

#### Asian Journal of Economics, Business and Accounting

21(17): 75-87, 2021; Article no.AJEBA.76433

ISSN: 2456-639X

# The effects of Electronic Salary Paying Voucher System on Undeserved Salary Compensation of Employees within Ghana Education Service

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#### Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

#### Article Information

DOI: 10.9734/AJEBA/2021/v21i1730492

Editor(s):

(1) Fang Xiang, University of International and Business Economics, China. <u>Reviewers:</u>

(1) Hussin Jose Hejase, Al Maaref University, Lebanon.

(2) Pesqueux Yvon, Conservatoire National des Arts et Métiers, France.

Complete Peer review History: <a href="https://www.sdiarticle4.com/review-history/76433">https://www.sdiarticle4.com/review-history/76433</a>

Original Research Article

Received 25 August 2021 Accepted 04 November 2021 Published 11 November 2021

#### **ABSTRACT**

Ghana Education Service is believed to be the department with the highest level of undeserved compensations and other related payroll fraud. This is because the Auditor General Report (2018) noted that Ghana Education Service is the common department for the menace of Salary Grade Mismatches which included some 1,200 employees across board. This paper is born with the purpose of Assessing the Impact of the E-Salary Payment Voucher system and Payroll Headcounts/Audits in the elimination of Unauthorized Compensations in the two Kasena-Nankana Districts of Upper East Region of Ghana. Research questions for the study focused on the relationship between undeserved compensations which is the dependent variable and the independent variables include; payroll audits and the E-Salary Payment Voucher system. This study employed the fraud triangle theory as the basis for its experiment. The study also utilized the non-probability quota sampling method to select 102 users of the E-SPV system for a cross sectional survey in Ghana Education Service. Significant findings of the study include, validators or users of the E-SPV system are partly mandated to protect the public purse and hence the power to allow the prevalence of undeserved compensations is also in their hands. Recommendations emanating from

the study seek to unpin that there should be an annual system audit of the Electronic Salary Payment Voucher at various management units to ensure that it reflects the true and fair view of the compensations given to staff at various cost centers in Ghana Education Service.

Keywords: Validation; staff; payroll; voucher; electronic; payment; cost center.

#### 1. INTRODUCTION

In recent times, it has been an uphill task for the Republic of the government of Ghana to totally eliminate the occurrence of undeserved compensations which include fictitious and ghost names added in the payroll database [1]. Episodes of payroll audits reached institutions of Ghana Education Service (GES) annually to verify the active teaching and non-teaching staff who work for the country in the Education Sector [2]. The auditor general on many platforms constantly appeals to all citizenry who are gainfully employed in Ghana Public Service to help clean up the payroll system of all manner of undeserved and illegal compensations which mostly come in the form of fictitious and ghost names. The government of Ghana is regarded the highest employing body of the Ghanaian populace and so pay-rolling becomes a tedious process for the body which has the sole mandate to do pay-rolling for people working under the Ghana public service [3]. The performances of staff in Ghana Education Service largely depend on their monetary rewards/compensations. This assertion is supported by [4] who noted that if monetary compensations are accurate employee motivation satisfactory. performances are positive and yield better results. This is not also different from the popular adage in the subject of Organization Behavior that states, "a satisfied worker is a highly performing worker." Teachers' performances in Ghana Education Service largely depend on their compensation. monetary Likewise. performance in the classroom is directly proportional to their job satisfaction [5].

Banyen [6] asserted that Pay-rolling according to the local government system is the process of listing all the employees within the local government council who withdraw their monthly monetary compensations from the public purse. From the above definition, a worker must be a bonafide and legitimate employee within the local government system before s/he can be payrolled into the system for any monetary compensation. The payroll of an institution or a body provides an appropriate data base of all employees of the said institution for the purpose of calculating the monthly and annual compensations [7]. The

institution responsible for the payroll of employees of Ghana Education Service (GES) is Accountant and Controller General Department (CAGD) (Asamoah et al., 2018). The salaries of workers of Ghana Education Service cannot be jeopardized by mistakes made by the CAGD since most workers depend solely on their salaries for survival. Therefore, the Controller and Accountant General Department must exhibit a higher level of professionalism and competency in doing the payroll of workers in other that they do not make avoidable mistakes to hinder the majority of workers who depend solely on their monthly salaries for their daily survival [8].

Payroll Audit is the process of analyzing the processes involved in doing payroll of an organization to ensure that the compensations given to workers are accurate and reflect a true and fair view of employee emoluments [9]. In doing payroll audits, an entity's active workers and emoluments are examined [10]. According to the Ghana Audit Service [11] it is a requirement by the Auditor General for all public institutions and entities to perform payroll audit at least once every year to ensure that their payroll processes are up to the standards required. For this reason, the Accountant General's Department which is responsible in doing the payroll for many departments conducts annual payroll audits to ensure that every department's worker, pay rates, wages, ranks and tax withholdings are appropriately examined and verified. Head counts are conducted annually by the internal audit unit of the Controller and Accountant General Department (CAGD) to ensure that workers' salaries and other compensations reflect an accurate view of their actual emoluments [12]. The significance of the annual head counts and Electronic Salary Payment Voucher cannot be underestimated in Ghana Education Service.

According to the Auditor General, (2018), all workers within the public service of Ghana who draw their compensations from the public purse have a public responsibility to the nation to help ensure the cleanliness of the payroll system by making sure that the system is rid of all manner of unauthorized and undeserved compensations.

The auditor General revealed in a speech addressing the press that approximately 45 percent of revenue generated locally is used to compensate public service personnel who are less than seven hundred thousand (700,000) of the total population of the country which is presently estimated to be twenty-eight (28) million. The purpose of this study is to evaluate the impact of the Electronic Salary Payment Voucher and payroll audits in the elimination of undeserved compensations in Ghana Education Service (GES). The study in its survey captured the two Kasena-Nankana Districts of the Upper East of Region of Ghana. This is because despite the usage of the E-SPV in GES and head counts which the CAGD conducts annually, there are still many occurrences of undeserved compensations, unauthorized compensations and payroll frauds of different kinds in the two Kasena-Nankana Districts of Ghana Education Service. According to Assenso-okofo & Agyeimensah [13] the wage bill of the republic of Ghana is not a true and fair view of the actually size of the public service and even the quality of services delivery to the national income. According to the Auditor-General-Report, (2019), 5.8% of the monthly compensations are not deserving and hence illegal. This denotes that ghost workers of many kinds still exist in the payroll system of Ghana despite several attempts in policies and regulations coupled with the implementation of E-SPV system and annual payroll audits which are all geared towards the elimination of undeserved compensations. This is therefore a patriotic responsibility of the entire citizenry who work in the public service of Ghana to ensure that people who withdraw from the public account are actually at their respective posts working diligently for the country.

#### 1.1 Problem Statement

Over some years now, the long surviving plague of unauthorized and undeserved compensation of workers in the Education Sector of Ghana has been a menace of great concern to stakeholders. People at various Public Service positions make use of the weaknesses of the payroll system for selfish and personal gains. The menace of both undeserved and unauthorized compensation in Ghana Education Service most especially in the two Kasena-Nankana Districts is growing up unnoticed because it comes in different forms apart from how it was formerly regarded. Undeserved and Unauthorized compensation mostly come in the form of fictitious and ghost names. Many people see ghost names as people whose names do not actually exist but are in the

payroll database and paid, but salaries go to other people (fraudulent people). Hence the salaries paid to the ghost names go to other people to be enjoyed since the names are fictitious yet deliberately kept in the payroll system by people who abuse their official positions to engage in that act. This assertion is not different from Leyira & Temple who also see ghost workers as non-existent personnel whose details are kept on an organization's payroll system and whose accounts are monthly credited with salaries but monies received by other people most likely the fraudsters. However, literature reveals recent that ghost workers/names are not only fictitious but also real workers or employees in an organization who receive their monthly salaries yet do not work for the salaries they have been receiving. This form of ghost workers is regarded as undeserved workers who receive unearned salaries.

#### 2. LITERATURE REVIEW

Nyaledzigbor [1] revealed that the insufficient studies made on illegal and undeserved compensations as well as payroll auditing have created a wide gap in literature regarding the phenomenon of undeserved compensations in Ghana Education Service as well as the entire public Service. It is therefore worth stating at this stage that little work has so far been done on payroll audits regarding undeserved compensations in Ghana. Since the inception of the Electronic Salary Payment Voucher system, there has not been any much literature regarding its effectiveness.

#### 2.1 Conceptual Framework

There are few concepts that have evolved to describe the phenomenon of payroll, Payroll audits, undeserved compensations and the Electronic Salaries Payment System.

## 2.2 Using Case Scenario for Tracking Undeserved Compensations

The use case scenario shows how to track undeserved and illegal compensations through an intelligent model illustrated in Fig. 1 for a payroll management system with a data set specified.

## 2.2.1 Conceptual model on the Electronic Salaries Validation

After examining the Electronic Salary Voucher validation procedure as well as payroll audits and

head counts exercises in Ghana Education Service as they appear in Peace E. [14] it is obvious that the users of the Electronic Salary Payment System have some power to protect the public purse from illegal and undeserved compensations [15]. This assertion draws its justification from the conceptual model in Fig. 2. At the mid of every month, the Department of Controller and Accountant General sends an espy message to each management unit head alerting that the validation portal is open and hence validators can go ahead and approve or disapprove the salaries of workers in their management units using the espv link, http://www.espv.com [16]. The validator has options to approve a staff for payment, validate a

staff as a missing staff, validate a staff as an unknown staff, validate a staff with issues and finally discontinue validation of the staff. After the validator is done, the head of human resource will have access to all pay vouchers within his coverage for further approval [17], After validation is completed by various heads of human resource, the regional officers will have access to all pay vouchers within their coverage for further approval. The regional level after approving finally sends a whole region's list of valid staff to the CAGD for payments to be made. It is therefore obvious that without the initial approval of an undeserved compensation from a management unit, it will be difficult for an employee to receive any undeserved payment.

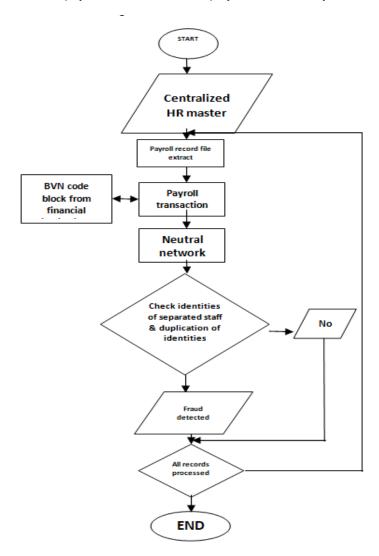


Fig. 1. The Case Scenario Model (Source: Promise E., Sunny O. & Soye F. (2019))

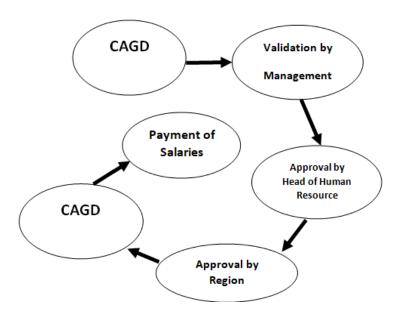


Fig. 2. Conceptual model on the Electronic Salaries Validation (Source: Author's conceptualization)

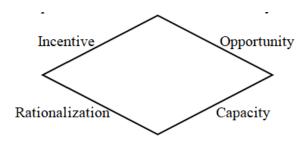


Fig. 3. Fraud diamond model

#### 2.3 Theoretical Framework

This study employed two theories to provide a framework for the understanding of the phenomenon. They include the fraud diamond model and the fraud management lifecycle theory.

#### 2.4 The Fraud Diamond Theory

The Fraud Diamond theory was employed as theoretical framework to back up this study. This theory was pioneered by Donald Cressey (1950). The Fraud Triangle Theory originally had three sides in the form of a triangle when it was first introduced. The three sides of the Triangle are composed of Incentive, Opportunity and Rationalization. However, Wolfe & Hermanson

came out with a fourth side that changed the fraud triangle to a four-sided module. The capability of the fraudster was the fourth factor introduced by Wolfe & Hermanson. According to Wolfe and Hermanson [18] notwithstanding the three fundamental components of fraud but fraud is likely not to occur if the fraudster has no capabilities to engage in fraud. The fraudster's capability has extended the fraud diamond theory to four components. Thus; the opportunity for fraud to occur, the supposed force that ignites fraud, the rationale for engaging in fraud and the fourth component is the capability of the From the principle of Wolfe and fraudster. Hermanson, it is deduced that it is only when the fraudster has the required capabilities in an organization that fraud is likely to occur. Narrowing this down to payroll related fraud, payroll officials and people who have it as part of their responsibility to safeguard the public purse must have the capability to indulge in payroll fraud and without such capability, the incidence of undeserved compensations could have been curbed by now.

[19,20] disclosed some Allen prevailing indications that employees in organizations who engage in fraudulent activities have the capability to do so if and only if the said employees have gone through special training and education pertaining to the use of the accounting systems of the organization and also if such employees are occupants of reputable positions in the organization. The significance of revealing a fraudster capability in an organization to engage in fraud suggest to key stakeholders and the authorities of various departments in the public sector that unless the fraudster is given an unmonitored capability to operate in an organization, there can be no fraud even if there is perceived pressure, opportunity and rationale for fraud to occur. Considering the above implication in this study, users of the Electronic Salaries Payment Systems and heads of the various management units have gone through special training to use the E-SPVS and also are occupants of positions of authorities in the management units. Therefore, if there is an opportunity for undeserved compensations to occur, if there are apparent influential forces to engage in undeserved compensations and finally if there is a rationale or reason to do so, then the users of the system who have the capabilities will definitely engage in undeserved compensations.

#### 2.5 The Fraud Management Lifecycle for

The fraud management lifecycle theory was introduced by Wilhelm [21] The lifecycle for fraud management postulates that if there is effective and efficient management of all the elements of the lifecycle, then there is assurance that fraud will not occur in organizations or fraud will be drastically reduced in organizations where it is already occurring. Considering the postulations of the theory of fraud lifecycle, there are eight (8) sequential components which are highlighted in the cycle. They include; Fraud detection in organizations, Investigation of fraud, Fraud Analysis, Fraud Mitigation, Prevention of Fraud, Fraud Deterrence, Prosecution of fraudsters and Policy making

It is noteworthy that the lifecycle theory of fraud is adaptive in its nature and hence, it is considered that all the sequential elements in the

cycle are necessary elements if an organization wants to effectively and efficiently manage fraud. Therefore, payroll fraud in the form of undeserved compensations in the cost centers of Ghana Education Service can be managed to reduce this menace if there could be an efficient and effective management of the all the eight (8) sequential components of the fraud management lifecycle theory.

#### 2.6 Empirical Review

#### 2.6.1 Government Payroll

Banyen stipulated that a payroll is a register of workforce or personnel being paid earnings or salaries with various amounts of monies which are due to each one of them. The Government of Ghana Payrolling basically consists of two main stages. Thus, stage one which is Payroll payment and stage two which involves payroll deductions. Payroll audits in Ghana Education Service have the sole mandate to ensure that both payroll payments and payroll deductions reflect a true and fair view of what each employee takes as salary [22].

Murla, Roasa, Reyes, De, & Santos, discussed that in the process of doing payroll, there cannot be room for the accommodation of mistakes since such mistakes largely affect the integrity of the payroll workers as well as jeopardizing the satisfaction of employees. Yet the presence of salary errors. grade mismatches miscalculations whether deliberate or not regarding the salaries, allowances, arrears and other emoluments due GES staff are too common [23]. The above assertion is not different from the information which came from a meeting on 9<sup>th</sup> December, 2019 involving the three Teacher Unions to declare a nationwide industrial strike action for unpaid legacy arrears [23]. The teachers' strike action revealed some major anomalies regarding the payroll system for the inability of the Accountant and Controller General Department (CAGD) to pay teachers' salary arrears [23]. The anomalies included the following; some teachers were paid on ranks they were not owed, some teachers have no personal records on the payroll system from 2012 to 2014, some teachers were not owed any arrears at all yet were credited with huge sums of monies, some teachers were employed as Pupils teachers but were paid as Senior Superintendents and finally, some female employees were to be paid night watchman allowances [24].

#### 2.6.2 Payroll/Staff Audit

Staff audit refers to the process of verifying or reviewing afresh the staff at post to express an opinion as to whether or not the staff at post represent a true and fair view of the work-force and provide the necessary database for accurate estimate of personnel costs in a department or an organization [24]. A study conducted by Oguzierem, Allen & Joab-peterside revealed that a verification exercise was carried out that covered between February, 2012 and December, 2015. The report indicated that Post Primary schools Board had staff strength of 6,411 in February 2012 with a wage bill of 601 million monthly but after the verifications in December 2015, the staff strength reduced to 5,620 and wage bill dropped to 510 million despite the promotions and increment that implemented within the period. Payroll fraud and undeserved compensations are major problems that many governments all over Africa are combating. Therefore, staff verification exercises are done in almost every African country just as in the literature above. The annual payroll audit conducted by the internal audit unit of the Controller and Accountant General Department (CAGD) is an indispensable exercise that cannot be undermined. This exercise supposedly reveals thousands of ghost workers every time to cut down government's expenditure on the wage bill for public service personnel which include staff of Ghana Education Service.

## 2.6.3 Undeserved Compensations and Related Ghost Workers Fraud

Nyaledzigbor, [1] represented ghost workers as people who do not show up at their various workplaces yet still receive their salaries or as people who do not literally exist but salaries are paid to them and received by other people altogether. This definition of ghost names covers all the teachers and the non-teaching staff who are not at post without legal permission yet are taking their monthly salaries. Supportive literature from Micah & Moses [25] stated that the definition of ghost workers include all manner of unqualified employees. unauthorized employments, names that do not exist at all but claiming compensations from the coffers of the government of Ghana. By this definition, ghost workers cover all over-aged, under-aged workers, employees who backdate their engagement periods. unqualified unauthorized staff. Though such people report at

their prospective workplaces everyday but they are still categorized as ghost workers. This is because such people engage in forging the certificates and dates of engagements as well as dates of birth to misinform the employer for compensations they do not deserve [26] Hearings from many staff of GES revealed that there are many teachers in the service who are paid with huge salaries yet are not at post [26]. Such teachers are often covered by their immediate superiors who supervise their regularity and punctuality. Such personnel according to the above definition are categorized under ghost workers. Allen & Joab-peterside also asserted that a ghost employee is a person whose details is logged into the payroll system of an organization as a staff but who does not report for work. This is not different from the previous revelation of the term ghost workers. Hearings from the many unsatisfied workers of Ghana Education Service (GES) in the two Kasena-Nankana Districts revealed that many workers are not at post yet are paid their monthly salaries. Mark, Simeon, & Ifeanyichukwu, [27] posit that the process of calculating employee emoluments is a very hot area for fraud to occur. Allen & Joab-peterside explained that ghost workers fraud occurs in mostly public departments where workers names and certifications are impersonated. Impersonations involve claiming the credentials of people with or without their notices to gain an illegal favor.

#### 2.7 Research Method

This research is exploratory in nature and therefore adopts the quantitative design that allows the researchers to obtain responses from a category group of respondents for analysis.

This research adapted the quasi-experimental design in the selection of various validators and users of the E-SPV system at the cost centers of Ghana Education Service within the two Kasena-Nankana Districts of the Upper East Region of Ghana. The quasi-experimental design permits the researcher to choose respondents for the survey. It is not a requirement in the quasiexperimental design to assign cases to comparison groups. The above information was obtained from literature presented by Lavrakas (2008). The variables which are considered necessary for this study include the opportunities undeserved compensations which considered the dependent variable and the independent variables include the strength of

staff of the management units, the ranks of the staff, payroll audits and E-SPV system.

Both Teaching and non-teaching employees who are assigned to be the users of the E-SPV system within Management units of Ghana Education Service and are presently working in the Two Kasena-Nankana Districts of the Upper East Region were selected for the survey. Among the many staff in each management unit is one computer literate who is assigned official user of the E-SPV system. Tansey [28] stated that for the sake of the researcher's own convenience and judgment, it is appropriate to employ the non-probability quota sampling technique in selecting respondents for a survey. Quota sampling was also used because there was no information on the exact proportion of the various cost centers in the Ghana Education Service. The purposive sampling technique which was also used alongside the nonprobability quota sampling technique allowed the inclusion of key validators or users of the Electronic Salary Payment System as well as key management units in the survey. Fields, ete Kenyo et al., (2006) the Purposive sampling technique is also a form of the non-probability quota sampling technique. This is in line with Fields, ete Kenyo et al., (2006) who again explained that purposive sampling method allows a researcher to include key respondents and departments in a survey for the purpose of indebt study. Based on literature prevailing from Cohen (1988); Singleton & Straits (2005) showing how to use power test to obtain sample size from a population, 102 respondents are obtained as the sample size for the survey.

Results from the respondents were analyzed using spss version 20. Regression and correlation analysis were used to express the relationships between the variables of the study. Also tables and charts were used to show frequencies on the responses from the sample size on the study variables.

#### 3. RESULTS AND DISCUSSION

## 3.1 Rank of Staff in Ghana Education Service

The Auditor General report (2018) noted that one thousand two hundred (1,200) were not appropriately placed at the ranks which match with what was stated in their engagement and promotion letters. The most affected employees here were Ghana Education Service staff. Most

of the respondents indicated that they were on the rank of PS which is Principal Superintendent. Fig. 4 presents the results of the ranks of respondents.

## 3.2 Opportunity for Illegal Compensations in the Management Units of GES

The Ghana Audit Service (2018) noted again that they could not substantiate the actual grades of 10,034 employees of which GES staff are the majority. This suggests that Ghana Education Service is the department with the most prevailing opportunities for undeserved and illegal compensations. Table 2 presents the various opportunities for the menace of undeserved compensations in Ghana Education Service under the two Kasena-Nankana Districts of the Upper Region of Ghana.

Table 1 shows that the coefficient of correlation between the opportunities for undeserved compensations and undeserved responsibility allowances in the cost centers of Ghana Education Service is 0.935 with a P-value of 0.000 and the sample size been 102. The correlation coefficient value rs = 0.935 which is positive signifies that an increase in undeserved allowances in Ghana Education Service will result to a corresponding increase in the opportunities for undeserved compensations. Also, because the sig. coefficient .000 is less than the confidence level of 95% (.05), this signifies that there is a proof of relevant relationship between undeserved allowances and the opportunities for undeserved compensations in the various cost centers of Ghana Education Service. By this significant relationship, the null hypothesis is rejected.

Table 1 also shows the coefficient of correlation between the strength of the staff at the various cost centers and the opportunities for undeserved compensations. The coefficient of correlation involving the above variables is rs = 0.809 with a sig. p-value of .000 which is less than the  $\alpha$ -value 0.05.rs = 0.809 being a positive figure signifies a strong positive relationship between the variables. Therefore, an increase in the number of workers at the cost centers will result to a corresponding increase in the opportunities for undeserved compensations. The sig. value p = .000 is less than the confidence level .05. This denotes an evidence available the show a sig. relationship between the variables and hence the null hypothesis

which stated, "there is no significant relationship between the strength of staff and opportunities for undeserved compensations" is rejected.

One major rationale for conducting this study was to dig out the relationship that exists between undeserved compensations and the Electronic Salary Payment Voucher system. Regression analysis with a scatter plot and a clear line of regression were employed in this study to ascertain the kind of relationship that exists between the dependent variable. Undeserved compensations and the predictor, Electronic Salary Payment Voucher. From Fig.5 the nature of the line of regression on the scatter plot means that there is a negative relationship between undeserved compensations and the Electronic Salary Payment Voucher. negative relationship implies that as more and more GES continue to use the Electronic Salary Payment System, the less the occurrences of illegal and undeserved compensations in the service. R - Square is 0.193 representing the degree of variance between variables. Table 1 presented that R = -.439 which implies a week negative correlation between the dependent variable, undeserved compensations and the

predictor, E-SPV System. From Table 1 (Module summary), the sig. value is .000 which is less than the P-value, .05. This supports the rejection of the null hypothesis (*H0*) stated that "there is no evidence of significant relationship between undeserved compensations and that of Electronic Salary Payment Voucher.

Finally, the correlation coefficient between the staff potency of cost centers and the undeserved responsibility allowances on the payroll is rs =0.881 with a sig. p-value. .000 and sample size of 102. With rs = 0.881, there is a strong positive correlation between the staff potency of cost centers and undeserved extra responsibility allowances. This means that there will be a corresponding increase in undeserved extra responsibility allowances as the number of workers in a cost center continues to increase. Also, sig. power value of .05 indicates that there is available proof of a genuine relationship between staff potency and undeserved extra responsibility allowances in the management units of Ghana Education Service within the two Kasena-Nankana Districts of the Upper East Region.

#### Regression Model for the Impact of E-SPV in the Elimination of Undeserved Compensations

Table 1. Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Statistics
					Sig.
1	439a	.193	.202	1.70233	.000

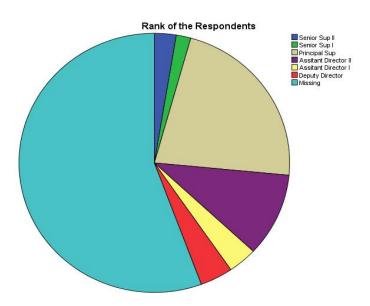


Fig. 4. Rank of staff in Ghana Education Service

Table 2. Spearman's correlation coefficient using absolute values of variables

		Opportunities for Undeserved Compensations	Staff Strength at the cost Centers	Undeserved extra responsibility allowances
Pearson Correlation	Opportunities for Undeserved Compensations	1.000	.809	.935
•	Staff Strength at the cost Centers	.809	1.000	.881
	Undeserved extra responsibility allowances	.935	.881	1.000
Sig. (2-tailed)	Opportunities for Undeserved Compensations		.000	.000
	Staff Strength at the cost Centers	.000		.000
	Undeserved extra responsibility allowances	.000	.000	

#### 3.3 Interpretation of the Findings

Findings emanating from this research were based on the results of the study as well as the relevant literature. The study revealed a strong positive relationship between opportunities for unauthorized compensations and the rank of employees in GES (Table 2). The internal controls of Ghana Education Service are weak and hence create loop holes for undeserved compensations to occur. This assertion is in line with the fraud triangle theory as indicated by Dorminey et al. which states that if the internal controls of a system in a department or an organization are weak, there could be several opportunities for fraudulent occurrences in that organization or department.

From regression equation as well as the line of regression on the scatter plot, it was found that there is a negative correlation between Electronic Salary Payment Voucher system and the opportunities for undeserved compensations in Ghana Education Service (see Table 2). This negative correlation between the abovementioned variables means that the more the use of the E-SPV in Ghana Education Service, the less the opportunities for undeserved compensations. This supports Peace (2018) who revealed in an article that there are several advantages the Electronic Payment System has over the manual. Some of these advantages include the eliminating of public payroll bloating/ghost names which in this, is regarded as one of the components of undeserved compensations.

**Table 3. Opportunities for Undeserved Compensations** 

		Frequency	Percent	Number of staff in that category
Valid	Retirement of Staff	9	3.9	67
	Vacation of Post	20	8.7	89
	Death of Staff	9	3.9	20
	Resignation	6	2.6	6
	Leave without Pay	19	8.3	20
	Staff on Transfer	15	6.5	137
	Staff on Further Studies without Approval	24	10.4	60
	Total	102	44.3	398
Missing	System	128	55.7	
Total	•	230	100.0	

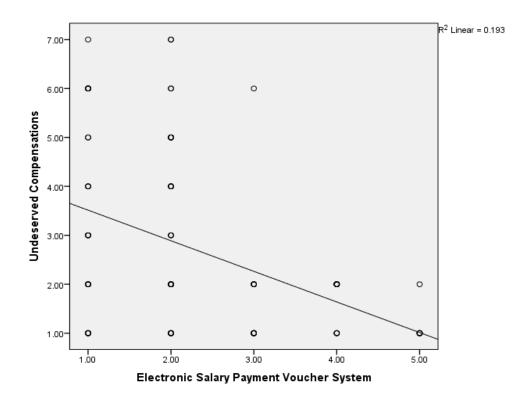


Fig. 5. Scatter Plot with a line of Regression for the Predictor, E-SPV

#### 4. CONCLUSION

The Auditor General Reports over the years continue to reveal many lapses inadequacies of the Payroll processes in the elimination of unearned salaries. In 2018 for instance, it was evidently pointed out by Auditor-General that there are some gaps in Ghana's payroll system that contributed to over GHS 564 million being paid to undeserved personnel. The highlights of these gaps and inadequacies were clear in the Auditor General's report in 2018 which was meant to verify all the employees in the public service are paid through the Department of the Controller and Accountant General. The 2018 report presented that there are 522,478 persons believed to be active employees on the payroll and out of that number, 7,823 remained unaccounted for when the verification exercise was completed. The report further revealed 1,200 employees of whom GES workers were the majority and victimized them with Salary Grade Mismatches. This prompted the researcher to assess the impact of the E-SPV system and payroll audits in the elimination of unauthorized compensations. The E-SPV system and payroll audits were the variables assessed because they are the only two major tools used in Ghana Education Service to detect the presence of undeserved compensations in the cost centers. The study involved the two Kasena-Nankana districts of the upper east region of Ghana.

#### 5. RECOMMENDATIONS

One major recommendation to improve upon payroll management is to design and implement a system audit for the Electronic Salary Payment Voucher system. This system audit shall continue to verify the correctness of the system to ensure that it reflects the true and fair view of employees' compensations at the various cost centers of the entire public service of the nation.

The Education Sector of Ghana and the Controller and Accountant General Department should collaborate to develop a proper system of authorization of inputs. All payroll inputs must pass through a standard process of authorization before effected. Payments of arrears, allowances and reinstating a staff have to pass through a well-organized and standardized authorization procedure to be affected on employees' compensations.

Finally, legal actions should be taken against the heads of public institutions as well as users of the E-SPV system who engage in activities of undeserved compensations.

#### **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

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Peer-review history:
The peer review history for this paper can be accessed here:
https://www.sdiarticle4.com/review-history/76433