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## **Impacts of Control Activities on Fraud Prevention and Control in the Bursary Departments of Tertiary Institution: A Critical Study and Appraisal of Kwararafa University Wukari, Taraba State Nigeria**

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### **Abstract:**

*This paper assesses the Impacts of Control Activities on Fraud Prevention and Control in the Bursary department. This study employs primary as well as secondary data to achieve the objective of the study. Primary data was obtained through the administration of questionnaires whereas secondary data was gotten from textbooks, journals, magazines, reports and internet. This paper employs standard table and simple percentages as descriptive statistics to measure the socio economic data of the respondents, while inferential statistics in the form of Analysis of Variance popularly known as ANOVA was used to test the hypotheses formulated which has direct bearing with the subject matter. The result of this findings reveals among the following: that Segregation of duties have been able to prevent as well as control the occurrence of fraud in the Bursary department, Authorization and approval of financial transaction in the Bursary Department has proven to be a fraud prevention strategy and that Accounting and arithmetical control has impacted positively especially in the area fraud prevention and control in the Bursary Department.*

**Keywords:** Control Activities, Fraud, Fraud prevention and Control and Bursary Department.

### **1. Introduction**

Control Activities is one of the components of internal control which can be defined as they are principles, policies and procedures that are set on motion by the management to guide operations which are meant to forestall and reduce the opportunity of the occurrence of risk and increase the ability to achieve the set goals. It is the responsibility of the management to establish control activities to effectively and efficiently accomplish the objectives and goals of the organization. Control activities can be represented by the acronym – PAPAMOSSAB which are mistakenly known as the features of internal control.

- a) P= Physical control
- b) A= Accounting and Arithmetical control
- c) P= Personnel control
- d) A= Authorization and Approval control
- e) M= Management control
- f) O= Organization control
- g) S= Segregation of Duties
- h) S= Supervising control
- i) A= acknowledgement of Performance
- j) B= Budget and Budgetary control

For adequate comprehension of control activities as it applies to this paper, the following explanation is inevitable:

#### **1.1. Physical Control**

This control measures ensures that assets are physically secured and access is limited to authorized persons. Physical restrictions are the most important type of protective measures for safeguarding the assets, processes and data. This can be achieved electronically or mechanically through the use of safe, fences, locks, staff identity cards and passwords.

### *1.2. Accounting and Arithmetical Control*

This control measures ensures that all transactions are correctly recorded, computed, reconciled and processed to a decision level. Proper checking of accuracy and totals must be achieved. This component of internal control gives the basis for the preparation of financial statements since it is prepared from reliable and adequate records to be acceptable.

### *1.3. Personnel Control*

This form of control is designed to ensure that the employees of the organization are competent in relation to their responsibilities. It is worthy of note that the efficiency and effectiveness of any organization depends on the qualification, training and retraining, integrity and reputation of the workers operating it.

### *1.4. Authorization and Approval Control*

This is a control mechanism which requires that a thorough review of supporting information should be made by appropriate responsible officers who should verify the propriety and validity of all transactions undertaken during the period. The bench mark is that, the approving authority should commensurate with the nature and significance of the transactions and in compliance with relevant laws.

### *1.5. Management Control*

Management control refers to the kind of control exercise by the management of the organization outside the day to day routine of the system. These include review of management accounts and its relationship with budget, the internal audits and other specialized review procedures.

### *1.6. Organization Control*

Organization control ensures that a plan of the enterprise is made clearly defining and allocating responsibilities and identifying lines of reporting operations.

### *1.7. Segregation of Duties*

This is an idea of having more than one person required to complete a task. The underlying reason for separation of duties is that, no employee or group of employees should be at the advantageous position of committing and concealing errors or frauds in the normal course of their duties. Segregation is critical to effective internal control because it reduces the risk of mistakes and inappropriate actions. So it is fundamental in fighting fraud and discouraging collusion.

### *1.8. Supervising Control*

This form of internal control can be defined as observation of ongoing operational activity by responsible officers with the view of ensuring that assigned tasks are carried out as expected.

### *1.9. Acknowledgement of Performance*

Every personnel who undertake any activity in an organization should accept the responsibility of doing so by way of initials, stamp and letter headed paper.

### *1.10. Budget and Budgetary Control*

This control measures insist that the organization should set achievable target which serves as bearing that guides the pilot to drive home. Once goals are established, deviations are noticeable which gives room for corrective measures to be applied to ensure the attainment of the set goals.

From the foregoing, internal control can be seen from my perspective as a measure taken by the management of an organization to ensure that its resources are protected against misuse, waste, inefficiency, fraud and theft. It is against this background that the study intends to assess impacts of Control Activities on fraud prevention and control.

## **2. Statement of the Problem**

It is not in doubt that the Bursary department of every University is the framework for financial transactions that relate to the institution. The bursary department is one department of the institution that played positive role in the smooth running and steady operation of the institution because it handles the financial and other non-financial aspects of the institution which is fundamental for the progress of the institution. However, there has been report of fraud in the bursary department. These cases of fraud were few hitherto, however, in the recent past; there has been increasing reports of the occurrences of these frauds. The intensity of the perpetration of these frauds and the misappropriation of funds can be evidenced in the proposed promulgation of the failed parastatals decree by the federal government to try those who were directly and indirectly identified with frauds.

Despite the facts that it is evident that in the event of collusion, individual employee performing strategic function can act together to perpetrate and conceal fraud so as to prevent its detection by internal control mechanism, yet the problem of fraud in the Bursary department in Nigeria seems to occur because of lack of separation of duties.

In another development, the outmoded Bursary regime was bedeviled by incoherent authorization which aided the inclusion of ghost workers and making payments to non-existent contractors. This singular act of inconsistent and irregular approval payment system caused paved way for horrendous level of fraud in the Bursary department of Nigerian Universities.

Moreover, another porous pipeline that gave vent to fraud in the Bursary department of the Universities is inability to keep adequate record of the total revenue and total expenditure of the University. The numerical inaccuracy of the financial transactions of the Bursary department of the Nigerian Universities became questionable.

### 3. Objectives of the Study

The main objective of this research work is to assess the impacts of control activities on Fraud Prevention and Control in the Bursary department. The specific objectives of the study are to:

- i. examine the impacts of segregation of duties on fraud prevention and control;
- ii. evaluate the impacts of authorization and approval on fraud prevention and control;
- iii. assess the impacts of accounting and arithmetical control on fraud prevention and control;

#### 3.1. Research Questions

- i. What are the impacts of segregation of duties on fraud prevention and control?
- ii. What are the impacts of authorization and approval on fraud prevention and control?
- iii. What are the impacts of accounting and arithmetical control on fraud prevention and control?

#### 3.2. Research Hypotheses

- $H_{01}$ : Segregation of duties does not have any significant impacts on fraud prevention and control;
- $H_{02}$ : Authorization and approval do not have any significant impacts on fraud prevention and control;
- $H_{03}$ : Accounting and arithmetical control do not have any significant impacts on fraud prevention and control;

#### 3.3. Significance of the Study

This research work is of great benefit to individuals and groups such as the researcher, students, the staff of Bursary department and the management of the school in general. This work has broadened the horizon of the researcher especially in the area of control activities. This work will serve as a reference pool of data to students who may carry out research on related matters. This piece of work will also be of eminence to the staff of bursary department in improving the efficient of separation of duties, accounting and arithmetical accuracy of accounting records. This research project will also assist in improving policy formulation by the management of the University as it relates to its finances. Finally, this research work will add value to the existing literature.

#### 3.4. Scope of the Study

This research work basically focuses on the impacts of control activities on Fraud Prevention and Control in the Bursary department of Kwararafa University; Wukari covering the period from 2012 – 2015.

#### 3.5. Conceptual Framework

This part of chapter two takes a look at the key concept that makes up the project topic which is entitled “the impacts of Control Activities on Fraud Prevention and Control”.

#### 3.6. The Concept of Control Activities

Control activities, one of the components of internal control which this project work is poised to assess has been defined by Momoh (2005) Adams (2004) and Walker (1999) as the form of control which occurs at all levels and functions of the organization which include performance review, information processing, physical controls, segregation of duties, reconciliation, accounting and arithmetical control, authorization and approval, personnel and supervision. Whittington and Pany (2001), accepts the fact that control activities is another component of internal controls which refers to policies and procedures that help ensure that management directives are carried out in an efficient and orderly manner.

#### 3.7. The Concept of Fraud

The term fraud has been given many definitions in the literature by the experts, however, for the purpose of this research work it is discussed in this dichotomy: lexically and legally.

##### 3.7.1. Lexical

Lexically, Adefila (2001) defined fraud as an irregularity involving the use of criminal deception to obtain an unjust or illegal advantage. It is the diversion of money or illegal advantage. It is the diversion of money or materials of an individual or an enterprise for the satisfaction of the perpetrators personal or selfish desires by criminal deceptive means. In the words of Patrick (2010), fraud can be defined as knowingly making material misrepresentation of fact with the intention to induce someone to believe the falsehood and act on it which may invariably result in a loss or damage to the person that has relied on the false information. Boniface (1991) describe fraud as any premeditated act of criminal deceit, trickery or falsification by a person or group of persons with the intension of altering facts in order to obtain undue personal monetary advantage. Because fraud is seen as anything calculated to deceive, Apaa

(1993) opined that fraud is “all offences against ethical practices as it includes embezzlement, theft or attempt to steal or acts of unlawfully obtaining, missing or harming the assets of an institution”. Fraud which has become official in the Bursary department of the Nigerian University can be seen as an act of dishonesty or cheating aimed at causing a person to give up possessions or some lawful right (Idowu, 2009). Association of Certified Fraud Examiners (1999) defined fraud as the use of one’s profession for personal enhancement through the conscious misuse, misapplication or employment of organizational possessions or property. Akinyumi (2012) opined that fraud is an act of commission which is planned to cause unlawful gain to one person and criminal loss to the other, either by way of concealment of information or otherwise. Agwu (2014) observed that fraud impacts organization in several areas including financial, operational and psychological; where the monetary loss owing to fraud is significant, the full impact of fraud on an organization can be staggering and the losses ranging from reputation, goodwill and customer relations can be devastating. From the foregoing, any dishonest intention to benefit the perpetrator to the detriment of the organisation or another person is fraudulent.

### 3.7.2. Legal

Legally, Black’s Law Dictionary (1979) defined fraud as all multifarious means which human ingenuity can devise, and which are resorted to by one individual to get an advantage over another by false suggestions or suppression of the truth. From the foregoing, the term fraud is all embracing as it includes all surprise, trick, cunning, or dissembling, and any unfair way which another is cheated. In the eye of the law, fraud is seen as the act of depriving a person dishonestly of something which such an individual would or might be entitled to. It is an intentional perversion of truth for the purpose of inducing another, in reliance upon it to part with some valuable things belonging to him, or to surrender a legal right. From the foregoing, fraud refers to the offences that contravene ethical operation of a system.

### *3.8. The Concept of Fraud Prevention and Control*

In the words of Adeniji (2012), fraud prevention involves taking steps to create and maintain a culture of honesty and high ethics and assessing the risk of fraud and developing concrete responses to mitigate the risks and eliminate the opportunities for fraud. Measures to prevent fraud may include periodic rotation of staff, reinforcement of control system, strict disciplinary actions and audit functions. Put in another words, fraud prevention entails employing all available strategies and means to ensure that fraud do not occur in a system in the first place. Fraud prevention strategies are the first line of defense and provide the most cost effective method of controlling fraud within an entity.

### *3.9. The concept of Bursary Department*

According to University of Ilorin (2015), every organization has a department saddled with the responsibility of carrying out its finance and accounting functions. The Bursary department is the financial engine room of any University that is headed by the Bursar who is according to Kwararafa University Act, the Chief Finance Officer of the University and he is responsible to the Vice Chancellor for the administration and control of the financial affairs of the University. In the words of University of Lagos (2015) and Federal University of Technology, Akure (2015), the Bursary department performs the functions of overall control of the institution’s financial resources; receive on behalf of the university governing council grants, subventions, revenues and gifts donated to the university; guidance to all departments in all financial matters, particularly as regards the preparation and monitoring of the budget; maintain proper and adequate records of income and expenditure, assets and liabilities and report periodically to the vice chancellor on finances of the university; the institution’s accounting, reporting and internal control procedure; maintaining the financial information system; administering the payroll, loan pension scheme; arranging adequate insurance cover for the University’s assets; and ensure that surplus funds are invested and are manage prudently.

The bursary is organized into the finance and treasury department; the budget and expenditure control division; the final accounts division and the audit Unit. The finance and treasury unit is made up of the cash office section, the payroll section, the student’s accounts section and investment section. The budget and expenditure control division is responsible for preparation of the university budget and ensure that the University’s financial resources are incurred for the purpose intended for (James 2015).

### *3.10. Segregation of Duties between the Staff in the Bursary Department*

In the words of Nwako (2006), segregation of duties refers to those controls which ensure that separate individuals or group of individuals carry out the main functions of an organization of authorization, executive, custody and recording. This is because the separation of these critical duties will minimize the inherent risk of fraud or errors and increase the element of checking within the system. Labaran (2011), agreeing with Nwako (op cit) mentioned that separation of duties is put in place to ensure that no single individuals responsible for all aspects of the transactions from the beginning to the end to reduce the risk of incidental error or deliberate fraud.

This control measure is employed and adequately utilized in the Bursary department of Kwararafa University which allows for a participation of various staff’s in a given activity of the department. For instance, when there is any need for collection of funds from the students through sales of forms, the officer who collects money from the students takes such money into the bank account. However, the responsibility for bank responsibility is carried out by another staff of the department. This means that no one activity is completed from inception to the end by one single staff. The whole essence is to avoid incidence of errors and frauds.

The activity of Kwararafa University is in congruence with the opinion of Coleman (2008) who posits that separation of duties is a key concept of internal controls whose main objective is achieved by disseminating the tasks and associated privileges for a specific

security process among multiple people. This is in line with the view of Gregg, Nam, Northcut and Pokiadnik (2005) who averred that separation of duties is a classic security method to manage conflict of interest, the appearance of conflict of interest and fraud. It restricts the amount of power held by any one individual and put a barrier in place to prevent fraud that may be perpetrated by one individual. Accordingly, appropriate separation of duties creates an information flow diagram for every function within each area of the organization.

### *3.11. Authorization and Approval of activities in the Bursary Department*

Adeniji (2012), asserts that all transactions should require authorization or approval by an appropriate responsible person or institution with the limits of these authorizations specified. Adams (2002) insists that authorization and approval must be done by appropriate and responsible officers with specified authority limits.

According to Internal Audit Office (2012), authorization procedures need to include a thorough review of supporting information to verify the propriety and validity of transactions and that approval authority is to be commensurate with the nature and significance of the transactions and in compliance with the university policy.

It is worthy of note that most of the financial transactions that are undertaken in the Bursary department of Kwararafa University are normally contained in the Budget and any item of expenditure not captured in the budget are termed extra budgetary spending and therefore not within the budget ceiling of the university. In the words of the Bursar (2015), where an item of expenditure is not classified in the University budget but if such need cannot wait without causing damage on the fabric of the entirety of the university community, then a supplementary budget must be prepared to take care of such circumstance. After the budgetary approval, the Vice Chancellor who is the representative of Management makes approval of virtually all transactions in the University and directs all financial transaction to the Bursar who is at the hem of affairs in the bursary to ensure that all payments are made according to approved rate. The Bursar hereafter redirects the Accountant in charge of expenditure to spend money by way of payment voucher. When the Voucher is prepared, the Accountant then forwards it to the cashier for final cash disbursement. The cashier, seeing that the approval emanate from the appropriate authority, affects the payment on behalf of the management of the school.

From the foregoing, it is important to note that approval from appropriate authority is desirable if spending must be achieved in Kwararafa University.

### *3.12. Accounting and Arithmetical controls in the Bursary Department*

This is one of the control measures in the Bursary Department which ensures that all transactions for the period are correctly recorded and accurately processed. Adeniji (2012) opined that accounting and arithmetical controls include checking the arithmetical accuracy of records, the maintenance and checking of totals, reconciliation, control accounts, trial balances and accounting for documents. According to Cliff Notes Application (2013), accounting and Arithmetical control provides evidence that financial statements are accurate and this control is designed to ensure that adequate record keeping include the creation of invoices and other documents that are easy to use and sufficiently in formative; the use of pre numbered, consecutive documents; and timely preparation of accounting records. In the words of internal Audit Office (2015) and Wikipedia, the free Encyclopedia (2014), accounting and arithmetical control provides reasonable assurance that all information and transactions of value are accurately recorded up to date and the totals of each transaction is adequately ascertained. This control insist that accounting records are to be maintained and controlled in accordance with the established retention period and properly disposed of in accordance with established procedures.

## **4. Methodology**

Wukari is a local government area in Taraba State, Nigeria. Its headquarters is located in the town of Wukari on A4 highway. The Donga River flows through the area and the Benue River forms the boundary with Nasarawa State to the Northwest. The town is the base of the Wukari Federation, a traditional State (Wikipedia 2015). Wukari has an area of 4,308 KM<sup>2</sup> and a population of 241,546 at the 2006 population Census (NNPC 2006). It is located at 7<sup>o</sup>51N 9<sup>o</sup>47E with ten (10) political wards as at 2015. This project work employed survey designed to assess the impact of financial statement on the general public. This method was used because as observed by Babbie, (1973) who maintained that survey method is probably the best method available to a social scientist interesting in collecting original data for describing a population too large to observe directly. Survey designed was used because Adefila, (2008) opined that survey research is the type of research that is based on information gathered through questionnaires, interviews, rating scales, inventories, self-report and observation and this study intends to use questionnaire to solicit data from the respondents.

### *4.1. Study Population*

The population of the study comprised of the staff of the Bursary Department, Kwararafa University, Wukari which is shown in table 1.

S/N	Departments	Official Status			Number of Respondents
		Senior Officer	Middle Officer	Operational Staff	
1	Office of the Bursar	1			1
2	Finance and Treasury	1	3	2	6
3	Final Accounts, Statistics and Reporting	2	2	2	6
4	Budget Control and Management	1	2	1	4
5	Purchases and Supplies	1	2	2	5
	Total	6	9	7	22

Table 1: Breakdown of Population of the Study  
Source: Bursary Department, KUW, 2015

#### 4.2. Sample and Sampling Technique

Researchers usually cannot make direct observations of every individual in the population they are studying; instead, they collect data from a subset of individuals – a sample – and use those observations to make inferences about the entire population (Ogumbameru and Ogumbameru, 2010). Sampling will be employed because it reduces cost, has greater speed, greater scope and more accurate because the data is easier to manage (Osuala, 2007, Ogboru, 2007). Thus, this study employed simple random sampling technique since it gives every element of the population equal opportunity of being considered for appraisal. Because the population of the study is manageable and therefore not too unwieldy, the researcher will adopt the entirety of the population for the study.

#### 4.3. Sources of Data

This study used primary data to obtain firsthand information from the respondents. Secondary data was also utilized to augment the primary data.

#### 4.4. Methods of Data Collection

Primary data for this research work was obtained through administration of questionnaire to realize the objectives of the study while the secondary data was collected through documentary sources such as text books, newspapers and magazine, journals, reports and internet.

#### 4.5. Methods of Data Analysis

The researcher used both descriptive and inferential statistics to analyze the data intended for this research work. The descriptive statistics consist mainly of tables, percentages and five point Likert scales which was used to obtain the view of the respondents as described by Babbie (2005), an illustration of the scores of the instrument will be:

Item	Score
Very relevant	4
Relevant	3
No Effect	0
Irrelevant	2
Very Irrelevant	1

Table 2

Whereas, Analysis of Variance (ANOVA), an inferential statistic was employed to test the data collected and hypotheses formulated. ANOVA was adopted since it is appropriate for survey research (Osugwu, 2008).

#### 4.6. Analysis of Variance (ANOVA)

ANOVA is a statistical tool of comparing the means of several populations, such as the mean cost of three components relevant to produce a particular product. This study used ANOVA because it is the most acceptable quoted advanced research method used in the professional business and economic literature (Adefila, 2008).

The terms that relate to ANOVA calculation and the stages involved are as follows:

##### ➤ Stage 1:

N = The total of individual scores in all

Q = The grand total of all the data

t = Number of groups

n = Number of elements or cells in each group

SST = Sum of the square of each of the individual scores in all the groups, subtract  $Q^2/N$

$= (X^2_1 + X^2_2 + \dots + Z^2_3 + Z^2_4 + Z^2_5) - Q^2/N$

SSB = Square of each group sum, divided by the corresponding group(n), then sum all these and subtract  $Q^2/N$ .

$\frac{XX^2 + YY^2 + ZZ^2}{n \quad n \quad n} - \frac{Q^2}{N}$

$SS_W$  = The outcome of  $SS_T$  less the outcome of  $SS_B$

$$SS_W = SS_T - SS_B$$

➤ Stage 2:

This is the stage at which the degree of freedom shall be defined.

$df_B$  = degree of freedom for “variance between” =  $t-1$

$df_T$  = degree of freedom for total of all the data =  $N - 1$

$df_W$  = degree of freedom for “variance within” =  $df_T - df_B$  ( $N - t$ )

➤ Stage 3:

The mean square (MS) for “variance between” and “variance within” shall be determined here, thus:

$$MS_B = SS_B / df \text{ and } MS_W = SS_W / df_W$$

➤ Stage 4:

This is the stage at which the F - ratio is determined by simply dividing the mean square of the “variance between” by the mean square of the “variance within” thus given as

$MS_B / MS_W$ . The result of this is then compared with the critical value “X” in the F- distribution table at the required level of  $\alpha$  (i.e. significant level) and  $df$  (degree of freedom).

The above information is meant to set up ANOVA table as follows:

Source	SS	Df	MS	Ratio	Remark
Between	$SS_B$	$t - 1$	$SS_B / df_B$	$MS_B / MS_W$	Accept or Reject
Within	$SS_W$	$N - t$	$SS_W / df_W$		
Total	$SS_T$	$N - 1$			

Table 3: Anova Summary Table  
Sources: Adefila, (2008)

The null hypothesis in ANOVA is that all the mean of the groups is similar while the alternate hypothesis states that at least one of the group mean will not be similar.

$$H_0: M_1 = M_2 \text{ i.e. } \sum (m_1 - \mu) = 0$$

$$H_1: m_1 \neq m_2 \text{ i.e. } \sum (m_1 - \mu) \neq 0$$

The null hypothesis is rejected if the calculated value of F - ratio i.e. ( $MS_B / MS_W$ ) is greater than the critical value of F i.e. ( $F_{t-1, N-t}$ ) as given in the F distribution table otherwise, it stands accepted.

- If  $MS_B / MS_W > F_{t-1, N-t}$  then, reject the null hypothesis
- If  $MS_B / MS_W < F_{t-1, N-t}$  then, accept the null hypothesis.

#### 4.7. Response Rate

This aspect of the study deals with the number of the respondents that participated actively in answering and submitting the questionnaires administered.

S/NO	Name of Institution	Respondents	Response Rate	Percentage
1	Office of the Bursar(Bursary)	1	1	5
2	Finance and Treasury (F T)	6	6	27
3	Final Accounts, Statistics and Reporting (FSR)	6	5	23
4	Budget Control and Management (BM)	4	4	18
5	Purchases and Supplies (PS)	5	4	18
	TOTAL	22	20	91

Table 4: Breakdown of the Rate of Response  
Source: Field Survey, 2015.

It is worthy of note that 20 out of 22 questionnaires administered were retrieved representing 91% response rate. 5% of the respondents were from Office of the Bursar, 27% were from Finance and Treasury, 23% were from Final Accounts, Statistics and Reporting, while 18% were both from Budget Control and Management and Purchases and Supplies respectively. The totality of the presentation is partitioned into three main categories, namely the socio-economic data, topical data and discussion and Findings.

#### 4.8. Presentation of Socio- Economic Data

This part of the research work presents information that relates to the bio-data of the respondents as shown in tables 4.3a to 4.2.

AGE	Bursary	F T	FSR	BM	PS	Frequency	Percentage
18- 24	0		1	0	0	1	5
25- 30	0	1	0	0	1	2	10
31-35	0	2	1	1	1	5	25
36-40	1	2	1	2	0	6	30
41and above	0	1	2	1	2	6	30
Total	1	6	5	4	4	20	100

Table 5: Age distribution  
Source: Field Survey, 2015.

Table 5 shows that 5% of the respondents are between the ages of 18-24, 10% are between the ages of 225-30, 25% are between the ages of 31 – 35, while overwhelming majorities of 30% are between the ages of 36- 40 and 41 and above respectively. This indicates that the employees in the Bursary Department of Kwararafa University are mostly energetic to meet with the demand of their organizations.

Sex	Bursary	F T	FSR	BM	PS	Frequency	Percentage
Male	1	5	4	3	4	17	85
Female	0	1	1	1	0	3	15
Total	1	6	5	4	4	20	100

Table 6: Sex Distribution  
Source: Field Survey, 2015.

From Table 6, the highest proportion of the respondents, that is 85% were male while 15% were female. This indicates clearly that the male participates more than the female counterpart in the activities of Bursary department of Kwararafa University because the number of men is more than the number of female staff.

Status	Bursary	F T	FSR	BM	PS	Frequency	Percentage
Single	0	2	1	0	0	3	15
Married	1	3	4	3	4	15	75
Divorced	0	0	0	0	0	0	0
Widowed	0	0	0	0	0	0	0
Separated	0	1	0	1	0	2	10
Total	1	6	5	4	4	20	100

Table 7: Marital status  
Source: Field Survey, 2015

Considering marital status, Table 7 indicates that 15% of the respondents are single, 75% of the respondents are married while none of the respondents as at the time of collection of information were divorced or widowed, while 10% of the respondents are separated. This is a clear indication that the respondents are highly responsible people.

Education	Bursary	F T	FSR	BM	PS	Frequency	Percentage
FSLC	0	0	0	0	0	0	0
Secondary	0	0	0	0	0	0	0
OND/ NCE	0	1	1	1	0	3	15
Degree and Equivalent	0	4	4	3	3	14	70
Post graduate	1	1	0	0	1	3	15
total	1	6	5	4	4	20	100

Table 8: Education  
Source: Field Survey, 2015

Table 8 clearly shows that overwhelming majorities of 70% of the respondents hold degree and its equivalent, none of the respondents had First school leaving certificate and secondary school certificate. 15% of the respondents had OND/NCE and postgraduates respectively.

Years	Bursary	F T	FSR	BM	PS	Frequency	Percentage
0 -10	0	2	1	1	2	6	30
11 – 20	1	3	2	1	1	8	40
21 – 30	0	1	2	1	1	5	25
31 and above	0	0	0	1	0	1	5
total	1	6	5	4	4	20	100

Table 9: Years of working experience  
Source: Field Survey, 2015

Table 9 indicate that greater portion of the respondents of about 40% have 11-20 years working experience, 30% have 0-10 years' experience, 25% have 21-30 years' experience and 5% have 31 years and above working experience. This reveals that the vast proportion of the respondents gave opinion from their wealth of experience.

#### 4.9. Presentation of Topical Data

This part of the study analyses information that relates to the main subject of the research work.

Specifically, data elicited from the respondents through questionnaire. Thus, ANOVA was used for analysis of topical data.

The main activities to be segregated in Bursary department		SA	A	U	D	SD	Total
A	Authorization	5	3	4	3	5	20
B	Executive	7	3	2	4	4	20
C	Custody	2	7	3	3	5	20
D	Recording	5	4	2	4	5	20
E	Reconciliation	5	3	4	3	5	20
	Total	24	20	15	17	24	100

Table 10: Segregation of Duties and Fraud Prevention and Control  
Source: Field Survey, 2015

Applying ANOVA statistical tool yield the following result:

Source	SS	df	MS	F ratio	Remark
Between	23.2	4	5.8		
				5.58	Reject
Within	20.82	101	0.4		
Total	44	105			

Table 11: ANOVA Summary Table  
Source: Field Survey, 2015

Looking at F – distribution table, we find that at  $0.05F_{4,20} = 2.87$ . The calculated value is 5.58 while the critical value (table value) is 2.87. Since the calculated value is greater than the critical table value, the null hypothesis which states that Segregation of duties does not have any significant impacts on fraud prevention and control is rejected. This implies that the alternate hypothesis which states that Segregation of duties have significant impacts on fraud prevention and control in the Bursary department is accepted.

	statement about authorization and approval	SA	A	U	D	SD	Total
a	Authorization is required by a responsible person with a specified authority limits	3	5	4	3	5	20
b	Authorization can be achieved by all the staff of the department	7	3	2	4	4	20
c	Authorization procedure need to include a thorough review of supporting information to verify propriety and validity of transactions	2	7	3	3	5	20
d	Most of the items of expenditure executed in the Bursary department are contained in the budget	2	4	5	4	5	20
e	Item of expenditure not included in the budget can also be executed	3	3	4	5	5	20
Total		17	22	18	19	24	100

Table 12: ANOVA Test for Hypothesis II  
Source: Field Survey, 2015

Applying ANOVA statistical tool yield the following result:

Source	SS	df	MSF- ratio	Remark
Between	26.846.7			
	7.79	Reject		
Within	17.220	0.86		
Total	4424			

Table 13: ANOVA Summary Table  
Source: Field Survey, 2015

Looking at F – distribution table, we find that at  $0.05F_{4,20} = 2.87$ . The calculated value is 7.79 while the critical value is 2.87. Since the calculated value is greater than the critical value, the null hypothesis which states that Authorization and approval do not have any significant impacts on fraud prevention and control is rejected. The alternate hypothesis which states that Authorization and approval have significant impacts on fraud prevention and control is maintained.

Accounting and Arithmetical control include the following:		SA	A	U	D	SD	Total
a	Checking accuracy of records	4	5	3	3	5	20
b	Maintenance and checking of totals	2	3	4	4	7	20
c	Reconciliation	3	7	5	3	2	20
d	Control accounts	4	5	5	4	2	20
e	Trial balance	4	3	5	5	3	20
	Totals	17	23	22	19	19	100

Table 14: ANOVA Test for Hypothesis III  
Source: Field Survey, 2015

Applying ANOVA statistical tool yield the following result:

Source	SS	df	MS	F – ratio	Remark
Between	24.8	46.2			
	6.46	Reject			
Within	19.2	20	0.96		
Total	44	24			

Table 15: ANOVA Summary Table  
Source: Field Survey: 2015

Looking at F – distribution table, we find that at  $0.05F_{4,20} = 2.87$ . The calculated value is 6.46 while the critical value is 2.87. Since the calculated value is greater than the critical value, the null hypothesis which states that Accounting and arithmetical control do not have any significant impacts on fraud prevention and control is rejected. The alternate hypothesis which states that Accounting and arithmetical control have significant impacts on fraud prevention and control is maintained.

## 5. Discussion of Findings

This study titled impacts of control activities on fraud prevention and control formulated three hypotheses which were adequately tested using Analysis of Variance popularly called ANOVA.

The result of hypothesis I shows a calculated value of 5.58 while the table value is 2.87. Because the calculated value of 5.58 is greater than the table value of 2.87, the null hypothesis which states that Segregation of duties does not have any significant impacts on fraud prevention and control stand rejected. This implies Segregation of duties among the staff of Bursary department in Kwararafa University has prevented the occurrence of fraud in the department.

The result of hypothesis II reveals a calculated value of 7.79 and the table value of 2.87. Because the calculated value is greater than the table value, the null hypothesis which asserts that Authorization and approval do not have any significant impacts on fraud prevention and control stand rejected. By extension, approval by the specified and appropriate officer in the Bursary department in Kwararafa University has prevented the occurrence of fraud in the department.

The result of hypothesis III shows that the calculated value is 6.46 while the table value is 2.87 at  $0.05F_{4,20}$ . Because the calculated value is greater than the table value, the null hypothesis which states that Accounting and arithmetical control do not have any significant impacts on fraud prevention and control stand rejected. By extension, accounting and arithmetical control in the Bursary department of Kwararafa University has prevented incidence of fraud in the department. These findings form the basis of decision making of the researcher.

## 6. Summary

This research work was carried out to assess the impacts of control activities on fraud prevention and control in Bursary department with specific emphasis on Kwararafa University, Wukari covering the period of five years from 2012 to 2015.

The data employed for the purpose of this study include primary as well as secondary data. The primary data were obtained through the instrumentality of questionnaire. Secondary data was gathered from textbooks, journals, newspapers, and internets which were dully acknowledged.

It is important to note that the study reveals that Bursary department of Kwararafa University is dominated by staff of matured mind and competence. This is a clear prove that the staff are reasonable and matured in the mind and tolerable. Besides, the study also shows that 75% of the respondents are married while only 25% are not married. This is also a clear sign that the personnel are mostly responsible ones. In terms of educational qualifications, an overwhelming majority of 75% of the respondents holds Degree certificate and none of the respondents is holding certificate below Diploma or Nigerian Certificate in Education. This is a pointer to the fact that the respondents know and have the full view of the subject matter under consideration; thus, the respondent's opinion is viewed to be reliable and adequate.

In terms of working experience, the majority making 40% has worked for about 11-20. By extension, the information provided is from a pool of experience which helps the researcher to conclude upon.

## 7. Conclusion

This research concludes that despite the fact that the incidence of fraud tends to increase in geometric progression in the Bursary department of Nigerian Universities, the Bursary Department of Kwararafa university has made its marks by ensuring that the occurrence of fraud is not only controlled but prevented in the area of performing its functions by adopting control activities such as segregation of duties, authorization and approval and accounting and arithmetical control.

## 8. Recommendations

From the foregoing, the following recommendations are made:

1. The Bursary department of Nigerian Universities should ensure that there is adequate segregation of major activities such as authorization, executive functions, custody of funds and classified documents, recording of transactions on the books of accounts and bank reconciliation; Approval of every financial transaction should be made by the appropriate authority without compromises.
2. All financial transactions should be dully recorded immediately it occurs and the arithmetical accuracy of each transaction should be ascertained at a point in time without postponement.
3. Students who may wish to carry on research on related matter should compare two or more Bursary Departments among Nigerian Universities.

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