically significant at 0.01 (p<.01).

The correlation (r) values the entire independent variables together (Management systems, Information and communication, Procurement processes and Contract management) and the use of procurement performance (dependent variable) was 0.851. This indicates a high relationship between the variables (when an R value falls within 0.7 to 1, it is considered moderate). The relationship was also positive, indicating that when the level of compliance increases, procurement performance would also increase and the vice versa (moving in same direction). The R^2 (which indicates the extent to which the level of compliance explained the procurement performance of the Senior High Schools) was 0.851. This shows that 85.1% of the level of procurement performance was explained by the level of compliance to the provisions in the Public Procurement Act.

Two of the compliance dimensions had an inverse relationship with procurement performance. This indicates that, when those independent variables (Information and communication and Procurement processes) increase, the dependent variable (procurement performance) would decrease. Although this result contradict priori assumption, it was rejected because it was not statistically significant at 0.05 (p>0.05). Contract management had a positive relationship with procurement performance, but was not statistically significant at 0.05 (p=0.127).

The outstanding impact was management systems. The coefficient value was 0.667. This indicates that, when there was a 100% in the improvement of the level of management systems compliance, there was 66.7% improvement in the level of procurement performance. This was statistically significant at 0.05 (p=.043).

The output in the Table 5 represents the linear regression to establish the impact of the compliance of with the provisions of the Public Procurement Act on the procurement performance of Senior High Schools in Ghana. The regression equation was therefore $y = 0.843 + 0.667x_1 - 0.699x_2 - 0.017x_3 + 0.749x_4$.

4. Summary of Findings

The Public Procurement Act (2003) stipulates five procurement procedures. Out of this, the study found out that three were mostly used among the Senior High Schools in the Ashanti Region. These were that National competitive tendering, Single-sourcing and price quoting.

The study further indicated a high level of compliance with the provisions in the Public Procurement Act. Amongst the four dimensions of procurement, Procurement Procedures was the highest dimension complied to. This was followed by Information and Communication, Management Systems and Contract Management Practices.

Compliance with the Management Systems and Contract Management, individually, had a high correlation with Senior High Schools' procurement performance. Information and Communication and Procurement Processes, respectively, also had a moderate relationship with the level of Senior High Schools' procurement performance.

In establishing the impact of the procurement reforms on the procurement performance of the SHS, a multiple regression analysis was conducted. The equation was $y = 0.843 + 0.667x_1 - 0.699x_2 - 0.017x_3 + 0.749x_4$. The correlation (r) values the entire independent variables together (Management systems, Information and communication, Procurement processes and Contract management) and the use of procurement performance (dependent variable) was 0.851. This indicates a high relationship between the variables (when an R value falls within 0.7 to 1, it is considered moderate). The relationship was also positive, indicating that when the level of compliance increases, procurement performance would also increase and the vice versa (moving in same direction). The R^2 (which indicates the extent to which the level of compliance explained the procurement performance of the Senior High Schools) was 0.851. This shows that 85.1% of the level of procurement performance was explained by the level of compliance to the provisions in the Public Procurement Act.

5. Conclusions and Recommendations

The study sought to identify the correlation between compliance with Public Procurement Act and its impact on procurement performance of Senior High Schools in Ghana. The study concludes that, generally, there was a high level of compliance to the Public Procurement Act, on the dimensions of management systems, information and communication, procurement procedure and contract management. Altogether, there was a high level of relationship between the level of compliance with the Public Procurement Act and the level of procurement performance of Senior High Schools. The compliance with management systems of procurement has significant impact on the procurement performance of Senior High Schools.

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Table 1 Procurement procedure

Procurement procedure	N	Mean	Std. Dev.
National Competitive Bidding	34	2.2353	1.12973
Single- Source Procurement	34	2.2353	.88963
Price Quotation	34	2.3529	1.20309
Restricted Tendering	34	2.6471	1.43300
International Competitive Bidding	34	3.3529	1.39006

Source: Field Survey, 2014

Table 2 Compliance with Public Procurement Act

Management system	N	Mean	Std. Dev.	Ranking
Monitoring and Control Systems	32	2.1562	0.86077	1st
Human Resource Development	34	2.1569	1.05803	2nd
Effectiveness of Leadership	34	2.2941	0.89711	3rd
Information communication				
Interaction with the marketplace	34	2.0294	0.96091	1st
Procurement Information searching and Dissemination	34	2.0882	0.85697	2nd
Procurement procedure				
Submission, opening and evaluation of bids	32	1.6667	0.99461	1st
Award of Contract	34	1.7059	0.97706	2nd
Bid Preparation and Invitation	34	1.8627	0.77901	3rd
Procurement Planning	34	2.1324	1.03944	4th
Procurement Publicity	34	2.3137	0.87209	5th
Contract management				
Inspection and Inventory control	34	2.1176	0.92980	1st
Disposal	34	2.1176	1.04409	2nd
Project Implementation and Supervision	34	2.1765	0.86158	3rd
Project Planning and Mobilization	34	2.5882	1.10420	4th

Source: Field Survey, 2014

Table 3 Summary of compliance level

Level of compliance	N	Mean	Std. Dev.	Ranking
Procurement processes	32	1.9865	0.82296	1st
Information and communication	34	2.0588	0.80495	2nd
Management systems	32	2.1424	0.81129	3rd
Contract management	34	2.2500	0.81042	4th

Source: Field Survey, 2014

Table 4 Correlations of Compliance Public Procurement Act

No	Variables		1	2	3	4	5
1	Impact	Pearson Correlation	1				
		Sig. (2-tailed)					
		N	26				
2	Management systems	Pearson Correlation	0.838**	1			
		Sig. (2-tailed)	0.000				
		N	24	32			
3	Information and communication	Pearson Correlation	0.497**	0.087	1		
		Sig. (2-tailed)	0.010	0.637			
		N	26	32	34		
4	Procurement processes	Pearson Correlation	0.488*	0.343	0.667**	1	
		Sig. (2-tailed)	0.016	0.064	0.000		
		N	24	30	32	32	
5	Contract management	Pearson Correlation	0.740**	0.714**	0.620**	0.637**	1
		Sig. (2-tailed)	0.000	0.000	0.000	0.000	
		N	26	32	34	32	34

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

*. Correlation is significant at the 0.05 level (2-tailed).
Source: Field Survey, 2014

Note:
Correlation value between 0 to 0.3 is weak
Correlation value between 0.3 to 0.7 is moderate
And correlation value between 0.7 to 1 is high

5 Regression analysis of impact of compliance

Independent variables	Dependent variable (Procurement performance)			
	R	R^2	B	Sig.
(*Constant*) (*a*)	0.851	0.851	0.843	0.262
Management systems (x_1)			0.667	0.043
Information and communication (x_2)			-0.699	0.243
Procurement processes (x_3)			-0.017	0.951
Contract management (x_4)			0.749	0.127

Source: Field Survey, 2014

Note:
R *represents the correlation or relationship between the dependent and the independent variables*
R^2 *represents how much of the dependent variable can be explained by the independent variables.*
B *represents the coefficients of the independent variables.*
Sig. *represents the statistical significance level of the model (the acceptable level of significance for this research was 0.05).*