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THE IMPACT OF E-SALARY PAYMENT VOUCHER AND PAYROLL AUDITS IN ELIMINATING UNDESERVED COMPENSATIONS IN THE MANAGEMENT UNITS OF GHANA EDUCATION SERVICE.

BY

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A THESIS SUBMITTED TO THE DEPARTMENT OF ACCOUNTING AND COMMERCE, SCHOOL OF BUSINESS AND LAW, UNIVERSITY FOR DEVELOPMENT STUDIES, IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF COMMERCE DEGREE IN ACCOUNTING

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Student

I hereby declare that this thesis is the result of my original work and that no part of it has been presented for another degree in this University or elsewhere.

Candidate's Signature

Date 3rd March, 2021

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www.udsspace.uds.edu.gh ABSTRACT

This study was 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. Research questions for the study focused on the relationship between the opportunities for undeserved compensations which is the dependent variable and the independent variables include; payroll audits and the Electronic-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. The results of the study show that there is a statistically significant inverse relationship between the opportunities for undeserved compensations and both payroll audits and Electronic Salary Payment Voucher system. However, the study revealed a direct relationship between undeserved compensations and both size of management units and rank of staff in Ghana Education Service. Significant findings of the study include, validators or users of the Electronic Salary Payment Voucher 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 from this study seek to suggest that there should be a proper authorization procedure for the users of the Electronic Salary Payment Voucher system and that there should be strict monitoring to ensure adherence to the procedures given. Another major recommendation is that there should be an annual system audit of the Electronic Salary Payment Voucher at various management units to ensure that it reflects a true and fair view of the compensations given to staff at various cost centers in Ghana Education Service.



www.udsspace.uds.edu.gh ACKNOWLEDGEMENTS

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$\frac{www.udsspace.uds.edu.gh}{DEDICATION}$

This work is dedicated with humility to the Holy Spirit for His guidance and counseling throughout the project, to my wife, parents and siblings.



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www.udsspace.uds.edu.gh LIST OF ABBREVIATIONS/ACRONYMS

IPPD Integrated Personnel and Payroll Database

PFM Public Finance Management

MDA Ministries, Departments and Agencies

MMDA Metropolitan, Municipal and Districts Assemblies

SSSS Single Spine Salary Structure

PPD Payroll Processing Division

PUFMARP Public Financial Management Reform Program

EFT Electronic Fund Transfer

ATMs Automated Teller Machines

PETS Public Expenditure Tracking Survey

CAGD Controller and Accountant General's Department

ESPV Electronic Salary Payment Voucher

IRB The International Review Board

SPSS Statistical Package for Social Sciences

GES Ghana Education Service

GOG Government of Ghana

KNM Kasena – Nankana Municipality

KNWD Kasena – Nankana West District

UE/R Upper East Region

NADMO National Disaster Management Organization



CHAPTER ONE

1.0 Background

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. 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. 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. The performance and delivery of staff in Ghana Education Service largely depend on their monetary rewards/compensations. This assertion is supported by Palladan (2018) who stated that if monetary compensations are accurate and satisfactory, employees motivation and 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 monetary compensation. Likewise their performance in the classroom is directly proportional to their job satisfaction.



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Banyen (2016) 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. The institution responsible for the payroll of employees of Ghana Education Service (GES) is the Accountant and Controller General Department (CAGD). The CAGD is the body solely assigned by government to be responsible in the calculations and payments of salaries of both the teaching and non-teaching staff of Ghana Education Service. Hence the duties of the staff of the CAGD are very indispensable because calculations involving the compensations of workers depend on them. 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.



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. In doing payroll audits, an entity's active workers and emoluments are examined. According to the Ghana Audit Service (2013), 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 of 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. The significance of the annual head counts and Electronic Salary Payment Voucher cannot be underestimated in Ghana Education Service.

According to the Auditor-general-Report (2014), 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 annual 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 (Field Survey 2020). According to Ifeanyi et al. (2020), payroll fraud presents a serious drain on state funds and that the wage bills of almost every developing economy 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 literature from Nkiruka & Thomas (2020), 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 Dimensions of Undeserved Compensations in the form of Payroll Fraud.

Undeserved compensations encapsulate all those employees that have retired, dead,

resigned or on transfer yet may be kept on the payroll database. Chaflekar et al. (2018) disclosed that each section in a public department has to perform necessary operations like data collection and entry updates, monitoring and updating of payroll data. If payroll managers delay in removing the names of individuals who are no longer in service, it creates the problem of difficulty in detecting those names. This means that the workers are paid salary irrespective of not being present in the office as staff and do not work yet their salaries are redirected by the fraudster. Unauthorized and undeserved compensations also involve all the workers within the



service of Ghana Education whose payslips are made with even the appropriate inputs

 $\frac{www.udsspace.uds.edu.gh}{\text{yet they do not go through the official procedure of effecting those inputs.}}$ Information from many unsatisfied workers within the Ghana Education Service (GES) of the two Kasena-Nankana Districts revealed that many workers both teaching and non-teaching are able to make appropriate inputs on their payslips regarding their salaries without passing through the laid down procedure. Most teachers are able to process their transfers, salary upgrades, promotions, arrears, allowances and other relevant changes without the involvement of their IPPD officers. This suggests that there are teachers or even non-teaching staff in the various institutions within the Education Sector who have direct contact with some staff within the Controller's General Department and have direct involvement in making inputs regarding salaries of GES staff. Therefore, passing through the contact persons at the various institutions will give the staff definite and faster results in making appropriate changes on their payslips. Contact persons of the CAGD at the various institutions/schools are influential in making salary inputs than the IPPD officers who are officially recruited for that responsibility in their respective districts.

1.2 **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. Mbuh (2020) disclosed that Irrespective of the attempts put in place to eliminate undeserved compensations in the public payroll system, the plague continues to exist and to grow. This is because 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. Allen and Joab-peterside (2017) denoted that while corruption takes different forms in the public service, Undeserved and Unauthorized compensations 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 Nkiruka & Thomas (2020) 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, recent literature reveals 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.

Nyaledzigbor (2015) disclosed that key stakeholders have the belief that there are many instances of undeserved compensations involving people who do not work at all yet are paid. However, little is known about the factors that create opportunities for ghost workers, terminated employees and calculation mistakes in the payroll system of Ghana Education Service.

Allen (2017) unpinned that there are people in high offices within the public service of Ghana who misuse their positions to knowingly or unknowingly over populate the employment ceiling. This misconduct is literally known as payroll fraud. What is more worrisome about the above fact is that most of those who are enjoying



www.udsspace.uds.edu.gh undeserved compensations due to the misconduct of payroll fraud by persons in authorities are people without the qualification to be at where they are, people whose employment statuses are back dated, people who receive extra responsibility allowances for no extra responsibility done and those who are not at post at all yet are enjoying compensations from the public purse.

The above confirms loud hearings from many unsatisfied employees in the various management units of GES that, despite the numerous annual payroll audits in Ghana Education Service as well as the implementation of the Electronic Salary Payment Voucher which is introduced in GES since 2014, there are still too many occurrences of undeserved compensations in GES payroll system. There also exist many calculations mistakes in doing payroll inputs pertaining to the ranks of teachers as well as allowances due them. This places massive pressure on the public account and consequently reduces the credibility of the annual payroll audits in GES management units. This plague is contrary to the ultimate goal of annual payroll audits and E-SPV in the management units of GES which are to ensure that employees are only paid for work done at the correct wage rate with appropriate deductions made to regulatory bodies.



Justification of the Study 1.3

This project topic draws its justification from the fact that payroll fraud, wrong wages salaries inputs, undeserved allowances and all manner unauthorized and compensations are still too common in Ghana Education Service yet the Electronic Salary Payment voucher and annual payroll audit seek to mainly address those issues. Information emanated from a meeting on 9th December, 2019 involving the three Teacher Unions, GNAT, NAGRAT and CCT to declare a nationwide industrial strike

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action for unpaid legacy arrears revealed some major anomalies regarding the payroll system for the inability to pay teachers salary arrears. The anomalies include;

- 1. Some teachers were paid on ranks they were not owed
- 2. 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
- 5. Some female employees were to be paid night watchman allowances. (Source: www.graphic.com.gh)

This is not different from the survey conducted by Allen and Joab-peterside (2017). The survey disclosed that out of six hundred and sixteen (616) respondents, 524 attested in agreement to the fact that there are salary arrears of workers which keep accumulating, there are delays in incremental points and promotions and finally, unions of various professions are threatening to strike.

It was believed by the Ghana Teacher Unions that the above inputs were done by a professional entity that is the Controller General's Department which in every year conducts payroll audit to make sure that compensations for teachers are duly authorized and deserved. Palladan (2018) asserts that there is an unarguable fact that in an organization, workers' productivity depends largely on the level of their satisfaction. This explains the adage, "a satisfied worker is a productive worker."

The above anomalies place undue pressure on the Government of Ghana Wage Bill which if not giving adequate attention to address them permanently will reduce the credibility of the annual payroll audit team as well as the E-SPV system which in tend



 $\frac{www.udsspace.uds.edu.gh}{\text{wage bill to an unbearable height. Auditor-General-Report}}$ (2016) also noted that one thousand and two hundred (1200) workers in the public service have salary grade mismatches of which the employees of Ghana Education Service are the most affected staff. The 2016 audit report further buttressed that the Ghana Audit Service could also not substantiate the actual grades of 10,034 employees. These employees which included most of the GES staff were not able to make available the required documents such as appointment and promotion letters for the verification exercises. The affected staff according to the report claimed that promotion letters were not given to them.

It is therefore very necessary to undertake this project to enable the researcher dig into processes of the Electronic Salary Pay Voucher System and Payroll Auditing Exercises in Ghana Education Service within the two Kasena-Nankana Districts and how such a system and exercises respectively can be improved to reduce if not eliminate the occurrences of undeserved compensations and related payroll fraud. The study is also required to reveal whether or not payroll audit reports about Management units of Ghana Education Service in the two Kasena-Nankana Districts reflect the accuracy of workers' compensations including their salaries and other

allowances whether such compensations are deserving or not.



This research is purposed to bridge the literature gap in the activities of undeserved and unauthorized compensations by examining the effect of the annual head counts and the E-SPV system in the cost centers of Ghana Education Service under the two Kasena-Nankana Districts of the Upper East Region. The overall goal was to expose



 $\frac{www.udsspace.uds.edu.gh}{\text{for undeserved compensations to key stakeholders despite}}$ the several attempts to curb the situation. The information on undeserved compensations will assist the audit service, CAGD and key stakeholders to implement measures to minimize the occurrence of the plague to protect the public purse from illegal withdrawals.

1.5 Research Objectives

This study seeks to satisfy the following objectives;

- 1. To determine the relationship between E-SPV system in GES and the problem of undeserved compensations.
- 2. To determine how Payroll audits in GES KNM/KNWD relate to Undeserved compensations.
- 3. To assess the relationship between the staff strength of cost centers and undeserved compensations.
- 4. To determine the relationship between ranks of employees in GES-KNM/KNWD and undeserved extra responsibility allowances

1.6 Research Questions

The study seeks to answer the following questions.

- 1. What is the relationship between undeserved compensations in GES -KNM/KNWD and the E-SPV system?
- 2. What is the relationship between undeserved compensations in GES KNM/KNWD and annual payroll audits?



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- 3. What is the relationship between staff strength in GES-KNM/KNWD and the opportunities for undeserved compensations?
- 4. What is the relationship between staff ranks in GES-KNM/KNWD and undeserved extra responsibility allowances?

1.7 Hypothesis

Hypothesis according to Fields (1997) refers to a statement of expression or a prediction that will be tested by research. The correlation between the menace of undeserved compensations and its predictors such as the Electronic Salary Payment Voucher and Payroll audits in the management units was also examined. According to Taylor and Worsley (2008), in other to predict relationships between variables, quantitative techniques are needed to accomplish that purpose. Also, according to Agarwal (2009), to predict the relationship between variables using a sampled data, the quantitative research method can be useful than any other method.

Therefore, to proffer useful answers to the research questions and realize the study objectives, the following hypotheses stated in their null forms will be tested;

- 1. *H0*: There is no evidence of significant relationship between undeserved compensations and the E-SPV in GES system.
- 2. *H0:* There is no evidence of significant relationship between undeserved compensations and payroll audits in GES.
- 3. *H0*. There is no evidence of significant relationship between undeserved compensations and staff strength in GES-KNM/KNWD.
- 4. *H0*. There is no significant relationship between staff ranks in GES-KNM/KNWD and undeserved responsibility allowances.



1.8 Nature of the Study

The researcher employed the quantitative technique to evaluate how undeserved compensations in the cost centers affect performances in Ghana Education Service. The quantitative method makes it possible to ascertain the correlation between some variables. The study employed this method to analyze the relationship between the monthly staff validation using the E-SPV system and opportunities for undeserved compensations. Agarwal (2000) further expressed that with the quantitative method, the nature of relationship that exist between variables can be determined using sampled data.

1.9 Significance of the Research

Results from this research will be of great benefit to teachers, payroll auditors, Electronic Pay Voucher (EPV) Validators of various management units in GES and the management unit heads of Ghana Education Service (GES) in that through the findings of the study, the issues of payroll fraud which are enjoyed by some teachers will be resolved to ensure job satisfaction in GES.

The findings of the study will also contribute to improved public financial management.

The study again will serve as a useful document to scholars seeking information relating to the Electronic Salary Payment Voucher system and Payroll audit since little has being done on Payroll audits.

Finally, this study seeks to make relevant recommendations resulting from the findings which will contribute to the measures that could help stabilize the wage bill and reduce the menace of undeserved compensations in the Ghana Education Service

 $\underline{www.udsspace.uds.edu.gh}$ which according to literature from the Auditor General Department is regarded as a common department for the occurrence of undeserved and illegal compensations.

1.10 Definition of Related Terms

This heading involves the definition of terms and phrases commonly used in the write-up.

Payroll Audit: Mohamed and Mohd-sanusi (2018) referred payroll audit to the verification of an entity's processes of payroll to ensure that the processes reflect the accurate compensations due workers of an organization, department or a body.

Ghost workers: Neuhauser (2016) defined Ghost workers as people who do not literally exist or people who are not known but their accounts are often credited with compensations which are received by other people mostly the fraudsters.

Management unit: Beat (2017) elaborated that a management unit refers to the smallest section of a public department or government agency where payroll costs are charged.

Payroll fraud: Ejura (2018) posit that Payroll fraud can be defined as the unlawful or illegal withdrawal from the public account through compensations that are unearned.

Separated Staff: this according to Asiedu and Deffor (2017) are people who have no extended contracts with various management units yet they receive various unearned compensations from the public account through the coffers of those management units.

Cost Center: Beat (2017) revealed that for the purpose of budget implementation and monitoring, emolument budgets for the public service are broken into smaller sections called management units or cost centers. With this definition, a cost center can be used interchangeably with management unit as it is in this study.



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1.11 Limitations of the Study

The limitations of the study are

- The research is limited to undeserved compensations in the cost centers of Ghana Education Service who receive their salaries through the Electronic Salary Voucher. Because of this, the results and findings of this study cannot be generalized to other public sectors such as the health sector, agric sector and related others.
- 2. The non-probability sampling technique was used to select management units and staff of GES who are users of the E-SPV for this survey. Due to employing this strategy, Feild et al. (2016) asserts that results and findings emanating from the study cannot be generalized to the entire population of cost centers in the public service.

1.12 Assumptions

This survey is conducted anonymously by using Social media hence it is assumed that the validators who were users of the E-SPV system in the management units of GES provided truthful and accurate information. There was a revelation from the study that if the processes of employee reposting and other separated staff are delayed, it can be the main cause of undeserved compensations.

1.13 The Scope of the Study

Conceptually, this study hovers around the implicit effect E-SPV and annual payroll audits have on the compensations of personnel in Ghana Education Service within the



www.udsspace.uds.edu.gh two Kasena-Nankana Districts of the Upper East Region of Ghana. The study also encapsulates the responsibility of the E-SPV and payroll audits in the elimination or reduction of illegal and undeserved compensations in the Education Service of Ghana.

1.14 Chapter Organization

There are five (5) chapters which are discussed and reported in this research. The chapter one (1) which is the introductory chapter contained the research objectives, research questions, problem statement, justification of the study and definition of relevant terms relating to the study. In chapter two of this study, the theoretical and conceptual frameworks were considered. Hence, the related literature pertaining to all manner of undeserved compensations ranging from ghost workers fraud to illegal compensations is discussed in this chapter. Chapter three of the thesis dealt with the methodology employed to undertake this study. Sample size, hypothesis setting and instrumentation are captions associated with chapter three. The results of the study as well as data analysis were presented in chapter four (4). Chapter five (5) which is the concluding chapter presented the major findings of the study, the summary of study, recommendations, implications of the findings to social change and conclusion.



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LITERATURE REVIEW

2.0 Introduction

Nyaledzigbor (2015) 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.

In this chapter, the researcher aimed at assessing already-existing literature relating to the topic of study. The literature will be subjected to critical review to reveal their correlation with the researcher's quest in assessing the impact of E-SPV and payroll audits in Ghana Education Service.

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. Various schools of thought and diverse studies evolved to give diverse elaborations and definitions of the above terms related to the phenomenon of enquiry. The subsequent headings unfolded the conceptual framework and empirical literature review on which this study referenced its contents.

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2.1.1 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 Figure 2.1 for a payroll management system with a data set specified.

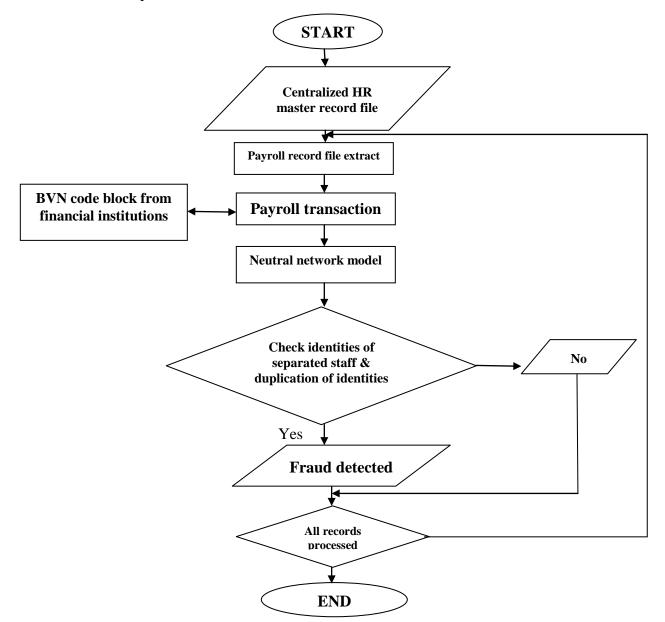




Figure 2. 1: The Case Scenario Model

(Source: Promise E., Sunny O. & Soye F. (2019))

2.1.2 Conceptual model on the Electronic Salaries Validation

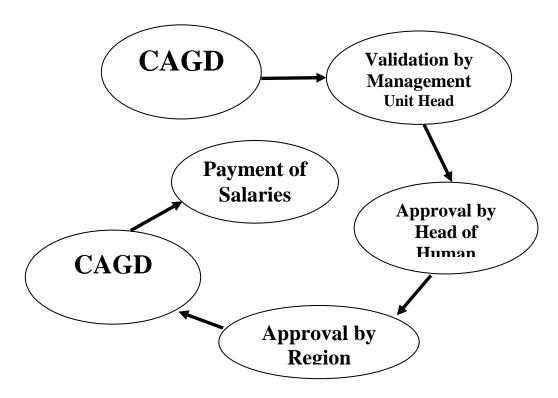


Figure 2. 2: Conceptual model on the Electronic Salaries Validation

(Source: Author's conceptualization)

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 Kaur and Grover (2018), 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. This assertion draws its justification from the conceptual model in Figure 2.2. At the mid of every month, the Department of Controller and Accountant General sends an espv 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. Each validator must thoroughly go through the electronic payment voucher for each month to make sure that it voucher for the specified month reflects a true and fair view of the compensations of the staff working in the management unit. The validator has options



<u>www.udsspace.uds.edu.gh</u> 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 with his work, s/he electronically sends the e-salary voucher to the head of human resource for further approval. The head of human resource is mandated to approve the e-salary vouchers s/he receives for the month and further sends the vouchers electronically to the regional level for 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 an employee to receive any undeserved payment.

2.2 **Theoretical Framework:**

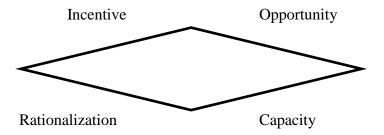
This study employed two theories to provide a framework for the understanding of the phenomenon. They include the fraud diamond model and the fraud management lifecycle theory.

2.2.1 The Fraud Diamond Theory



The Fraud Diamond theory was employed as theoretical framework to back up this study. This theory according to Abdullahi (2015) was pioneered by Donald Cressey in the year, 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 and 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 and Hermanson.

According to Wolfe and Www.udsspace.uds.edu.gh Hermanson (2004), 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 fraudster. From the principle of Wolfe and Hermanson, it is deduced that it is only when the fraudster has the required capabilities in an organization that fraud is likely to occur. Therefore without the required skill or capability exhibited by the fraudster, there can be no fraud in an organization despite the fact that there could be some supposed force embedded on an individual to engage in fraud, a rationale for engaging into fraud and an available opportunity in an organization for fraud 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. The diamond module now has a four sided shaped figure as presented below.



Fraud diamond model Figure 2. 3

Notwithstanding the four components of the fraud diamond theory, there are also some stated features in the theory that could be associated with a teachers' ability in a management unit to engage in fraudulent activities. These features include; if the teacher (personnel) in the management unit or department occupies a position of

authority which prefers to opportunity on the model; if the teacher has the ability to temper with the weaknesses or loop holes for the purpose of manipulating the E-SPV and Control systems of the management unit; and finally, if the personnel is confident with the assurance that no one can detect the fraud and even if detected, the personnel can easily go away with the crime.

Again Allen (2017) disclosed some 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.



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2.2.2 The Fraud Management Lifecycle for

The management lifecycle for fraud is another theory that was employed as a basis for this study. This theory was introduced by Wilhelm (2004). The lifecycle of fraud management theory 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;

- 1. Fraud detection in organizations
- 2. Investigation of fraud
- 3. Fraud Analysis
- 4. Fraud Mitigation
- 5. Prevention of Fraud
- 6. Fraud Deterrence
- 7. Prosecution of fraudsters
- 8. Policy making

If the eight sequential elements in the cycle are managed efficiently, there is an assurance for the reduction of fraud in departments where fraud is too common. 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.

2.3 Empirical Review

2.3.1 **Government Payroll**

Banyen (2016) 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 payments involve a personnel's monthly basic salary, the annual basic salary, grade level, arrears, allowances and other bonafide emoluments. Payroll deductions entail all the deductions that are made out of an employee's total emoluments. 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. The Electronic Salary Payment voucher also enables various management unit heads and Human Resource heads to validate and authenticate the salaries of staff before salaries are paid into the accounts of workers. This is often a monthly validation of staff salaries. Though there are annual payroll audits and to an extension, an Electronic Salary Payment Voucher system which allows heads of management units to validate their workers before payments are made yet still there exist payroll issues among the employees of Ghana Education Service which include; wrongful deductions, unauthorized and undeserving compensations which are mostly denoted among public service personnel as "passing through the back door".



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Acquah (2017) stated that for the purpose of poverty eradication in Ghana as a nation, the government of the republic of Ghana has made various investments into human resource/capital pertaining to Education and Health of the citizenry. This has been the foundation of accomplishing the major millennium goals of the nation. Though the government of the republic of Ghana has made diverse investments in human capital with the sole purpose of poverty reduction but this investment has placed an unbearable financial burden on the Government of Ghana Public Account. The challenge of computing the salaries and emoluments of public service personnel most especially staff of Ghana Education Service has become cumbersome due to the thousands of workers in the service. This has paved the way for victims of payroll fraud to utilize the weaknesses of the payroll system for fraudulent activities.

Moshonas (2019) also stated that the civil sector covers an indispensable position when it comes of employee engagement and recruitment. In the public sector of Ghana and that of most developing countries in Africa, the government is the main source of white color jobs for the citizenry. Many people draw their livelihood from the public purse of the nation. This is because most departments, institutions, industries and companies are owned by the state and therefore have to employ people of diverse qualifications and working experiences to run the affairs of the various departments.



Allen (2017) in an article captioned, "unauthorized employment in the public sector and local government authority" stated that the wage bill of the Ghanaian economy is not a true reflection of the actual public servants as well as the actual service delivery of the country. In light of this, huge sums of monies have been paid to undeserved

workers in the form of salaries and other compensations. This has resulted into the over bloating of the government of Ghana wage bill for many years down the line.

Murla et al. (2020) 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 errors, salary grade mismatches and miscalculations whether deliberate or not regarding the salaries, allowances, arrears and other emoluments due GES staff are too common. The above assertion is not different from the information which came from a meeting on 9th December, 2019 involving the three Teacher Unions to declare a nationwide industrial strike action for unpaid legacy arrears. 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. 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 watchman allowances. (Source: were be paid night to www.graphic.com.gh). However, the Teacher Unions aired out that the above inputs were done by a professional entity, the Department of Accountant and Controller General which in every year conducts payroll audit to make sure that compensations for teachers are duly authorized and deserving.



According to Murla et al. (2020), pay rolling involves a lot more than what employees think and it is not as simple as it may appear. In doing payroll, there could be undue

errors that can complicate the whole payroll process. If the calculations of employees' emoluments must be accurate, there is every need not to rush in the payroll processes so as to arrive at the net pay of the employee. Payroll processing therefore involves the professional practice of processing financial records which covers all employee salaries in addition to all allowances taking into consideration all lawful deductions to arrive at the net pay of the employee. If staff in-charge of the payroll process rush in doing the payroll, they tend to jeopardize the salaries of the workers involved. This partly accounts for the reasons why most workers of Ghana Education Service especially in the two Kasena-Nankana Districts suffer various miscalculations regarding their salaries, allowances and arrears.

Payroll/Staff Audit 2.3.2

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.



A study conducted by Oguzierem, Allen and Joab-peterside (2017) 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 were implemented within the period. Government was thus losing 90 million monthly and 1.08billion annually to ghost workers fraud and undeserving compensations. 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.

Nkiruka and Thomas (2020) revealed that staff audit exercises carried out in different states in the country have confirmed that there are more staff on the payroll system of these states more than there are in the offices. This suggests the presence of unearned compensations due to unauthorized employment in the various governments of Africa Public Service sectors. Illegal Compensations result to non-existent employees having their particulars in a department's payroll system. Compensations are often sent to the accounts of such persons but those compensations are often received by other people. These non-existent employees are often called ghost names, (Huefner 2017). Despite the amount of effort the CAGD exhibits to implement various policies to curb the menace of undeserved compensations in the management units of Ghana Education Service, there are still many ghost workers and undeserved compensations in the Ghana Education Service Payroll System.



The Controller and Accountant General Department has gone through a number of system upgrades to solve the problem of illegal compensations in the payroll system. A decade ago, the payroll system was completely manual and very cumbersome (Yao 2017). This has paved way for people at highly official positions in Ghana Education

Service at that time to misuse their power for personal gains through bribery and corruption to fill the GES payroll system with unqualified pupil teachers.

According to Yao (2017), there have been persistent disregards for the internal control components of the public service departments and this has resulted to massive and gross irregularities in financial management, misappropriation of state resources and consequently various forms of fraudulent activities in the public service accounting including illegal and undeserved compensations. The lack of regards for internal controls has paved way for the manifestation of many weaknesses in monitoring and supervision in the management units of various public institutions and agencies including Ghana Education Service. Little attention has been given to the internal control systems of the Accountant and Controller General Department to check on unauthorized inputs made by employees in charge of inputs. Contrary to the above analogy, Mbuh (2020) assert that the owners or employers can put in "air tight" controls against fraud but that still doesn't guarantee that the menace of unauthorized compensation will be eliminated. However, Mark et al. (2018) are of the view that a good or strong (air tight) control systems can motivate and trigger the creativity of workers to break the controls and carry out illegal and undeserved compensations. In his assessment of the fraud triangle, he believes a percentage of employees actually carry out unauthorized inputs just to prove to themselves or others that it can be done. Putting an "air tight" system of internal control might just serve as a challenge they seek to achieve. However, loud hearings from some teachers in Ghana Education Service (GES) reveal that both teaching and non-teaching staff of GES prefer to ignore the legal process of effecting the appropriate inputs on their payslips. Employees prefer to obtain an indirect contact with Controller and Accountant General (CAGD) Staff to pay a token so as to effect the appropriate changes because



passing through the legal and official process will result to indefinite delays in making their appropriate inputs. Yet the Controller and Accountant General Department is believed to be a competent body to have had strong control systems to put checks on employees work. In recent times, most employees in Ghana Education Service (GES) do not go through the official processes of making inputs such as change of management unit, salary upgrade, payment of arrears, etc. Most workers just try to look for a link with the appropriate worker in Controller and Accountant General Department and pay some token of money for inputs to be effected immediately. Passing through the official process is regarded as tedious and an indefinite process. This is becoming a habit for employees in Ghana Education Service and even other sectors since unnecessary delays and denials of what is rightly due workers persist. A study conducted by Lwanga, Munyambonera and Guloba (2018) to determine the effectiveness of Public payroll decentralization in Uganda revealed the reasons for the decentralization of payroll processes in Uganda. Among many reasons include; miscalculations and errors in doing payroll accounting for workers, undue delays in the payments of salaries of workers due to various persisting deficiencies, undeserved compensations in the centralized government's payroll system, arrears in various categories are accumulated. The decentralization process was done in 2014 to address the various deficiencies encountered with the centralized payroll system. The findings and results of their study revealed that there was massive improvement in performing payroll duties to minimize the deficiencies that were accompanied with the central government payroll system. Their study which involved teachers in the republic of Uganda revealed that teachers at various schools in the country were able to make appropriate corrections regarding their salaries and related compensations.



2.3.3 Undeserved Compensations and Related Ghost Workers Fraud

Nyaledzigbor (2015) buttressed that due to inadequate information about the phenomenon of illegal and undeserved compensations in the public service of the Ghanaian economy, the government in collaboration with various anti-corruption agencies are unable to address this long persistent problem of undeserved and illegal compensations. Notwithstanding this inability of the government but there are various policies and measures implemented to address the issue. This suggests that the government of the republic of Ghana has no adequate knowledge about some illegal activities of controller's staff as well as users of the Electronic Salary Payment System in engaging into undeserved compensations. The government is always into the elimination of ghost workers but not trying to reveal those who kept the ghost workers in the payroll system.

Yao (2017) in his paper stated that beyond every imagination, there are various irregularities regarding the finances of the state account and these irregularities are associated with mainly public sector institutions and agencies. This revelation further disclosed that Ghana as a nation had below average performances in the year 2014 regarding the management of public sector resources (Auditor-general-Report 2014). The Auditor-general-Report (2014) further revealed that there has been no compliance to the ethical practices when it comes to accountability in public finance. These financial irregularities are now been hijacked by the payroll department of Ghana, where unauthorized and undeserved compensations are at their highest peak. A study conducted by Tetteh (2014) supported the above assertion by indicating that the cash irregularities of one billion, nine hundred and sixty five million, fifty two thousand, six hundred and seventy two Ghana cedis (GHC 1,965,052,672.00) was associated



with various miscalculations and misapplications of funds and various fraudulent actions by staff. Most payments and inputs at the Controller and Accountant General Department do not go through the appropriate verification and authorization processes (Asiedu & Deffor 2017). This has led to many financial irregularities in the Public Account. There have been episodes of actions taken by government and appropriate regulatory bodies to curb the menace of payroll fraud and undeserved compensations yet still the menace keep growing at the pace. The problem of undeserved compensations is been backed by employees of Ghana Education Service due to the benefits driven from it. This is because there have been issues of unnecessary delays in making inputs pertaining to the ranks and promotions of personnel in Ghana Education Service at the Department of Accountant and Controller General. The delays are claimed to be backed by the reason that there are dozens of documents regarding inputs at the Controller and Accountant General Department and hence personnel in GES are often ready to pay a bribe for their inputs to be effected in the short period of time.

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 and Moses (2018) 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 covers all over-aged, under-aged workers,

Nyaledzigbor (2015) represented ghost workers as people who do not show up at their



employees who backdate their engagement periods, unqualified and 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. 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. 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 and Joab-peterside (2017) 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. Mohamed and Mohd-sanusi (2018) also represented ghost workers as either names that do not literally exist but are paid which payments are received by others or real people who do not work at their places of engagements yet are compensated with salaries and allowances. The later is regarded as people who use the weaknesses of the system to be compensated illegally. This means such category of workers is enjoying what they have not worked for, and this is often termed as illegal compensations. Such people are also referred to as ghost workers by the above school of thought. This further denotes that ghost workers are not only fictitious names that do not exist and are logged into the payroll system with salaries directed to other people but also, ghost workers encapsulate all categories of workers whose names are legally logged into the payroll system but do not show up for work yet they receive their monthly compensations. Such workers are often



covered up by their immediate superiors to be able to run their personal endeavors and also receive compensations from the coffers of Ghana Education Service.

Mark, Simeon and Ifeanyichukwu (2018) posit that the process of calculating employee emoluments is a very hot area for fraud to occur. This assertion is not different from Neuhauser (2019), who also stated that it seems nearly impossible to keep tracking the payment status of every employee in organizations most especially in institutions where there are thousands of employees. Due to this together with the absence of an efficient internal control system, there have been rooms created by payroll officials of institutions for the manipulation of emoluments. For payroll fraud to occur, there is always a room created by the payroll officials or team to channel their efforts together to manipulate the payroll system in other to add non-existing names to the system, deliberate miscalculations of salaries of workers or inflating the salaries of employees, processing compensations that are not deserving which include undeserved allowances and bonuses. Etc.

Allen and Joab-peterside (2017) 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. There are various impersonations the government of Ghana's payroll system which need to be addressed. This definition suggests that all manner of unauthorized payments in the payroll system are categorized under payroll fraud. Bringing this down to the situation of the Education sector of Ghana in the two Kasena-Nankana Districts of the Upper East Region of Ghana, there are episodes of unauthorized compensations which workers receive by passing through the so called, "the back door". Among such unauthorized compensations include; teachers who are



paid at ranks they are not, teachers who are on further studies without authorized study leave with pay yet receive their full salaries, staff who receive their full monthly salaries but use the instructional periods for their private business activities.

Allen and Joab-peterside (2017) stipulated that there are also real people in the public payroll system who are regarded as ghost workers quite apart from ghost workers who come in the form of non-existent names. With regards to the above assertion, ghost workers can be real workers in public institutions and agencies who receive various fictitious compensations due to the payroll system irregularities and weaknesses. Ghost workers according to the above assertion include workers who receive double compensations using different names for a single work done, workers whose compensations and salaries do not match with their ranks, employees who receive various allowances and bonuses which they do not deserve, employees who are on leave without pay yet they receive their full salaries, employees who have reached the statutory age for compulsory retirement yet their names still appear on the payroll system and employees who are on transfer yet their names continue to appear on their previous management units. The above definition of ghost workers also covers workers who are actually employed, have their names in the payroll system but do not report to work yet receive their salaries. Such a category of ghost workers happen to work with other agencies with a covering from the public agency where they receive payment illegally through electronic payment system with the influence of an insider in authority who knows how to manipulate the system.



Micah & Moses (2018) see ghost workers as employees whose names and other particulars are included in an institution's payroll database. Such people are paid salaries but the salaries are received by other people who are mostly fraudsters. They

further stated that if the $\frac{www.udsspace.uds.edu.gh}{payroll}$ officials delay in deleting payment particulars of workers who are no more part of the active service, there is enough room for ghost workers to be included in the payroll system. For instance, if there are delays in deleting names of workers who have resigned, retired or dead, some payroll officials may engage in the crime of including fictitious names and consequently forge signatures to claim salaries on their behalf. This is yet another level of payroll fraud and has bloated the wage bill of the republic of Ghana.

According to Nkiruka and Thomas (2020), ghost workers who are inserted into the payroll through collusion are usually difficult to expose due to the fact that those who ought to stop the ghost names from entering the payroll are part of the crime. This is not different from Huefner (2017) who also stated that payroll officials who are conversant in manipulating the system collaborate to engage themselves into payroll fraud for selfish gains at the detriment of the public account. This accounts for the reason why the fraud diamond model recognized the capability of the fraudster in doing payroll fraud. There cannot be any payroll fraud without the fraudster being capable.



Oguzierem, Allen and Joab-peterside (2017) in their article, "Ghost Workers Fraud in Primary and Secondary Education Sector in Bayelsa State: Beyond Financial Loss" stated that there is a criterion for stakeholders at various public departments to identify ghost workers related fraud. Among many items here include; a real employee whose particulars are included in an organization's payroll system but have not resumed for work or do not report to his/her purported workplace. Secondly, any staff who has been receiving compensations from the government but his/her employment is not authorized. Thirdly, all engagements or recruitments which are regarded as temporal but employees in that category whose time of engagement has

elapsed yet they continue to receive payments from the public coffers. Also ghost workers covers all persons who have retired from service or people who are dead but their names continue to appear in the payment vouchers at their previous departments or cost centers. Another criterion to identify ghost workers is to identify people whose dates of birth are either under-aged or over-aged. All employees at various management units who occupy positions which they do not qualify to occupy are identified as ghost workers.

2.4 Challenges in Ghana Education Service

According to Adam et al. (2016), the overall Department of Ghana Education Service is regarded as the mandated public department that is instituted by an act of parliament to take charge of the activities of the education system of the country. This department according to the literature above is tasked by the government through the act of parliament to come out with appropriate policies that they can implement to develop and transform the education system of Ghana to match with international standards. The Ghana Education Service is also responsible by law to provide staff of the service with incentives of processional and career advancements to update and upraise themselves with new and current standards.



Nkiruka and Thomas (2020) explained that every developing country has its public sector predominately occupied by teachers and any budget associated with education is largely taken by the bid for teachers. This is not different as it appears clearly in the situation of the Ghanaian economy where the public sector is occupied with the highest percentage of GES staff. The Ghanaian populace has shown an undivided interest in scrutinizing Education in Ghana and hence the management of the teaching

staff in the various schools or management units is receiving far much more attention than before. The management of Education in Ghana has more concern and interest for recruiting and posting the most qualified teachers at where their services could be needed. Management of GES is also concerned with providing both teaching and nonteaching staff with quality and valuable incentives that will motivate them to put up with their best and the kind of incentive that motivates teacher professionalism. Parents however with regards to Ghana Education are mostly concern with the government's ability to provide quality and affordable education for their wards. The various objectives and broad goals of Ghana Education Service may appear very simple to hear and read but many countries are unable to achieve most of those simple objectives.

Sawyer (2019) postulate that countries all over the world have their education sectors

forming the biggest percentage of the public service. In most developing countries, about 20 to 30 percent of the total budget is channeled to financing educational activities (Reinikka & Smith 2004). The educational sector by far in Ghana absorbs the largest proportion of human resources. This human capital ranges from educational administrators, educational supervisors, teachers and professors Quarm et al.(2020). Literature from the above assertion reveals that about 20 to 25 percent of the Ghanaian total population is largely concerned with Education. This percentage of the population is distributed among pupils/learners, key stakeholders and parents, parents and many other stakeholders. Notwithstanding various contributions of the Education Sector in every economy, this same sector according to the literature is bedeviled with pressing challenges and difficulties that are weakening its operations most especially in developing countries such as Ghana. Among the many challenges include; financial challenges, misappropriation and misuse of educational resources,



poor service delivery, very weak management, lack of relevance for the human resources of the sector and many others. Educational corruption is regarded by Asiedu and Deffor (2017) as the process of continuously using a public official position for selfish private gains or benefits. This illegal attitude portrayed by some public officials has made the educational sector to be significantly challenged with regards to the provision of quality educational resources and services. When an employee gives a bribe in other to obtain favor from someone in higher authority or paying money to bribe someone in authority to help you go through a process faster than others especially in situations where there is high bureaucratic processes, then it is a termed as corruption. Corruption involves several and diverse activities which may include; favoring someone, nepotism, clientism, bribery, embezzling public properties and many related others. Corruption covers a wide range of activities, such as: favoritism; nepotism; clientelism; soliciting or extortion of bribes; and embezzlement of public goods, among others.

2.5 Delays in Authorized Termination of Names from the Payroll



Ormiston et al. (2020) revealed that if payroll officials unduly delay in eliminating names of separated staff from the payroll database, this could create various opportunities for undeserved compensations. For instance if the names of teachers who are no more working with Ghana Education Service, teachers who are no more alive have not been terminated from the payroll database, there could be various opportunities for undeserved compensations at the cost centers as well as the office of the Controller and Accountant General Department . Undue delays in deleting names of separated staff are common at the offices located in rural and remote areas which there are no modern technologies for communication. Mbuh (2020) also disclosed that

one reason for delays in the elimination of separated employees from the payroll database is that there are voluminous numbers of public servants across all public departments of the country who are paid from source and hence, handling all matters regarding these large numbers could take some time to effect various changes.

2.6 Effects of Unauthorized Compensations and related Payroll Fraud

Accounting for payroll in the Ghana Public Service is a hot area and also could be the easiest sector where payroll fraud could occur. This is because since the government of Ghana is the largest employment body for the Ghanaian populace, the huge numbers of employees are difficult to manage in the payroll system. If eanyi et al. (2020) buttressed the above by asserting that heads of various public institutions and departments find it nearly impossible to keep tracking the salary statuses of employees under them. This could create various opportunities for payroll fraud to occur. This is not different from Nkiruka and Thomas (2020) who also stated that payroll fraud and related unauthorized compensation are serious and expensive problems which can persist without heed if the appropriate measures are not kept in place to address it. This gives room for unauthorized or illegal compensation by the officers who are tasked with the responsibility of payroll accounting to be engaged in various fraudulent activities in the discharge and performance of their duties. However, this can only happen when proper internal controls are not kept in place. For this reason, payroll fraud coves all manner of illegal activities which include, passing through the weakness of the payroll system to manipulate names to be added to the system, deliberate and arranged over payments, unauthorized payments, ghost workers, and related others.



According to Allen and Joab-peterside (2017), the high prevalence of illegal and undeserved compensations in the various public departments and institutions inflate the cost of human resources and thereby reducing the budget for other capital expenses such as educational infrastructure.

The government of Ghana spends a lot of money in paying public service personnel.

These huge sums of monies could have been used for infrastructural development. At the neglect of infrastructure, huge sums of monies rather go into the payment public service workers among which are ghost workers, People who receive salaries yet do not go to work. Ghost workers have a higher negative effect on national development. If the incidence of ghost workers in the CAGD is tolerated for long, huge sums of government's monies will go into paying people who do not work for the country. The Auditor-General-Report, (2018) revealed that GHS 564m was paid to unearned Public Service Workers. The Auditor-General Department has pointed out gaps in Ghana's payroll system that contributed to over GHS 564 million being paid as unearned salaries. 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. The Audit Service also indicated in their report that they were not also able to substantiate the actual grades of 10,034 employees. These employees according to the report were unable to make available the required documents for the verification processes. Most of the affected staff which GES staff, both teaching and



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non-teaching were the majority stated in their defense that they were not issued with promotion and engagement letters. The report alerts the researcher that Ghana Education Service is the department with the highest number of the prevalence of undeserved compensations. Out of the 522,478 persons believed to be active employees on the payroll, 7,823 remained unaccounted-for at the end of an enumeration exercise to verify employees. The Audit Service's payroll validation first revealed 12,563 unaccounted-for employees before attempts to verify the various employments. The Audit Service Department 2018 tasked the Department of Accountant and Controller General to make sure that those names that were not accounted for are duly deleted from the payroll database and consequently make sure that the various departments retrieve their salaries from them into the public account. It was also noted in the 2028 Auditor General Report that six thousand three hundred and seven (6307) workers within the public service were considered as discontinued employees in the Electronic Salary Voucher. There was no proper configuration of the payroll system at the Department of Accountant and Controller General with automatically handle the elimination of names or records of employees who have reached the statutory age for retirement. This consequently creates an opportunity for undeserved compensations because people who do not work for the country continue to receive their full compensations.



The review of the Auditor General showed that, names of 84 employees who had attained the statutory retirement age and had no contract extension were still on the payroll. To ensure full compliance with the provisions of the Constitution, the Auditor General urged the Controller Accountant General Department to ensure proper configuration of the payroll system to ensure that names of separated staff are timely removed from the system of the CAGD. The report also noted the issues of employees

with questionable academic credentials. The report described 19,203 academic certificates presented during the enumeration exercise as fraudulent. But a total of 7,407 out of the 19,203 suspicious certificates were confirmed to be genuine and 62 found to be faked. Owing to the challenges encountered by the universities in querying our data, they were unable to confirm the outstanding 11,734 certificates.

As part of observations, the Audit Service said there were systemic deficiencies which in their view were partly caused by the weak oversight on the activities of various IPPD Coordinators across the country. It also said there was weak control in the placement of staff on their correct salary grades.

According to the report, Heads of respective MDAs/MMDAs in response to this observation were able to provide evidence in favour of only 43 of the affected employees. The report notes GHS 564,234,442.74 as being the total unearned salaries and Auditor General plans to recover the monies for payment into the Consolidated Fund. Out of the amount, total unearned salaries relating to unaccounted-for employees was GHS 467,634,792.00 and payments to discontinued employees totaling GH¢87,560,632.53. Figure 2.2 presents a summary of the recommended recoveries of monies from unearned salaries.



Summary Chart of Recommended Recoveries GHC 8,661,338.37 GHC 467,634,792.00 Payments to Discontinued Staff Payments to Unaccounted-for Wrongful Salary Arrears payment Above Retirement Age

Figure 2. 4 Summary Chart of Recommended Recoveries (Source: www.modernghana.com)

Auditor-General-Report, (2020) disclosed that though the Ghana Audit Service wish to follow up to make sure that the CAGD terminate the names of employees who were not unaccounted for, but they have delayed in the follow up exercise due to the unusual times that the world has presently found itself which has affected every nation, the outbreak of the novel corona virus pandemic. It is however indicated that the Audit Service will later on follow up to make sure the government of Ghana retrieves in full the amount of GH¢467,634,792 unearned salaries immediately after the spread of the Corona virus is contained.

Oguzierem, Allen and Joab-peterside (2017) also indicated in the findings of their study that the incidence of ghost workers fraud does not only bloat the wage bills in primary and secondary education sector, but it also reduces employment opportunities for qualified applicants. This indicates that larger part of the annual budget goes into the payment of wages and salaries yet so many workers who receive those salaries do



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not work for such salaries. Employing more workers will only continue to shoot up the wage bill of Ghana without any work done for the nation.

Antwi-boasiako (2018) revealed that the government's ability to accomplish the objective of poverty reduction largely depends on the elements of the public expenditure which includes the financing the wage bill. The wage bill of the Ghanaian economy has been on an increasing rate due to large numbers of new entries into the public service. The risen nature of the Ghanaian wage bill can also be traced to the presence of various illegal and undeserved compensations in the public sector of Ghana. Despite the negative impact of large increases in public wages and employment, the occurrences of payroll fraud and related unauthorized payments are too common in the Education Service of Ghana. Ghana's aid dependency is scaling up due to the macroeconomic pressures among which are large public wage bill.

2.7 **Solutions to the Menace of Payroll Fraud**

Mark et al. (2018) claimed that to ensure an effective and efficient internal control system, management of various departments and agencies should segregate the duties of their staff. This makes it uneasy for just one person to start a transaction and complete it all by him or herself. This sort of internal control system can be accomplished only if operations of a job are segregated such that it is highly impossible for just one person to commence, document, endorse, pay cash and close all transactions. This sort of internal controls ensure that errors, mistakes and unethical actions are minimized if not avoided. Since performing duties entails a collective exhibition of skills towards the achievement of one goal and sharing various responsibilities which collectively accomplish an objective, it makes it too difficult for just one staff to engage in any fraudulent act. Again, work done can be



www.udsspace.uds.edu.gh traced to the employee that did the work. If the Controller and Accountant General Department (CAGD) adopts the principle of segregation of duty in their internal control system when making payroll inputs of salaries for staff in Ghana Education Service, no single worker in the CAGD will single handedly initiate any action of unauthorized compensation. It will also however be difficult for all workers working towards making inputs of salaries to come into a long term agreement of indulging themselves in the fraudulent act of unauthorized and illegal compensations.

Banyen (2016) contended that to ensure a proper internal control system, validators in PPD must check that all documentation is present, confirms authorizations signatures against specimen signatures kept on file and carries out other checks. If the input data and documents are in order, the validator passes the documentation to the schedule officer, who enters a final validation in the IPPD system.

Nkuah et al. (2015) posit that all transactions including payroll inputs should require authorization or approval by an appropriate person or body. The limits to these authorizations should be specified. This suggests that the authorization and/or approval of inputs can help reduce the menace of unauthorized compensations.



2.7.1 Head count exercises

Fedelino et al. (2017) believed that the population of the public service department of Ghana was over bloated and hence the World Bank supported the government of Ghana's idea to implement head count exercises in 2015 as a measure to reduce if not eliminate the occurrences of undeserved compensations in the government of Ghana payment systems.

Head count exercises are believed to have two major goals. One goal of the head count exercises is to reduce the number of opportunities for undeserved compensations and consequently eliminate the occurrence of ghost workers fraud (Neuhauser 2019). The other goal of implementing head count exercises is to obtain information and relevant details of all public servants in other to develop a concrete database for managing the information of the human resources within the public service of Ghana. The computerization of the payroll systems in Ghana made the Department of Controller and Accountant General to detect and eliminate a reasonable number of ghost workers and related undeserved compensations in the payroll database, (Kaur & Grover 2018).

Also, the Auditor-General-Report (2015) reported that they conducted a whole nation's exercise of head counting that involved all public servants and this program revealed four hundred and forty one (441) employees as ghost workers and as such those names were deleted from the payroll system. The 441 people who are regarded as ghost workers represented 0.1% of the entire working population of the public service who draw their compensations from the Department of Controller and Accountant General. The CAGD was further tasked with the responsibility to put measures in place to delete the suspected ghost names from the database of the payroll system.



The ministry of Finance (2012) stipulated that there were numerous challenges associated with the annual headcount exercises. Because of this, the government of the republic of Ghana brought about a biometric registration exercise in 2012 that included all public servants in a biometric system. This biometric registration continued to cater for even new entrants. This biometric system exercise is an

electronic exhibition that involves the process of capturing some unique characteristics of all the public servants who receive their salaries at source. In the exercise, the finger prints and electronic passport size pictures of the public servants are captured. This systematic initiated was introduced by the central government to terminate undeserved compensations in the form of impersonations and double salaries in the payroll system. Ministry of Finance (2012) further postulates that 41% of all public servants who are on compulsory retirement in some five regions were unable to participate in the biometric registration exercise and for this reason, they were regarded as ghost workers. This 41% represented a total number of 29,563 people on retirement. After the biometric registration exercise covered the other five regions, more ghost workers came to light and such names were subsequently terminated in the payroll system.

headcount exhibitions conducted by the Ministry of finance and these exercises were based on departments and agencies. For instance, there was collaboration between the ministry of Finance and the ministry of education to conduct headcount exercise to terminate the names of ghost workers in Ghana Education Service. This was done in relation to a similar headcount exercise in 2009 where the ministry of finance collaborated with the ministry of Education to eliminate names of ghost workers and related undeserved compensations. From the collaborative 2009 public servants census, two hundred and eighty two thousand, eight hundred and eighty nine (282,889) employees were enumerated into the public service biometric registration system. Out of this number, eleven thousand three hundred and sixty (11,360) employees were regarded as ghost workers.

Subsequently to the biometric registration exercise in 2012, there were other



<u>www.udsspace.uds.edu.gh</u> Several revelations coming from various scholars including reports from both Auditor General and the ministry of education continue to disclose the presence of undeserved and illegal compensations in the government of Ghana payroll system. This unacceptable practice continues to shoot up the wage bill to an unbearable height for the government of the republic of Ghana. However, according to Assi (2016), various measures including annual headcount exercises and payroll audits have succeeded to reduce the size of the public service to a reasonable number by terminating names of potential ghost workers, there is no need to relax in the fight to totally eradicate the unacceptable incidence of undeserved and illegal compensations in the government of Ghana's payroll system. This is because, the various measures kept in place to cater for the long persisting menace are always accompanied with various weaknesses which people pass through to engage in undeserved compensations in totally different forms apart from how it often appears. This is why Effiong et al. (2017) buttressed in their paper that using only headcount exercises and annual payroll audits cannot be enough weapons to fight the menace of undeserved and illegal compensations in the government of Ghana payroll system. This assertion is justified by a stated fact that as long as there are corrupted officials and employees who continue to create various opportunities for undeserved and illegal compensations taking advantage of the weaknesses of the payroll system, payroll audits and annual headcounts alone are not strong antidotes for fighting the illegal payroll practice.



This however does not imply that there can be no solution to the menace of undeserved and illegal compensations. According to Quarm et al. (2020), to appropriately and permanently address the problem of undeserved compensations in Ghana, key stakeholders, opinion leaders and policy makers need to acquire adequate and relevant information and findings about payroll fraud and related undeserved

compensations. The findings and information would help them to plan and manage payroll fraud more effectively and efficiently. If this is done, the expenses incurred by government in the annual implementation of the headcount exercises will be reduced and the monies could be channeled to different projects.

2.8 Electronic Payment Systems

Effiong et al. (2017) revealed that in a bid to reduce corruption, the Nigerian government in October 2006 implemented the Integrated Payroll and Personnel Information System (IPPIS) because the government of the republic of Nigeria perceived that the IPPIS will be able to record all relevant details of all public servants, make available an efficient database system for the public service that can facilitate the termination of ghost workers and related payroll fraud from the payroll system, assist in storing payroll accounting information easily without stress. The IPPIS among many purposes was also perceived by the Nigerian government to be able to facilitate human resource planning, bring up to date the records of personnel for the purpose of preparing pension processes and also assist in making efficient remuneration. This is also in line with the Department of Controller and Accountant General of Ghana which came up with an approach of digitizing pay vouchers at various cost centers which Ghana Education Service calls the cost centers Management units.



Just like the Nigerian government in the preceding literature, the Ghana Central Government (2010) in the Public Expenditure and Financial Accountability 2009 indicated that the accounting for payroll is done at the CAGD by the use of a transverse computerized payroll system which is technically known as IPPD2. The

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IPPD2 is a payroll system that provides a direct linkage between the personnel database and database for payroll accounting. Though linking personnel information to the payroll database is very beneficial in payroll accounting, however the system did not create a link between post database which can efficiently manage new entries, facilitate transfers and promotions in the personnel database. One major disadvantage of this system is that if there are changes in the databases of both personnel and payroll, an audit trail will be left and this permits only selected access dependent upon function. Both the personnel database and payroll database are encrypted such that all employees in the public service who receive their salaries from source are rolled into the IPPD2. For the purpose of avoiding duplication of entries, the IPPD2 system often provide proper fields to check duplicate entries. The IPPD2 system provides a far reaching authorization method of including new appointments.

Murla et al. (2020) again assert that performing the payroll responsibility with pen, ledgers and calculators considering the large numbers of public servants is highly impossible. This explains the tedious effort needed to do payroll process manually. And it also describes the pressures mounted on payroll staff a decade ago who were involved in manual payroll processing.



Most departments and organizations all over the world for a decade now have confidently relied on Information and Communication Technology (ICT) which made them to handle their operations in more reliable, effective and efficient way. The return mechanized voucher system which was used by the Ghana government in doing payroll accounting for public servants was accompanied with too many unbearable challenges. And this has obliged the government of Ghana as well as many other African nations in their effort to find solutions to payroll fraud to progress from the Return Mechanized System to the use of ICT – based payroll systems. With

the ICT-based Payrolling, salaries for public servants at various departments are sent to their prospective banks directly from the consolidated fund and other sources. The center for introducing the Electronic Payment Voucher System was on Electronic Fund Transfer, Electronic Cash, Electronic Billing, Automated Teller Machines, debit and credit cards respectively, (Idike & Okechukwu 2018). The accounting concept and processes have gone through a thorough transition from the manual accounting system to the computerized accounting systems. Various courses are now available at the tertiary institutions for accounts officers to upgrade themselves with the current trend of keeping accounting information in ICT-based systems. Notwithstanding the benefits associated with the introduction of computerized accounting systems, the decision as to which system to adopt is based on the nature of an organization, how complex an organization is, the nature of transactions incurred in an organization. The kind of system to adopt by an organization also largely depends on the threats and benefits associated with adopting either system. Also system upgrade comes with many disadvantages for instance, in 2015 the Controller and Accountant General Department upgraded their system from IPPD I to IPPD II and this according to them made them to lose relevant data of some employees in various departments including data of GES staff who were owe some legacy arrears between the years of 2012 and 2016 (Auditor-general-Report 2017). This data loss has led to many demonstrations and strike actions by various teacher unions and movements to get their salary arrears paid. Notwithstanding the challenges associated with system upgrade most especially those challenges of which the Controller and Accountant General Department encounted in 2015 in upgrading their system from IPPD I to IPPD II, an Information System approach to payroll processes such as the IPPD II ensures speed and accuracy in calculating employees' emoluments and hence was adapted by the Department of



www.udsspace.uds.edu.gh the Controller and Accountant General. The target of every organization in the world is to digitize their processes to ensure speed and accuracy. This era is affectionately called the "information era" because of the impact of computerized systems in almost every activity. The use of Communication and Information Technological systems in most firms within various industries made such firms enjoy monopoly and comfortable lead in their operations.

2.9 Monthly Validation of GES staff for Payment of Salaries

The introduction and implementation of the Electronic Salary Payment Voucher by the government of Ghana has led to many challenges in usage at its inception stage. Many valid staff in Ghana Education Service could not get their salaries over a period of time because of the unfamiliarity associated with the use of the ESPV system (Peace, 2018). This is because most heads of the various management units in Ghana Education Service happen to fall within the category of the so called, "Born Before Computer" and hence have no basic IT skills no matter the amount of training given them. This led to the wrong validations that subsequently led to the loss of salaries of some employees over a period of time. Every month, the Controller and Accountant General Department sends a list of staff to be paid for the heads of department to approve of the given salary. They are also to check to make sure that all those on the list provided are people who are assigned to that management unit. The heads go online through the link http://www.espv.com which the Controller and Accountant General Department sends. In Ghana Education Service, heads of the various management units now double as validators because they validate their staff for payment. Validators in every month mostly in the middle of the months enter their username which is normally their STAFF ID and password normally to have access to



www.udsspace.uds.edu.gh their nominal row for validation. The head validates by APPROVING (clicking on the GREEN BUTTON). To validate WITH ISSUES, the validators clicks on (blue button) and to validate as an UNKNOWN staff, s/he clicks on (red button)

APPROVE: A valid staff is approved for payment by checking the circle in front of his/her name. And this simply means the head of the department is saying controller should pay him/her for a good job done.

WITH ISSUES: When the "with issues" button is chosen, the head of department is saying that the staff has to be paid but there are some issues with the amount being paid to him/her. Here, the validator will be given a brief summary of details of that staff's salary to ascertain what the issues are.

After confirming facts and figures, the head can APPROVE, DISCONTINUE PAYMENT, UNKNOWN OR chooses PAYMENT WITH ISSUES again.

This will take the validator to a screen where he or she will choose basic issues like, underpayment, or over-payments. It is believed that response to over-payment will be faster than under payment.

DISCONTINUE SALARY: The head can choose to discontinue an employee's salary for reasons which include, retirement, vacation of post, dismissal, study leave without pay, deceased among others. There is a column to write other reasons too.

UNKNOWN: A staff is unknown when he/she is not physically present or posted to that management unit or cost center. A recently transferred staff from Chiana SHS to



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Navrongo SHS will be declared unknown at Chiana SHS. It is the responsibility of the head of Navrongo SHS to add that staff a missing staff.

The validator does not need to go to Controller and Accountant General Department in Accra to have certain validation issues resolved. Change of validators, password issues among others are all done at the regional directorates. The validators can get helped as soon as possible. Refusing to validate due to any reason will mean you the validator and the other staff will not have any salary. The monthly validation exercises are meant to help keep the Payroll system Clean.

2.10 Benefits of the E-SPV over the manual Payment system

There are so many advantages that the Electronic Salaries Payment System have over the manual payment system. More to the advantages discussed, it is also very imperative to state that in this present era, every activity in the world is going through a process of digitization. Hence payroll processes and charges should not be left manually handled. The following are therefore the advantages of the Digitized payroll system over the manual payroll system.



1. The electronic payroll system helps to eliminate payroll bloating. The manual system of payroll processing was associated with bloating the wage bill with illegal and undeserved compensations together with related payroll fraudulent actions. Due to this observation, the Department of Controller and Accountant General with the collaboration of the government introduced the digitized payment system as its bid to eliminate the occurrences of undeserved compensations. With the introduction of the digitized system of salary payments, twenty six thousand (26000) employees within the public service

had their salaries suspended by the Ministry of Finance. This was associated with Auditor-General-Report (2017). However, the digitized salary payments made room for thorough cross examination of salaries, authentication and verification at the various cost centers before salaries are paid to workers.

- 2. The electronic salary payment system brought about an improvement in the delivery of services when doing payroll. This electronic system ensured that services are easy and faster than before. The use of I.T related tools in the management of organizational processes naturally makes things faster and easier, (Peace 2018). With the manual salaries payment system, there was an issue of undue delays of payments almost every month, however the digitized system has made salaries processing faster and easier. Before the digitized method of paying salaries was introduced, the transfer of payment vouchers from the Department of the Controller and Accountant General was a difficult and delaying process, (Chaflekar et al. 2018). However, with the Electronic system, e-vouchers are sent directly to various cost centers for authentication and validation before payments. The amounts paid to the public servants most especially in the Education Sector are considered to be small and not motivating enough, (Adam et al., 2016). And if these small amounts are consequently delayed, it brings anxiety to the public servant.
- 3. With the electronic salary payment system, there is assurance of security in the delivery of services by the Department of the Controller and Accountant General (Peace 2018). Unlike the manual system which was tagged with so many loop holes for fraudsters to withdraw illegally from the payroll system, the electronic system works like the Automated Teller Machines (ATM)



 $\underline{www.udsspace.uds.edu.gh}$ because the system gives each user of the system a unique identity to enable him or her access the system (Idike & Okechukwu 2018).

- 4. The electronic payroll system also helps to reduce payroll management cost. The cost of payroll management associated with the manual system was so high because the system was very much associated with clear evidence of undeserved compensations in the form of ghost workers fraud (Peace 2018). The wage bill associated with the manual system was over-bloated and this consequently could have led to a very high wage bill beyond the amount in the public account (Kaninda 2018). Unlike the manual system of payment, the electronic salary payment system gives heads of the various cost centers, directors of Education and Human Resource Managers at the various GES offices the opportunities to monitor and control the information relating to staff.
- The electronic system ensures that employees in the public service have easier accessibility to the system (Idike & Okechukwu 2018). A digitized system ensures easier access to information and so the Electronic Payment System gives employees in the Education Sector and other departments within the public service easy access to their payroll information since they can access their payslips and other related payroll information. Access to payroll information can be at anytime and in any place where there is internet.

2.11 Conclusion

Illegal and unauthorized compensations in the departments of the public service of developing countries are the major areas on which literature was adequately reviewed. The government of the republic of Ghana through the Auditor General and



Department of Controller and Accountant General, in recent times has introduced many measures including the Electronic Payment System to help contain the increment in number of opportunities for undeserved and illegal compensations in the public sector departments. This is in accordance with Tetteh (2017) who indicated that the government of the republic of Ghana has made several efforts to decrease the various opportunities that make the menace of undeserved compensations to continue ravaging the public purse. However, According to Nyaledzigbor (2015), there is no positive outcome in the persisting efforts of the government of the republic to contain the ravaging activities of the menace of undeserved compensations. The government effort to eliminate the problem of undeserved compensations did not materialize because there is limited knowledge about the phenomenon at hand. The researcher conducted this study to add to the limited literature in other that the gap in literature pertaining to undeserved compensations in the management units of the entire public sector will be bridged. The study adapted the fraud theory module as a framework for the basis of the research. This theory which was propounded by Cressey in 1950, Wolfe and Hermanson (2004) helped the researcher to understand the nature of fraud in public departments and the features fraud manifest in public agencies.



www.udsspace.uds.edu.gh CHAPTER THREE

RESEARCH METHOD

3.0 Introduction

Beat (2017) put into record that Undeserved and unauthorized compensations create loop holes for the draining of public finance thereby limiting the resources of nations for development. Reports reaching the public reveal that the government of the republic of Ghana continues to compensate people with huge salaries yet such people do not work for the nation (Manurung & Hardika 2019). Separated staff including people who have retired, are dead, have resigned, etc. continue to receive salaries from the public account (Huefner 2017). Much money from the Government of Ghana tax revenue goes into the payment of workers' salaries yet many workers who receive salaries through the GoG payroll system do not deserve them (Neuhauser 2019). This research is purposed to add to the little literature available to payroll perpetuators in order to fill the literature gap on how public servants' compensations affect the wage bill or the public account. The study also brings to the notice of key stakeholders the loses the country encounter because of payroll frauds.

Chapter three (3) of this research presents the nature of the study, the methodology employed in the survey for the data collection, the instrumentation and the tools used for the data analysis.

3.1 Research Design and Rationale

Considering the nature of the research, quantitative methods were employed to ascertain the factors that provide the opportunities for undeserved compensations to



occur in the cost centers $\frac{www.udsspace.uds.edu.gh}{of GES}$ yet the continuous use of the E-SPV and payroll audits/head counts in GES are meant to eradicate the occurrences of undeserved compensations. The correlation between the menace of undeserved compensations and variables such as the strength of staff in management units, the rank of staff in the management units were also examined. Preference was given to the quantitative method because it is a statistical tool very useful for determining the correlation between various variables in a study. This assertion is obtained from literature presented by (Taylor and Worseley 2008). Also, according to Agarwal (2009), to determine the relationship between variables using a sampled data, the quantitative research method can be useful than any other method. The importance of using the quantitative method in surveys cannot be underestimated. This research also adapted the quasi-experimental design in the selection of various validators and users of the E-SPV system at the cost centers of the Ghana Education Service within the two Kasena-Nankana Districts of the Upper East Region of Ghana. The quasiexperimental design permits the researcher to choose respondents for the survey. It is not a requirement in the quasi-experimental design to assign cases to comparison groups. This type of design was mainly used only within the GES where data was collected from the respondents within the cost centers of Ghana Education Service through a sample survey and the correlation/relationships between the variables were determined. The above information was obtained from literature presented by (Taylor and Worseley 2008). The variables which are considered necessary for this study include the opportunities for undeserved compensations which is 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. The term Opportunity for undeserved compensations refers to all the activities that provide a



platform for workers to receive compensations they do not deserve. Such events include undeserved responsibility allowances, death of staff, staff resignations, unauthorized vacation of posts and staff dismissals or end of contract, (Neuhauser 2019). Undeserved compensations are those occurrences that make names on the GoG payroll system to be compensated unduly.

Reinikka and Smith (2018) also referred unearned salaries to compensations given to people who are no more working within the public service. In other to appropriately describe the relationship between the variables which were stated in the previous section, the researcher employed descriptive statistics, regression and correction analysis.

3.2 Population

Both Teaching and non-teaching employees who are assigned 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. According to data from the Municipal Education Office of the Kasena-Nankana Municipality, there are a total of 160 management units with each having one E-SPV validator. Allen (2015) defined management units as the smallest sections of a public department, government agency or cost centers where the costs pertaining to payroll are charged. Management units in Ghana Education Service are simply the cost centers which basically include the various schools which are made up of various and varied numbers of both teaching and non-teaching staff. Among the many staff in each management unit is one computer literate who is assigned official user of the E-SPV system.



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Lambert (2014) stated that for the purpose of budget implementation and monitoring in the management units, the budgets pertaining to the salaries of workers are allocated to smaller sections of an entire department called cost centers.

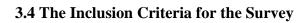
3.3 Sampling

The selection process of participants for the study included the appropriate use of the non-probability quota sampling method to include from the various cost centers for the survey. Gauthier (2012) 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. Preference was also given to the non-probability quota sampling technique because the researcher lacked access to the entire sampling frame of the population of the various cost centers in Ghana Education Service within the two Kasena-Nankana Districts. One major advantage that made the researcher to prefer the non-probability sampling technique to other techniques is that according to Gauthier (2012), when using the non-probability sampling technique, it is not necessary to get the exact number of respondents that would match the proportion of the entire population which include all the cost centers in Ghana Education Service. 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 non-probability 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. According to Agarwal (2009), the Purposive sampling technique is also a form of the non-probability quota sampling technique. This is also in line with Reinikka and Smith (2004) who explained that purposive sampling method allows a



researcher to include key respondents and departments in a survey for the purpose of indebt study. Findings from this study are limited to the cost centers of Ghana Education Service but does not extend to the entire public servants who are also validated monthly in other cost centers on the controller and accountant general's E-SPV. This was a constraint which is regarded as a limitation of the study. The power analysis approach was adapted to ascertain a suitable number of respondents who are basically users of the E-SPV system in thetwo Kasena-Nankana Districts who will be selected for the survey. Based on literature prevailing from Bray and Dean (2006), one hundred and two (102) respondents are obtained as the sample size for the survey. The 102 was obtained based on the alpha (α -value) of .05 and statistical power level of .6 which helps to arrive at the medium effect size of r = .2. Based on literature retrieved from taylor and Worsley (2008), if the alpha (α -value) of .05 and the power level of .6 are considered, then 160 respondents will be needed to detect a small effect size of r = .2 and hence 102 participants are needed to detect a large effect size of r = .05.

The sample size, 102 participants from the various management units within the two Kasena-Nankana Districts was based on the above conventional statistic values.





There was an inclusion criterion employed by the researcher in other to include participants for the survey. The procedure of including participants for this survey was that only teaching and non-teaching staff from management units in Ghana Education Service within the two Kasena-Nankana Districts of the Upper East Region of Ghana who receive salaries from the Controller and Accountant General Department were included. These participants must also meet the requirement of

being users of the Electronic Salaries Payment Voucher system. However, many validators in various cost centers at other Public institutions such as Health, Agriculture, NADMO, the Security Services, etc. who receive their salaries from the Controller and Accountant General Department as well as public institutions who prepare their own payrolls were not part of the population for this survey.

3.5 The Instrumentation for the Survey

The instrumentation for this survey involves the selection of a preferred instrument which best suits the study. The PETS was preferred to other instruments for the data collection in this survey. According to Savedoff (2008), the PETS is a tracking tool used by researchers to track how public funds flow from the central government to various public institutions. Graaf (2005) added that the flow of funds from the public account to various public institutions can be tracked by using the PETS. Since management units of Ghana Education Service are public institutions where the flow of public funds reaches for the compensations of staff in Service, it was appropriate to employ it for the data collection. Because of significance of using Public Expenditure Tracking Survey (PETS), Sundet (2007) stated that the World Bank has been using the PETS in most of their surveys to track the expenses and flow of funds of most African countries. The PETS has also been widely used by most scholars and researchers most especially fraud fighters to verify the compensations of various public servants who withdraw their salaries and wages from the public account. There are other public tracking instruments which scholars could consider regarding tracking the movement of government resources to the various cost centers and government agencies. For instance Graaf (2006) identified that the Staff Tracking Survey is an indispensible instrument used by scholars to track the compensations



www.udsspace.uds.edu.gh such as wages and salaries of workers. This instrument is also used in Uganda to track the amount of undeserved and unauthorized compensations in the respective public institutions. The STS can also be used to track the actual wages and salaries that public servants receive from the central government through the various cost centers. Notwithstanding the numerous advantages of using the PETS for the collection of data in pursuit of various surveys, Graaf (2006) cautioned that the instrument involves a very careful design before it can be appropriately implemented. There are various steps involved in designing an appropriate Public Expenditure Tracking Survey which include; problem definition, stating of objectives and actors, selecting and designing a sample strategy, designing a questionnaire, implementation or data collection, data analysis, presentation of findings and finally publication of findings and recommendations.

Considering various steps needed to make the PETS a workable instrument in data collection for surveys, the researcher designed a questionnaire to capture the following variables for the survey: the staff strength of the various cost centers, whether or not staff work at cost centers where they are validated, separated staff in GES management units, the rank of employees at the various cost centers and undeserved allowances.



3.6 Validity of the Instrument used for the Survey

Validity of an instrument in relations to literature from Graaf (2005) tests whether or not the research is measuring what it is expected to measure. In the process of employing the Survey for Public Expenditure Tracking, validation of the content is very paramount. Validation of the content refers to the process that measures the percentage of coverage of all attributes of the phenomenon. Graaf (2005) postulated

www.udsspace.uds.edu.gh that because the PETS has been used extensively by various researchers for variety of surveys that track the flow of public resources, it implies the PETS is a suitable instrument that is validated for ascertaining the level of undeserved compensations in the cost centers of various public service department and institutions.

The procedure adapted for the data collection also assured and motivated the various users of the Electronic Salary Payment Voucher System in the two Kasena-Nankana Districts to provide accurate and reliable information which improved the validity of the survey. Reinikka and Smith (2018) stipulates that respondents to a questionnaire are often careful in providing information. If there is less fear of query for providing information as well as a high level of anonymity, the confidence level of respondents is boosted to provide accurate and genuine information.

3.7 The Data Analysis Process

In the data analysis procedure, the data obtained from the survey was first entered into the SPSS system. A review process commenced after entering the data into the system. This review process helped the researcher to free the data from errors. The review process was done based on literature coming from Reinikka and Smith (2004) who elaborated that when data is entered into the SPSS system, it is very necessary to review the data and correct some errors and mistakes to make sure that the data entered is accurate. Descriptive analysis, correction and regression analysis with scatter plots were the tools used to ascertain the relationship between the variables, undeserved compensations, the strength of staff at the cost centers, the ranks of staff at the cost centers, payroll audits and the E-SPV System. According to Taylor and Worseloy (2008), there are correlation coefficients and these figures are very important because they help researchers to ascertain the nature and strength of the



www.udsspace.uds.edu.gh relationships that exists between the variables. By this literature revelation, there is a correlation scale that ranges from -1 to +1. This scale signifies whether the relationship between variables is positive or negative. The scale also helps to determine the strength of negative or positive relationship between variables. However, if there is a correlation coefficient of .00, it signifies that there no relationship between the variables under study. Agarwal (2009) also explained that statistically, if P-value is less than .05, this supports the rejection of the null hypothesis because there is a high confidence that there is a genuine relationship between the variables under study. Hence the coefficient of the p-value determines the acceptance or rejection of the null hypothesis.

3.8 Ethical Considerations

The ethical considerations regarding this study are addressed as follows. The researcher only proceeded to collect data after the thesis supervisor gave approval for the exercise to commence. Also respondents are given the freedom to withdraw from the survey as they so wish at any time. Finally, any information that was obtained from respondents for this survey will only be used for research purposes and nothing more than that.

3.9 Conclusion

The quasi-experimental survey made use of the non-probability quota sampling for the selection of users of the E-SPV system in the cost centers of Ghana Education Service for the survey. Non-probability sampling method was adapted for this study because the sample frame of the cost centers in the Ghana Education Service was



<u>www.udsspace.uds.edu.gh</u> inaccessible to the researcher. Data analysis was done by using the SPSS system to collect review and present the data. Finally, correlation and regression analysis with scatter plots were tools used to determine the relationship between the variables for the study.



www.udsspace.uds.edu.gh CHAPTER FOUR

RESEARCH FINDINGS, RESULTS AND DISCUSSION

4.0 Introduction

This research is purported to assess the impact of Electronic Pay Voucher Validation of staff and Payroll Audit in the elimination of deserved compensations in the cost centers of the Ghana Education Service, the pay roll system and how this system has effectively minimized if not totally eradicated the menace of unauthorized compensations, fraudsters, double payment and agents within the system who were taking advantage of the manual system available before the introduction of the computerize system, and to examine the loops in the new Electronic Pay Voucher system and find ways and measures to improve upon the new system thereby improving the internal control of the CAGD.

In finding answers to the problem, questionnaires were designed to get solutions to the problem. The responses from respondents were analyzed in consideration of the research objectives and questions in the below sections.



4.1 Data Analysis

The purpose for the data analysis is to determine the correlation/relationship that exists between undeserved compensations in the cost centers of GES and other variables which include; the strength of staff at the cost centers, the ranks of staff at the cost centers. The main predictors of undeserved compensations were payroll audits and E-SPV system. Data analysis was done by queuing the data obtained from the respondents into the Statistical Package for Social Sciences. The questions

 $\underline{www.udsspace.uds.edu.gh}$ included in the questionnaire were pre-arranged in a sequential order to make it easy for future recovery of data. In other to determine the relationships between the variables, regression and correlation analysis with scatter plots were used.

4.2 E-SPV and Payroll Audits

4.2.1 The Electronic Salary Payment Voucher as tool for eliminating undeserved compensations

The first objective of this study is to find out how the ESPV relates to undeserved compensations in the management units of Ghana Education Service within the two Kasena-Nankana Districts. The researcher embarked on this quest because of the realization that the major goal of introducing the Electronic Salary Payment Voucher System is to eliminate the opportunities of illegal and undeserved compensations in the Government of Ghana's payroll database, (Shukla & Bhandari, 2019). Table 4.1 presents responses from the respondents concerning the effect of ESPV validation and payroll audit in the elimination of illegal compensations.



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Table 4. 1 E-SPV System helps to eliminate or reduce undeserved and illegal compensations in GES Management Units

Decision	Frequency	Percentage	Cumulative
			Percentage
SD	25	24.51	24.5
D	20	19.61	44.1
N	5	4.90	49.0
A	41	40.20	89.2
SA	11	10.78	100.0
Total	102	44.3	
Decision	Agreed	50.9	

(Where SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree and SA = Strongly Agree)

4.5.2 Payroll Audits as tool for eliminating undeserved compensations

Payroll audits were introduced to handle the issue of payroll fraud and related undeserved compensations. As a result, the CAGD annually verify the employees of each management unit to make sure that staff reflect a true and fair view of the employee status of various public agencies, (Nkiruka & Thomas, 2020). This is why the second objective of the study is to find out how the payroll audits relate to undeserved compensations in the management units of Ghana Education Service within the two Kasena-Nankana Districts. Table 4.2 presents responses from the respondents concerning the effect of Payroll Audits/Head count exercises in the elimination of illegal compensations.



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Table 4. 2 Payroll audits help to eliminate or reduce undeserved and illegal compensations in GES

	Frequency	Percentage	Cumulative
			Percentage
SD	5	4.90	4.9
D	3	2.90	7.8
N	2	1.96	9.8
A	60	58.82	68.6
SA	32	31.37	100.0
Total	102	44.3	
Decision	Agreed	90.1	

(Where SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree and SA = Strongly Agree)

From Tables 4.1 and 4.2, it is revealed that respondents agreed that Electronic Pay Voucher Validation of staff and Payroll audits help a lot in the elimination of Undeserved and illegal compensations. Over the years, the Audit Service of Ghana in their annual reports has revealed consistently compensations/payment irregularities in the form of undeserved and illegal earnings associated with the various cost centers of the public sector. According to the Auditor-General-Report, (2017), over one thousand nine hundred and thirty seven (1937) people associated with unearned salaries were eliminated from the government payroll system. This resulted to a savings of seven hundred and eighty one thousand, five hundred and eighty five Ghana cedis (GH¢781,585). The Auditor General Department revealed that in 2011, non-existing workers were compensated with huge amounts of salaries which led to the lost of large public finances. These persisting revelations of the audit service point



www.udsspace.uds.edu.gh to the fact that the Ghana payroll system has a lot of weaknesses which faces so many threats from payroll fraudsters. Hence the introduction of annual payroll audits in the form of head counts and the Electronic Salary Payment Voucher have helped a lot in the elimination of undeserved compensations and related ghost workers fraud. However, users of the Electronic Salary Payment Voucher indicated in this survey that the system has loop holes through which the menace of undeserved compensations can occur.

4.6 Regression Model for the Impact of ESPV and Payroll Audits in the **Elimination of Undeserved Compensations**

Table 4. 3 Model Summary

Model	R	R	Adjusted R	Std. Error of	Statistics
		Square	Square	the Estimate	
					Sig.
1	4208	102	202	1.70222	000
1	439 ^a	.193	.202	1.70233	.000



 Table 4. 4 Coefficients^a
 www.udsspace.uds.edu.gh

Model Unstandardized Standardized Sig. Coefficients Coefficients В Std. Error Beta (Constant) 4.450 .400 .000 Payroll audits/Head -.347 .001 -.439 .127 **Electronic Salary** Payment Voucher -.200 -.307 .154 .049 System

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 Figure 4.6, 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. The 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 4.9 presented that R = -.439 which implies a week negative correlation between the dependent variable, undeserved compensations and the predictor, E-SPV System. From Table 4.9 (Module summary), the sig. value is .000 which is less than the P-value, .05. This supports the rejection of the null hypothesis ($H\theta$) stated that "there is



no evidence of significant relationship between undeserved compensations and that of Electronic Salary Payment Voucher.

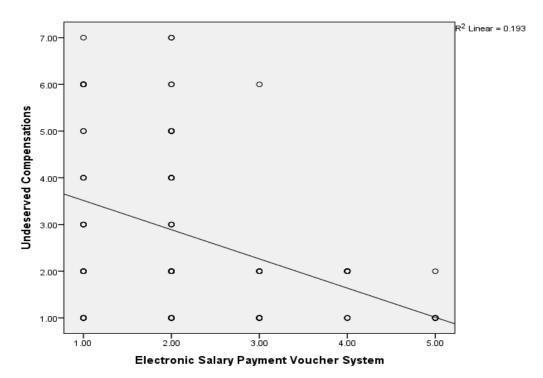


Figure 4. 1 Scatter Plot with a line of Regression for the Predictor, E-SPV

Another major specific objective for conducting this research was to determine the kind of relationship that exists between undeserved compensations and payroll audits/Head counts. The nature of the line of regression in Figure 4.7 implies an inverse relationship between undeserved compensations and payroll audits/head counts. This means that as more and more CAGD performs payroll audits in the management units of Ghana Education Service, the less the occurrence of undeserved compensations. Also the sig. value .000 which is less than the P-value (.000 < P - value), it supports the rejection of the null hypothesis (H0) "there is no evidence of significant relationship between undeserved compensations and payroll audits." Table 4.10 also presents the coefficients of the independent variables as (E-SPV = -.307 and Payroll audits = -.439). The negative coefficients of the independent variables show that there is a negative relationship between undeserved compensations and the predictors.



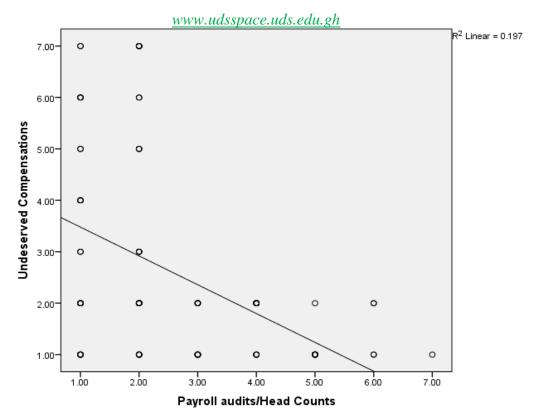


Figure 4. 2 Line of Regression for the Predictor, Payroll Audits

4.7 Regression Module

From the data analyzed, the independent variables include (a) E-SPV and (b) Payroll Audits. And the dependent variable is undeserved compensations. Also, from Table 4.10, the coefficients of the independent variables are in the "**B**" column, hence (E-SPV =-.307 and Payroll audits = -.439). The constant or slope of the regression equation is 4.450. To present the regression equation,



Undeserved Compensations = 4.450 - 0.307(E-SPV)) - 0.439(Payroll audits))

4.8 The relationship between the staff strength of cost centers and undeserved compensations

4.8.1 Strength of staff in the various management units

The third objective of this study is find out how the strength of staff in the various cost centers of GES in the two Kasena-Nankana Districts affect the plague of undeserved compensations. Adam et al., (2016) explained that the employees in teaching profession are the biggest fraction of employees within the public service in almost every under-developed nation. This is not different as in the case of Ghanaian economy where the public sector is occupied with the highest percentage of GES staff, (Auditor-general-Report, 2017). In recent times, managing teaching staff within the Ghana Education Service is getting greater attention because educational delivery in Ghana has been under various transformations and study over a decade. Best management of teachers is getting greater concentration over the years, (Lambert, 2014). This is because most unsatisfied teachers in Ghana Education Service voice out in the media through demonstrations and strike actions to express their dissatisfaction of how they are treated when it comes to promotions and incremental points. Lwanga et al., (2018) further pointed out that the education sector of every developing country has the greatest number of employees in the public service. Every developing country channels between 20% to 30% of its total budget to finance the activities of the education sector. Also a greater percentage of a country's educated workforce is often exhausted by the education sector. Considering literature revealing large numbers of staff within the education sectors of developing countries, this prompts the researcher to find out from the respondents about the strength of staff at the various management units.



Attempting to verify the strength of staff in the various management units, most the respondents strongly agreed that they have staff strength in their cost centers. This suggests that there is no too much work load on the various staff in the management units of Ghana Education Service in the two Kasena-Nankana Districts of the Upper East Region. Figure 4.2 presents a picture of data from the respondents.

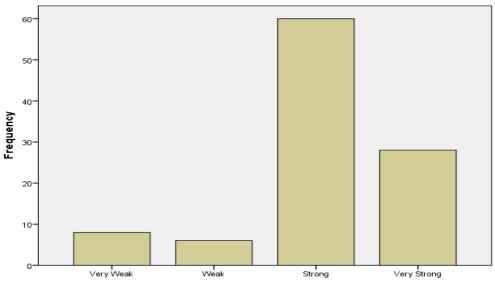


Figure 4.1 Staff Strength at the various cost Center

Figure 4. 3 Staff Strength at the various cost Center



 $\frac{www.udsspace.uds.edu.gh}{\text{Correlation for Undeserved Compensations in the Cost}}$ Centers and both Staff Strength and Responsibility Allowances

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



Table 4.5 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 $r_s = 0.809$ with a sig. pvalue of .000 which is less than the α -value 0.05. $r_s = 0.809$ 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 that shows 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.

Table 4.5 also 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 $r_s = 0.935$ 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.



www.udsspace.uds.edu.gh 4.9 The Relationship between Ranks of Employees in GES-KNM/KNWD and

Undeserved Extra Responsibility Allowances

4.9.1 Rank of staff in Ghana Education Service

The last objective of the study is to find out how the rank of staff in GES-KNM/KNWD affects undeserved compensations in the cost centers. Most of the respondents indicated that they were at the rank of PS which is Principal Superintendent. Principal Superintendent is a rank in Ghana Education Service which workers at that rank have to obtain a relevant degree program to be at that rank. Since most of the respondents stated that they are at the rank of PS, this suggests that most of the employees in the two Kasena-Nankana Districts of the Upper East Region of Ghana under the Ghana Education Service are Undergrad Degree holders. However very few Respondents are at ranks above PS. This suggests that it is often an uneasy task for a teaching staff to move from the rank of PS to a higher rank. Figure 4.1 presents the results of the ranks of respondents.



Rank of the Respondents Senior Sup II Senior Sup II Principal Sup Assitant Director II Deputy Director Missing

Figure 4. 4 Rank of staff in Ghana Education Service

Table 4. 6 Correlation between Rank of staff and the Opportunities for Undeserved Compensations

	Opportunities	Rank of the
	for Undeserved	Respondents
	Compensations	
Opportunities for	1.000	0.57
Undeserved		
Compensations		
Rank of the	0.57	1.000
Respondents		
Opportunities for		0.000
Undeserved		
Compensations		
Rank of the	0.000	
Respondents		
Opportunities for	102	102
Undeserved		
Compensations		
Rank of the	102	102
Respondents		
	Undeserved Compensations Rank of the Respondents Opportunities for Undeserved Compensations Rank of the Respondents Opportunities for Undeserved Compensations Rank of the Respondents Opportunities for Undeserved Compensations Rank of the	for Undeserved Compensations Opportunities for 1.000 Undeserved Compensations Rank of the 0.57 Respondents Opportunities for Undeserved Compensations Rank of the 0.000 Respondents Opportunities for 102 Undeserved Compensations Rank of the 102



In a quest to determine the correlation between the rank of staff and the opportunities for undeserved compensations in the management units of Ghana Education Service, there is a 0.000 significance level indicated in the model summary. Considering a confidence level (α -Value) of 0.05 (95%) and the Sig. power value of .0000. Since the significant power value is less than the α -Value, it implies that the independent variable, rank of staff is a significant predictor of the reliant variable, opportunities for undeserved compensations. Using the Pearson's Correlation module, there is a 0.57 correlation between the rank of staff and the opportunities for undeserved compensations. The correlation coefficient of 0.57 depicts a positive correlation between the rank of staff and the opportunities for undeserved compensations and this means that the higher the rank of staff in GES, the more the opportunities for undeserved compensations in the cost centers of Ghana Education Service. Also the α-Value of 0.000 which is less than the power value of .05 means that there is proof of a considerable relationship involving the rank of staff and the opportunities for undeserved compensations. Due to the proof of this relationship, we do not accept the null hypothesis.





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. The Ghana Audit Service could also not substantiate the actual grades of 10,034 employees. The victims in this category could make available the required documents for the verification exercises. Victims mostly staff of Ghana

Education Service stated in their defense that documents regarding their promotions were not issued to them as at the time they were upgraded. This suggests that Ghana Education Service is the department with the most prevailing opportunities for undeserved and illegal compensations. Table 4.7 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 4. 7 Opportunities for Undeserved Compensations

	Frequency	Percent	Number of staff in that
			category
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	24	10.4	60
Approval			
Total	102	44.3	398
System	128	55.7	
Total	230	100.0	



Considering the frequencies of the opportunities for unauthorized Compensations in the Management units of Ghana Education Service, Staff on further studies without approval creates the highest opportunity through which illegal and undeserved

Compensations prevail in Ghana Education Service. Staff on further studies without approval refers to when a staff is on regular further studies at a tertiary institution without any permission in the form of study leave with pay. This often creates an opportunity for undeserved Compensations in the said management units. Undeserved Compensations occur when the management unit continues to validate the staff on regular further studies without approval for payment. This suggests that the staff on illegal regular studies continue to receive his/her monthly salary despise his or her absence at work. This is yet another occasion for undeserved and illegal compensations at the cost centers of Ghana Education Service. Manurung & Hardika, (2019) posit that employees who are regarded as ghost personnel are people who are compensated by been attached to a public department but they do not show up for work. 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, (Allen & Joab-peterside, 2017).

are several teachers who are on study leave without approval yet they receive their salaries through validation at the various management units as confirmed by the respondents. This is often an internal arrangement between the immediate supervisor of the staff and the staff to enable him or her to vacate post for further studies. The staff on further studies continuously receives his/her salary without work. This act



According to the literature suggests payroll fraud since the worker receives salary for

Study leave without authorization is a very high opportunity through which illegal

Compensations can exist in the management units of Ghana Education Service. There

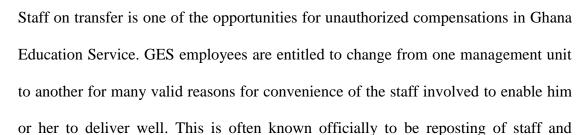
no work done over the period of time of his study. Responses confirmed that 60 staff

in the two Districts were on further studies without permission yet are validated and

paid. Vacation of post is yet another opportunity for unauthorized compensations in

that 60 staff at their various management units vacated from their post for over a period of time without any permission yet they receive their salaries through validation. Some staff of Ghana Education Service happen to have extra jobs to do at various private institutions and organizations. They therefore seized the available opportunities at their management units to make arrangements for covering so that they can be able to avail themselves at the private institutions for extra income.

Leave without pay is yet another opportunity for illegal Compensations. Leave without pay refers to a package given to GES staff to enable them absent themselves from work over a period of time without salaries. To some departments and organizations, leave without pay is equivalent to resignation. However, GES allows their staff to enjoy leave without pay. Leave without pay is however an opportunity for illegal Compensations in some of the management units of Ghana Education Service within the two selected Districts of Upper East Region. This is because 19 respondents indicated that leave without pay is an opportunity in the various management units for Undeserved Compensations. Respondents further revealed that there are 40 staff who are on leave without pay yet their salaries keep coming for validation at the various management units. This is however traceable to the fact that many staff have approval for leave without pay and yet still have their names left undeleted in the payroll system. Hence validators and the staff in question have the opportunity to validate the staff on leave without pay for payment.





www.udsspace.uds.edu.gh workers in Ghana Education Service often call it transfer of a staff. Both teaching and non-teaching employees in GES often go on transfer for various reasons. There are disciplinary transfers of staff in Ghana Education Service. There are also personally requested transfers. The Electronic Salary Payment Voucher validation of staff allows the management units involved (Thus the receiving management unit and the transferring management unit) to validate the staff on transfer. 15 of the respondents attested that there are 137 workers who are working in other management units yet are validated for payment at the respondents' management unit. However, a staff is only validated at the cost center in which he/she is working.

Staff on retirement presents another opportunity for deserved Compensations in Ghana Education Service. Staff on retirement comes in two forms; staff who have reached the maximum number of years on active service which is 60 years and staff who have understated their ages. Many staff in various management units are on retirement yet their salaries keep coming for validation. The payroll system does not make a provision for automatic deleting of names of staff on retirement. Hence that becomes an opportunity for illegal compensations at various management units. Also some employees in GES have understated their ages and hence have actually reached the age of retirement but on paper not up to 60 years. This is evident in the responses from the Respondents which indicated that 9 respondents revealed that there are 69 employees in their management units who are on retirement yet still receive their full salaries because they are validated for payment.

Resignation of a staff is one major opportunity through which undeserved compensations occur. When a staff resigns from Ghana Education Service, his or her name is supposed to be deleted with immediate effect. Staff in Ghana Education Service resign for various reasons. Some of the various are traceable to poor condition



of service in GES. Some reasons are also tracing to new and better job opportunities elsewhere in other organizations private or public. Employees who have resigned from GES create an opportunity for illegal compensations because names often take relatively a long period of time to be deleted from the payroll system. Hence, management unit heads in collaboration with the resigned staff can keep validating them for some time until their names are deleted. The budget of the government of Ghana indirectly covers staff who have resigned from GES. This is yet any form of payroll fraud.

4.11 Employees in other management units

In the quest to reveal various ways through which people illegally withdraw from the public purse within Ghana Education Service, responses from the survey indicated that employees in new management units whose salaries keep going to their previous management units for validation can create an opportunity for unauthorized compensation. This is because, most of the respondents strongly agreed that there are staff who are in other management units yet their salaries are validated in their cost centers. It is however noteworthy at this point that Electronic Pay Vouchers' validators within all sectors of the public service are entrusted with a percentage of the public purse to protect. So any deliberate action or inaction from validators can create loop holes for the menace of undeserved compensation to persist.

The researcher having dig out the fact that staff in other management units are been validated in their previous management units, it was also expedient to find out the total number of people who are working in other management units yet have their salaries been validated in their previous management units. Out of the 102 respondents, 100 respondents revealed 489 staff in the two Kasena-Nankana Districts



who are working in other management units yet their salaries are validated in their previous management units.

Having Realised that so many staff in the Ghana Education Service work at cost centers they are not validated for payment, it was also relevant to find out how long it takes for transfers to be processed by the Department of the Controller and Accountant General so as to have workers validation to be done at cost centers they are currently working with. Responses emanating from the survey revealed that it takes a relatively longer period of time and stress for Ghana Education Service staff to process their transfers at the Department of the Controller and Accountant General. All the 102 users of the Electronic Salary Payment System selected for the survey indicated that it takes more than a year for the Department of the Controller and Accountant General to transfer names of separated staff. If the employees of Ghana Education Service are validated at the cost centers where they are working, there will be very little opportunity for staff to engage themselves in unauthorized and undeserved compensations. However, it takes a very longer time period for names of separated staff to be transferred or deleted.



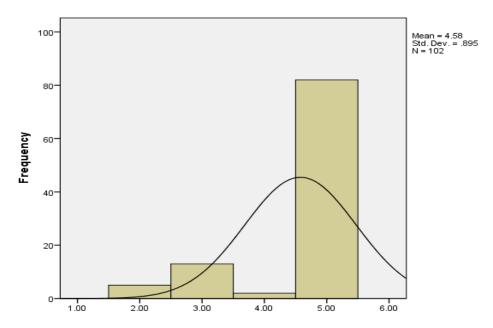


Figure 4. 5 Time Period for Separated Staff to be deleted

4.12 Unprocessed Transfers in the Management Units of GES

Having verified that there are people in different cost centers who are validated at respondents cost centers, it was also relevant to find out from respondents the number of staff who have gone on transfer for over six (6) months and are no more working in their management units yet they are validated and paid. 15 respondents at various management units indicated that 137 workers have gone on transfer for over six (6) months yet their salaries are validated and paid at their previous stations. This presents the probability that 137 respondents create the opportunity for unauthorized compensations since their work is not verified at where they are validated for payment. This confirms that fact that there are many employees within the Ghana Education Service who are validated at cost centers they are not working. Hence also confirms the analogy by respondents that it takes more than one (1) for separated staff to be transferred or deleted.





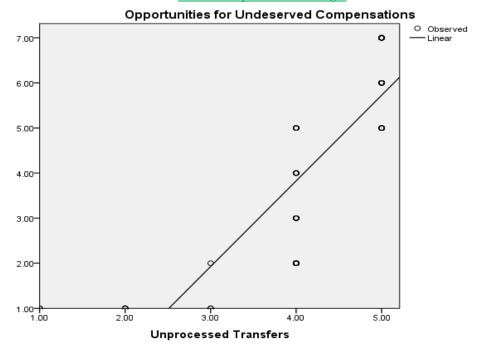


Figure 4. 6 Scatter plot for the Variables of the Regression module

Figure 4.4 shows that the data variables, unprocessed (Dependent) transfers and opportunities for undeserved compensations (dependent) are linear. Therefore the data here was analyzed using a linear regression module. This is because there are no outliers in the scatter plot. Table 4.5 presents the module summary of the analysis.



Table 4. 8 Model Summary for the Linear Regression Analysis

Equation	Model Summary				
•	R	R Square	Adjusted	Std. Error	Sig.
			R Square	of the	
				Estimate	
Linear	.868	.637	.749	874.779	.000

Dependent Variable: Opportunities for Undeserved Compensations

The independent variable is Unprocessed Transfers

Table 4.8 provides the R and R-square values. The R value .868 signifies the correlation coefficient between the variables, Unprocessed transfers and the dependent variable opportunities for undeserved compensations. The R-value, .868 denotes a strong positive relationship/correlation between the variables. The connectivity between the variables is positive because the coefficient .868 is a positive figure. This denotes that when number of unprocessed transfers in the management units of GES increases, the number of opportunities for undeserved compensations also increases. This supports the responses from the survey that there are 137 employees whose transfers are not processed and hence these employees create the opportunities for unauthorized compensations since their work is not verified at where they are validated for payment.

4.13 Extra Allowances in the Ghana Education Service

Allowances enjoyed by GES workers as part of their condition of service were also tested to verify whether they are loop holes for the menace of undeserved compensations to continue or not. The researcher attempting to find out the kind of allowances enjoyed by the staff of the GES presented three forms of allowance to the respondents which include; extra responsibility allowances, transfer grants and car & fuel allowances. All the 102 respondents indicated that extra responsibility allowance is a category of allowances that most employees within the Ghana Education Service enjoy. 1 response indicated that some staff of the Ghana Education Service enjoy car and fuel allowance and 3 responses stated that some staff of the GES enjoy transfer grants. Since 100% of the responses revealed by indication that most workers in GES enjoy extra responsibility allowances, it is obvious that if allowances enjoyed by staff



of GES can create the opportunity for illegal and undeserved compensations, then the extra responsibility allowance will create the highest opportunity for the menace to continue to occur. It was also important to find out from the users of the Electronic Payment System whether the system contains people who receive extra responsibility allowances yet they do not perform any extra responsibility at their various management units.67 Respondents agreed that there are people in their management units who receive extra responsibility for no single extra duty performed. Table 4.6 presents the data from respondents. Extra responsibility allowances are allowances enjoyed by the staff of Ghana Education Service for performing any other duty assigned to the staff by the head other than the official duties for which the staff was appointed. Since there are many staff at various management units in GES at the two Kasena-Nankana Districts of the Upper East Region who receive extra responsibility allowance as indicated by the respondents, it was also very necessary to find out from the 67 respondents the number of staff they know by verification in the E-SPV that they receive extra responsibility allowances yet they do not perform any extra duty in addition to their official duties. The 67 respondents indicated again that they know by verification that 123 workers at their various management units receive various extra responsibility allowances yet they are not assigned to perform any extra responsibility. The validators further indicated that the 123 workers have supportive documents regarding their exhibition of various extra responsibilities at their previous cost centers. However, as they were reposted to different cost centers, they were not assigned extra responsibilities because those extra responsibilities are already performed by other employees who are entitled to the extra responsibility allowances. Validators were further probed on the questionnaire to find out from them whether the management of Ghana Education Service take the responsibility to stop people who



are no more performing extra responsibilities from enjoying extra responsibility allowance. All the 67 validators strongly disagreed that the management of GES performs that role of stopping people who do not perform extra responsibilities from enjoying the said allowances.

Extra responsibility allowances provide an unauthorized platform for people within the Ghana Education Service to withdraw illegally from the public purse.

Table 4. 9 Undeserved Allowances are enjoyed by some Staff in GES

	Frequency	Percent	Decision	Std
				Deviation
SD	9	3.9		
D	11	4.8		
N	15	6.5		
A	35	15.2		1.26632
SA	32	13.9	Agreed	
Total	102	44.3		



4.14 Normality Test using Skewness and Kurtosis

According to Agarwal, (2009), the normality of a distribution can be tested by using skewness and kurtosis. The criterion for determining the normality of distributions using the skewness and kurtosis is that the values of the skewness and kurtosis must be zero. The skewness and kurtosis values for the data relating to the number of opportunities, undeserved Extra Responsibility Allowance, and the staff strength of the cost centers in GES are presented in Table 4.10.

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Table 4. 10 Results of Skewness and Kurtosis

	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Staff Strength at cost Centers	.533	.239	218	.474
Undeserved extra responsibility allowances	.788	.239	408	.474
Opportunities for Undeserved Compensations	.513	.324	398	.474

From Table 4.10, the skewness and standard Errors (SE)for the opportunities for undeserved compensations are 0.513 and 0.324 respectively. Skewness and Standard Error for Undeserved responsibility allowances are 0.788 and 0.239 respectively. Skewness and SE for staff strength of cost centers are 0.533, and 0.239 respectively. All the skew values for the variables are positive which indicate that the frequency scores were clustered at the left hand side of the distribution. This implies the data for the distribution was not symmetrical. Also the since the skew values > 0, this means the distributions is not symmetrical and therefore not normal.



Table 4.10 also presents the Kurtosis values and the standard errors (SE) for the opportunities for undeserved compensation which include -.398 and 0.474 respectively. Kurtosis and SE for Undeserved Responsibility Allowances include - 0.408 and 0.474 respectively and the staff strength of cost centers are -0.219 and 0.474 respectively. The Kurtosis values for all the variables are negative and this indicate a flat and light tailed distribution which violated the normality rule. Also, the Kurtosis values which are all < 0 means the distribution was flat and therefore not normal

The results show that the distribution of the data relating to opportunities for undeserved compensations, data for undeserved compensations and data for staff strength of management units were not normal. As a result of the distribution not been normal, data analysis was done using the Spearson's correlation coefficient which is the statistical testing tool used for testing data that is not normal.

4.15 Source of receiving monthly Compensations

All the 102 responses indicated that the employees in the various management units receive their salaries from source which is the Accountant and Controller General Department. It is noteworthy that the Accountant and Controller General is been given the mandate by the Financial Administrative Act, 2003 (Act 654) to disburse monies to public departments and agencies mostly in the form of compensations on the government of Ghana's behalf.

4.16 Effects of Illegal and Unauthorized Compensations in the cost centers of **GES**

Considering the many occurrences of illegal and undeserved compensations in the cost centers of Ghana Education Service, there was the need to verify from the respondents their view of the effects of such prevailing menace in the Ghana Education Service. When people are paid for no work done, it has a lot of consequences of the department, the public purse and even on the staff of the management unit. Attempting to find out from the respondents for this survey on the effects of illegal compensations in Ghana Education Service, Figure 4.5 presents that Low Morale to work is the most impactful effect of illegal and undeserved compensations in the management units of GES.



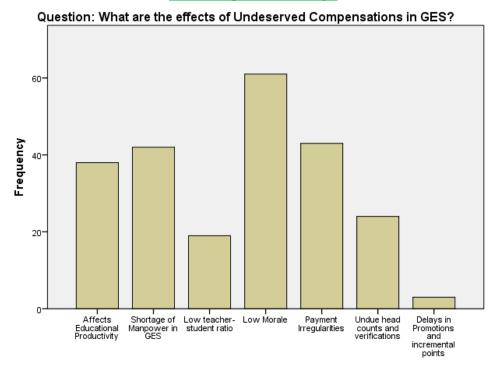


Figure 4. 7 Effects of Illegal/Undeserved Compensations in Ghana Education Service

From Table 4.5, it is been revealed that the most impactful effect of illegal/undeserved compensations in Ghana Education Service is that GES workers have low morale towards work which results to poor delivery at work which further results to the poor student performances as well as poor teacher delivery at the cost centers of GES. The revelation supports a research conducted by Oguzierem, U. Allen, Sofiri Joab-Peterside & Okodudu, A. S (2017) on Ghost Workers Fraud in Primary and Secondary Education Sector in Bayelsa State which also disclosed that 265 responses out of 616 respondents strongly agreed that one major effect of illegal compensations is that Workers are not motivated to any reasonable level for their work. From the data for their survey, 241 out of 616 respondents agreed that illegal compensations subject workers to unnecessary routine verifications. This is similar to the 24 respondents representing 10.4% who indicated that undeserved and illegal compensations subject workers to undue head counts and verification. Among others



<u>www.udsspace.uds.edu.gh</u> pressing effects of undeserved compensations according to the respondents include; Irregularities in salaries payments, Inconsistencies in the payment of monthly salaries, create accumulation of salary arrears, Delays in promotions and incremental points, Threats of industrial actions. Etc.

4.17 Conclusion

The regression module shows that the independent variables, E-SPV and Payroll Audits both related negatively with the dependent variable, undeserved compensations. Thus Electronic Salary Payment Voucher (E-SPV) and Payroll audits/headcounts help in the elimination of undeserved compensations and related payroll fraud.



www.udsspace.uds.edu.gh CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.0 Introduction

The research was initiated with an intention of Assessing the Impact of E-SPV and Payroll Audits in the elimination of Unauthorized Compensations in GES – KNM/KNWD. The study was very important to be conducted because in recent times, the Auditor General Department continues to reveal in their annual reports occurrences of undeserved compensations in the public service of Ghana most especially in the Education Sector of Ghana. According to the Auditor-General-Report (2016), about one thousand two hundred (1200) workers were not appropriately placed at their actual ranks. The report stated that the most affected department is the Ghana Education Service.

Having reviewed diverse literature and analyzed the data collected from respondents pertaining to the study in the previous chapters, Chapter Five (5) is intended to present a clear summary for the study, come out with a conclusion on the study and then make appropriate recommendations that will influence policy makers and stakeholders to adapt to better strategies of protecting the public purse of the republic of Ghana.

5.1 Acceptance and Rejection of the Hypotheses

Gauthier (2012) elaborated on a rule for the rejection of null hypothesis or the acceptance of alternative hypothesis in data analysis. The article revealed that if the



sig. value is less than the p-value in the data analysis, the null hypothesis should be rejected. Based on this literature, the hypotheses surrounding this study are therefore considered in this section for acceptance or rejection.

- 1. H0. There is no relationship between the E-SPV system and undeserved compensations in GES.
 - *H1.* There is significant relation between the E-SPV system and undeserved compensations.

From Table 4.3 (Module summary), the sig. value is .000 which is less than the P-value, .05 supports the rejection of the null hypothesis (H0) which states that "there is no evidence of significant relationship between undeserved compensations and Electronic Salary Payment Voucher. Table 4.3 also presented that R = -.439 which implies a week negative correlation between the dependent variable, undeserved compensations and the predictor, E-SPV System.

- **2.** *H0***.** There is no relationship between payroll audits and undeserved compensations in GES.
 - H1. There is a relationship between payroll audits and undeserved compensations.



Table 4.4 presented a sig. value of .000 which is less than the P-value, .05 (.000 < P – value). This also supports the rejection of the null hypothesis (H0) which states, "there is no evidence of significant relationship between undeserved compensations and payroll audits." Table 4.4 also presents the coefficients of the independent variable as (Payroll audits = -.439). The negative coefficient of the independent variable shows that there is a negative relationship between undeserved compensations and the predictor, payroll audits.

3. H0. There is no www.udsspace.uds.edu.gh significant relationship between staff strength in GES-KNM/KNWD and the opportunities for undeserved compensations.

H1. There is significant relationship between staff strength in GES-KNM/KNWD and the opportunities for undeserved compensations.

From Table 4.4, the sig. value p = .000 is less than the confidence level .05. This denotes an evidence available to 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.

4. H0. There is no significant relationship between staff ranks in GES-KNM/KNWD and the opportunities for undeserved compensations.

H1. There is significant relationship between staff ranks in GES-KNM/KNWD and the opportunities for undeserved compensations.

From Table 4.5, there is a 0.000 significance level indicated in the model summary. Considering a confidence level (\alpha-Value) of 0.05 (95\%) and the Sig. power value of .0000. Since the significant power value is less than the α -Value, it implies that the independent variable, rank of staff is a significant predictor of the reliant variable, opportunities for undeserved compensations. Using the Spearson's Correlation module, there is a 0.57 correlation between the rank of staff and the opportunities for undeserved compensations. The correlation coefficient of 0.57 depicts a positive correlation between the rank of staff and the opportunities for undeserved compensations and this means that the higher the rank of respondents, the more the opportunities for undeserved compensations in the cost centers of Ghana Education Service.



5.2 Interpretation of the Findings

Findings emanating from this research were based on the results of the study in Chapter four (4) as well as the relevant literature in Chapter two (2). The study revealed a strong positive relationship between opportunities for unauthorized compensations and the rank of employees in GES (Tables 4.5). The internal controls of Ghana Education Service are weak that they create loop holes for both teaching and non-teaching staff. Hence as employees rise to higher ranks, they got the opportunities to enjoy compensations they do not deserve such as extra responsibility and fuel allowances. This asserts that, as staff in GES rise to higher ranks, the opportunities for undeserved compensations also increase in the cost centers of Ghana Education Service. This assertion is in line with the fraud triangle theory as indicated by Yao (2017), 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.

Payment Voucher system and deserved compensations in the cost centers of Ghana Education Service. 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 4.5). This negative correlation between the above mentioned 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

One major finding of the survey is the relationship between the Electronic Salary



eliminating of public payroll bloating/ghost names which in this, is regarded as one of

 $\underline{www.udsspace.uds.edu.gh}$ the components of undeserved compensations. This finding was in line with the findings of the relationship established between Payroll Audits and the opportunities for undeserved compensations. It was established from Table 4.4 (Spearman's Correlation Coefficient) that there is an inverse relationship between payroll audits and undeserved compensations in GES – KNM/KNWD. This negative relationship means that the more the payroll audits in the cost centers of Ghana Education Service, the less the opportunities for undeserved compensations. Payroll audits help the Audit Service and the CAGD to detect fraud, investigate fraud, deter and prevent fraud in the management units of Ghana Education Service. Payroll audits also help to expose victims of payroll fraud for prosecution and this result to fraud mitigation in the cost centers of Ghana Education Service. This is in line with the theory of fraud management life cycle which stipulates that if the eight (8) components of the cycle are effectively managed in the various organizations, there would very tin opportunity for fraud to occur. This is to say, the effective management of components such as fraud detection, fraud analysis and investigations, prosecution of fraudsters to deter others in the cost centers of GES, fraud mitigation and policy making to eliminate the opportunities for undeserved compensations will collectively lead to the elimination of undeserved compensations in the cost centers of Ghana Education Service.

5.3 Summary

Auditor General Reports over the years continue to reveal many lapses and 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, (Auditor-General-Report 2018). The highlights of these gaps

www.udsspace.uds.edu.gh 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. The Audit Service also indicated in their report that they were not also able to substantiate the actual grades of 10,034 employees. These employees according to the report were unable to make available the required documents for the verification processes. Most of the affected staff which GES employees were the majority stated in their defense that they were not issued with promotion and engagement letters. The report alerts the researcher that Ghana Education Service is the department with the highest number of the prevalence of undeserved compensations. 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. The study therefore is summarized as follows.



Most of the respondents selected for the survey were teaching staff at the rank of Principal Superintendents who have also undergone various undergraduate programs to attain that rank in the Ghana Education Service. There were various opportunities for unauthorized payments and unearned salaries in the two Kasena-Nankana Districts of the Upper East Region of Ghana. However, the most common opportunity for

unearned compensations according to the respondents is staff on further studies without approval. The study further revealed 78 staff in the two Kasena-Nankana Districts who reached the statutory age of retirement yet their names keep coming for validation in their prospective management units. This attempts to tempt heads of management units to favor those staff by validating them for payment. Also 15 respondents revealed 137 employees in the two Kasena-Nankana Districts who are working in other management units yet their salaries are validated in their previous management units. This subsequently suggests to the management of Ghana Education Service and Department of the Accountant and Controller General that 137 staff within the two Kasena-Nankana Districts who happen to be validated for payment at cost centers where they are not working create opportunities for illegal compensations in the Ghana Education Service. It was also revealed from the study that it takes more than a year for the Department of the Accountant and Controller General to transfer names of reposted staff as well as staff regarded as separated. The delays in transferring separated staff to their present management units cause staff to be validated at where they are not working. If the staff of Ghana Education Service are validated at the cost centers where they are working, there will be very little opportunity for heads of various cost centers to engage themselves in unauthorized compensations knowingly or unknowingly. One of the areas through which staffs in Ghana Education Service receive undeserved compensations is the package of Extra Responsibility Allowances enjoyed by teachers in the service. According to the survey, 302 people at the various management units receive various extra responsibility allowances yet they are not assigned to perform any extra responsibilities at their present management units.



www.udsspace.uds.edu.gh5.4 Recommended Measures to improve payroll management

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 effected on employees' compensations.

Another appropriate recommendation resulting from the survey is that Ghana Education Service and the Department of Controller and Accountant General should develop a proper internal control system. A proper internal control system should be able to check whether or not workers are performing based on the rules and standards and also whether or not the data entered into the system is correct. An internal control system is used to make sure that all records and accounting transactions are presented to match with the standards and regulations. Yao (2017) explained that the internal controls of the public sector organizations are is challenged with so many weaknesses thereby subjecting public resources to mismanagement and misappropriation. A well designed internal control system for employees compensations should ensure that staff compensations are calculated accurately with error minimization. The Department of the Accountant and Controller General should anticipate a system that



www.udsspace.uds.edu.gh makes maximum use of the technology of this era which is Information Technology Systems.

The Controller and Accountant General Department should develop a new system to handle staff allowances and arrears in such a way that it automates the payment of staff whose arrears and allowance are long overdue for payment.

Another major recommended measure to improve payroll management is to update the registry of staff records for Ghana Education Service. Controller and Accountant General Department in collaboration with Ghana Education Service should develop a cost center payroll and GES roster based system.

5.4.1 Recommendations for Action

According to Kojo (2017), the government of the republic of Ghana in its effort of eliminating the occurrences of undeserved compensations has introduced various policies that can curb the ever growing menace, however, the occurrence of undeserved and illegal compensations in the government of Ghana payroll system persistently grow in different forms at various cost centers. With the results emanating from this study, the weaknesses of the payroll system and the weaknesses of the Electronic Salary validation before Payment system are exposed. Also the results of the study reveal the other hidden forms by which payroll fraud occurs. Payroll fraud does not come any longer in the form of fictitious names often known as ghost workers. Below are therefore some recommended actions to take in other to overcome the challenges revealed by the findings of this study;

1. Effective monitoring and supervision should be facilitated in the various cost centers where payroll related costs are charged. This will ensure that management unit heads who validate their staff monthly do not engage in



unauthorized validations that will result into undeserved compensations which consequently results into wage bill bloating. In line with the above recommendation, Awuni (2016) discussed in his thesis that there is amendment of the rules and regulations pertaining to the financial Administration Act 2003 and the Financial Administration Act 2004.

- 2. The Department of the Controller and Accountant General should further facilitate effective monitoring and supervision by further breaking down larger cost centers into smaller sections. This supports the finding from the study that, larger cost centers create loop holes in the payroll system for undeserved compensations to prevail.
- The CAGD should design and facilitate a periodic system audit to for the E-SPV in other to get rid of all opportunities in the system for undeserved compensations to occur.

5.5 Implications for Social Change

Considering the severity of the menace of undeserved compensations and the impacts it has on the public wage bill as well as the sectored performances most especially in the Education Section of Ghana, it is imperative to consider the implications of the problem on social change taking into consideration of the data gathered from respondents.

Unauthorized and undeserved compensations in Ghana Education Service deny both teaching and non-teaching staff of GES the value of civic performances. This is in support of Neuhauser, (2019), who stated that illegal compensations in the payroll system rob the citizenry of the value of their civil services to the state. Compensations given to staff of GES who do not deserve them could have been used to finance other



 $\frac{www.udsspace.uds.edu.gh}{\text{projects and activities that can boast up the Education Sector. The social change}}$ implication of this study to the validators of the Electronic Salary Payment System as well as payroll audit team is that the study has the advantage of making available the exposure of the weaknesses associated with the E-SPVS and this exposure could help policy makers regarding payroll to improve upon the measures to address the issue of undeserved compensations. This is why Abayomi, (2020) buttressed that if illegal compensations are reduced in the payroll systems, vacancies will be created at various sectors make available employment opportunities to the entire populace. This in turn will reduce the rate of unemployment and thus poverty level in Ghana.

In conclusion, the researcher intends to publish the results of this study to make the findings available to Ghana Education Service, Finance and Accounts Division as well as the Department of the Controller and Accountant. These institutions could use the results and findings of the study to enhance the nation's payroll systems for the purpose of saving public funds for developing other sectors.

5.7 Conclusion

Considering the results and findings of the study conducted, it can be concluded that as the staff of Ghana Education Service continue to rise to higher ranks in the service, the more the opportunities for them to enjoy undeserved compensations. This analogy is obtained from the direct relationship between the opportunities for undeserved compensations and ranks of respondents. From the results of the study, there was also a genuine positive relationship between the size of the various cost centers and the opportunities for undeserved compensations. This shows that as the staff at the cost centers continue to increase in their number, the opportunities of for undeserved compensations continues to increase. An inverse relationship however was revealed

 $\underline{www.udsspace.uds.edu.gh}$ between undeserved compensations and both payroll audits and the Electronic Salaries Payment validation system. This implies that as more and more cost centers continue to utilize the E-SPVS to authenticate salaries of staff, the less the opportunities of undeserved compensations. Also, the more the payroll audits mounted on the various cost centers in the Education Sector, the less the opportunities of undeserved compensations.



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www.udsspace.uds.edu.gh **APPENDICES**

APPENDICE A: QUESTIONNAIRE

UNIVERSITY FOR DEVELOPMENT STUDIES SCHOOL OF BUSINESS AND LAW **QUESTIONNAIRE**

Introduction

Dear respondent,

This is a questionnaire which is intended to gather data on a study titled, Assessing the Effect Payroll Audit in the elimination of Unauthorized Compensations in the Management units of GES, KNM and KNWM: This study is being conducted by a researcher, who is a staff of GES and a Master of Commerce student in the School of Business and Law at the University for Development Studies. Data to be gathered will be used for academic purposes and therefore the information to be provided by participants would be kept confidential.

SECTION A

MAN	AGEMENT UNIT IN GES
1.	Rank of respondent
2.	Please identify the Opportunities for Illegal Compensations in your
	Management
	[] Retirement
	[] Vacation of Post
	[] Deceased
	[] Resignation
	[] Study Leave without Pay
	[] Employee on Transfer
SECT	TION B
INFO	RMATION FROM GES STAFF OF SAMPLED MANAGEMENT UNITS
FOR T	THE SURVEY
1.	What is the staff strength of your management unit?
	[] Very weak [] Weak [] Strong [] Very Strong
2.	Select the source of funding for salaries of staff in your managementUnit?
	[] Government of Ghana funds [] Internally Generated funds
	[]Statutory funds

Opportunities for Undeserved Compensations in the Cost Centers

Question	SD	D	N	Α	SA
3. There is at least one employee in your management unit who is retired yet names keep coming to your EPV for validation					
4. There is at least one staff in your management unit who is dead yet their names keep coming to our EPV					



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5. There is or are employees in your management						
unit who are on study leave without approval/pay						
yet receive their salaries by validation.						
6. There is or are employees in your management						
unit who have been dismissed yet receive their						
salaries by validation						
salaries by varidation						
7. There is or are employees in your management						
unit who have resigned yet receive their salaries by						
validation						
8. There is or are employees in your management						
unit who are not at post for over 6 months without						
permission yet receive their salaries by validation						
F						
0. The control of the						
9. There are employees who receive extra						
responsibility allowances in your management unit						
yet do not perform any extra responsibility						
unit yet their salaries keep coming? [2. How many employees in your manager approval/pay yet receive their salaries by 3. How many employees on CAGD payro yet their salaries keep coming for validate. 4. How many employees on CAGD payro dismissed in yet their salaries keep coming. 5. How many employees on CAGD payro report for work for over 6 months with coming for validation? [SECTION C INFORMATION OF OTHER EMOLUMENT KNWD RECEIVE APART FROM THEIR S. 1. Do employees receive other emoluments [] Yes [] No 2. If yes, select the additional benefits or all their condition of service in your manage [] Transfer grants	validati ill resign ion?[yroll in ng for va oll in y out pern ITS GE ALARI in addit	ion[ned in] your alidatio our m nission S STA ES ion to	your man on?[anage n yet t	mana agem ement their N KN salari	unit salarie	ent unit nit are do not es keep
[] Extra Responsibility Allowances						
[] Fuel Allowances						
[] Other benefits/allowances (please s	state)					



SECTION D

INFORMATION ON SEPERATED STAFF IN GES, KNM & KNWD

¹U.	KIVL	ATION ON SEPERATED STAFF IN GES, KNW & KNWD
1.	Ho	w long does it take to delete names of a separated staff from the payroll
	[] Less than one month
	[Between 1 to 3 months
	[Between 4 to 6 months
	[Between 7 months to 1 year

		www.ud	lsspace.ua	ls.edu.gh
[] More than 1	year	_	

SECTION E

IMPACT OF UNAUTHORIZED COMPENSATIONS ON IRREGULAR PAYMENT OF SALARIES OF GES STAFF IN KNM. 1. What are the effects of Illegal Compensations on irregular payment of salaring payment of salaring payment.

•	what are the effects of megal Compensations on irregular payment of salaries
	of GES staff in KNM.
	[] Affects education productivity.
	[] Affects student's performance in external examinations.
	[] Affects available subject teachers in schools.
	[] Leads to shortage of teaching manpower.
	[] Affects available student-teacher ratio.
	[] Leads to low morale
	Effects of Undeserved Compensations on Employees

Effects of Undeserved Compensations on Employees Statement SD D N A		Λ	SA	
Statement	SD	1	^	JA
1. There are delays and irregularities in payment of salaries to workers				
2. Workers are subjected to unnecessary routine verification				
3. Workers are subjected to unnecessary routine verification				
4. Workers do not sometimes receive their full salaries				
5. Promotions and increments points are delayed or denied				
6. There are threats of industrial actions by unions due to irregular salaries				
7. Salary arrears of GES staff in your district are accumulated				

SECTION F: PAYROLL AUDITS

Statement	SD	D	N	Α	SA
1. Payroll audits help to eliminate or reduce the incidence of unauthorized compensations					
2. The incidence of Illegal compensations results to Poor service delivery in GES-KNM					



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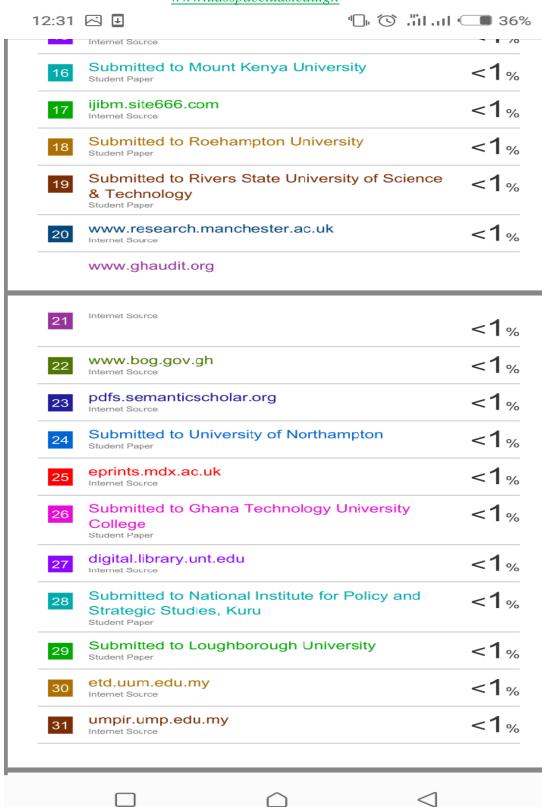
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