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# AN ANALYSIS OF AUDIT QUALITY ATTRIBUTES AND CLIENT SATISFACTION FOR COMPANIES QUOTED AT THE NAIROBI SECURITIES EXCHANGE

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## **Abstract**

With the collapse of Enron involving the misconduct of one of the Big 4, Arthur Andersen & Co. in the US and the CMC and Uchumi scandals in Kenya involving the big audit firms Delloitte and PwC, the argument for audits for big audit firms as synonymous with quality audit has become questionable. Despite several studies having been done on audit quality, none of them has touched on the analysis of audit quality attributes in relation to client satisfaction for the listed companies on the Nairobi Securities Exchange. The general objective of the study was to analyze audit quality attributes and client satisfaction for companies listed at the Nairobi Securities Exchange and the study will be significant to the management of the listed companies and the audit firms alongside the scholars who may want to pursue the subject further. The study comprised of all the listed companies on the Nairobi Securities Exchange as at 31st December 2013, they were 60 companies in number. The study reviewed literature on audit qualities which included audit reliability, audit tangibility, auditors assurance, auditors responsiveness and auditors empathy, also auditors experience and auditors independence were reviewed. Client satisfaction, empirical studies and theoretical review were also covered, the literature review finalized with the conceptual framework. The study employed descriptive study design and entailed the 60 listed companies as the population, which was taken as a census because of the small number. Primary data was collected by use of a structured questionnaire by use of drop and pick later. The collected data was analyzed first by use of descriptive statistics; correlation analysis was done to establish the relationship between the dependent and independent variables

and finally a regression analysis was performed on the model to test the hypotheses. A total of 60 questionnaires were sent out of which 49 were respondent to and 41 were satisfactorily filled and considered for analysis, this formed 84 percent response rate. The study found that only two out of five audit quality attributes (i.e., Responsiveness, Assurance, Empathy, Tangibles, and Reliability) were statistically significant related to client satisfaction. Thus the two attributes of tangibility and responsiveness has a significant impact on the client satisfaction.

**Key Words:** an analysis of audit quality attributes and client satisfaction for companies quoted at the Nairobi Securities Exchange



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#### INTRODUCTION

## **Background of the study**

In the recent past, the world has experienced a rise in corporate failures, financial scandals and audit failure. This has stimulated firm debate among the accounting profession's regulators and the public about the audit expectations gap. This is because the accounting information users often ask where auditor was when the scandals were taking place. Some accounting information users therefore seem to partly blame the auditors for corporate failures (Sidani, 2007). With the collapse of Enron involving the misconduct of one of the Big 4, Arthur Andersen & Co., the argument for audits for big audit firms as synonymous with quality audit has become questionable. These corporate scandals confirmed a requirement for high quality audit and considerable attention to different factors that may have effect on audit quality. High quality audit refers to the production of financial information without misstatements, omissions or biases. From an agency theory perspective, Dang (2004) argues that audited financial statements are a monitoring mechanism to provide assurance for users of financial information

In Kenya Deloitte exhibited poor audit quality by failing to recognize losses from CMC assets that were damaged, failing to disclose the auto firm's subsidiary in South Sudan in the annual reports, abetting the booking of undelivered vehicle sales as revenues and not capturing interest payments for cars sold on credit (Kamau et al. 2012). A final report on CMC's operations by the regulator CMA for the 2009 and 2010 released revealed that directors and management signed misleading financial statements, the accounts were not prepared in compliance with the

International Financial Reporting Standards, consequently putting the firm on a precarious business model. Such evidence has raised questions concerning the extent to which audit firms participate in company activities and whether shareholders rights are protected moving forward to avoid recurrences. The Deloite saga marked the second time one of the Big Four audit firms in Kenya was being put on the spotlight over the quality of its audit services after the investigation of PwC in the wake of Uchumi Supermarket's near-collapse in 2006. These latest CMC developments turned the spotlight on the auditors' responsibility in failing to detect the alleged inflation of invoices and diversion of funds from the company by its directors which greatly impacts on the quality of the audit services (Onwong'a, et al. 2010)

Audit quality by Khomsiyah and Indriantoro (1998) has become an important issue for the accounting profession. So much pressure from the outside parties to monitor the work and demands to increase audit quality process. To fulfill the good audit quality then auditors in carrying out his profession as an examiner should be guided on the accounting code of ethics, professional standards, and applicable accounting standards in Kenya. Each auditor must maintain the integrity and objectivity in carrying out their duties, by acting honestly, firmly, without pretensions, so that he can act fairly, regardless of pressure or demand certain parties to fulfill their personal interests. Basuki and Krishna (2006) states that audit quality is a complex issue because so many factors that can affect the quality of the audit depends on the point of view of each party, making audit quality difficult to measured becomes a matter that is sensitive to individual behavior conducting the audit. Theoretically, the quality of work is usually associated with auditor qualifications, expertise, timeliness of completion of the work, a competent examination of the sufficiency of evidence at the lowest cost and the independence to client. Rudyawan and Badera (2007) states that the auditor who has a reputation can provide a better audit quality, including in revealing going concern problems in order to maintain their reputation. According to Cheng, Liu, and Chien (2008) reputation of the auditor has a relationship with the human resources of the audit office, human resources (human capital) is the most important asset of a public accounting firm. Audit firm must ensure that they have enough personnel equipped with the competencies and professional characteristics so that they can perform according to standards, legal requirements and community expectations. To address these expectations, audit firms must establish a planned process of human resource management. To ensure the viability and flexibility and its ability to meet the needs of investors, audit firms

must continue to recruit, develop, educate, and train auditors at all levels are prepared to conduct high quality audits in a dynamic environment. The task is to examine public accounting and give opinion on the fairness of financial statements of a business entity based on standards set by the Cheng, Liu, and Chien (2008). Based on these two public accounting have an obligation to maintain the quality of audits to the standards set by the Indonesian Institute of Accounting. Oliver (1997) defines satisfaction as the consumer's fulfillment response, the degree to which the level of fulfillment is pleasant or unpleasant. Zeithaml and Bitner (2000) define satisfaction as the customers' evaluation of a product or service in terms of whether that product or service has met their needs and expectations. Dissatisfaction with the product or service is resulted as failure to meet the customers' needs and expectations. Satisfaction and perceived quality are highly inter-correlated (Bitner and Hubbert, 1994). Some studies find that satisfaction drives a general perception of quality, while others find that perceptions of quality drive satisfaction (De Ruyter, Bloemer, and Peters, 1997). Most marketing researchers accept a theoretical framework in which quality leads to satisfaction Oliver (1997), which in turn influences purchasing behaviour (Oliver, 1999). These arguments suggest that service quality is likely to affect customer satisfaction.

## The statement of the problem

With the collapse of Enron involving the misconduct of one of the Big 4, Arthur Andersen & Co., the argument for audits for big audit firms as synonymous with quality audit has become questionable. Corporate scandals like Enron debacle and Andersen collapse in the USA and Uchumi and CMC in Kenya confirmed a requirement for high quality audit and considerable attention to different factors that may have effect on audit quality. Several researchers have conducted research into the audit quality of the audit firms. According to the previous empirical studies on audit quality, the researchers started with around 50 to 100 factors and ended up with 3 to 10 of the most important attributes. Moreover, the researchers tried to find factors affecting audit qualities such as audit fees, the size of the audit firms, increased audit partner tenure and audit quality reduction behaviours, defined as actions taken by an auditor during an engagement that reduce evidence-gathering effectiveness inappropriately which can menace audit quality or damage the profession's reputation, none of the previous studies compared the audit quality attributes with client satisfaction and that is what necessitated the researcher to seek and evaluate

the relationship between audit quality attributes and client satisfaction for companies quoted at the Nairobi Securities Exchange.

## **Purpose of the Study**

The purpose of the study was to evaluate the relationship between audit quality attributes and client satisfaction for companies quoted at the Nairobi Securities Exchange.

The study was guided by the following objectives:

- i. To determine the effect of audit tangibility on client satisfaction.
- ii. To determine the effect of audit reliability on client satisfaction.
- iii. To determine the effect of audit responsiveness on client satisfaction.
- iv. To determine the effect of audit assurance on client satisfaction.
- v. To determine the effect of audit empathy on client satisfaction.
- vi. To evaluate the relationship between audit quality attributes and client satisfaction for companies quoted at the Nairobi Securities Exchange

## **Research Hypotheses**

The research was guided by the following hypotheses

- Ho1 There is no significant relationship between audit tangibility and client satisfaction
- Ho2 There is no significant relationship between audit reliability and client satisfaction
- Ho3 There is no significant relationship between audit responsiveness and client satisfaction
- Ho4 There is no significant relationship between audit assurance and client satisfaction
- Ho5 There is no significant relationship between audit empathy and client satisfaction
- Ho6 There is no significant relationship between audit quality attributes and client satisfaction for companies quoted at the Nairobi Securities Exchange

## Significance of the Study

In a world where many companies are increasingly relying on Audit, it is necessary for a company's management to understand the full degree of operational dependence on audit systems or the extent to which audit plays a role in shaping the firm's strategies.

This research will be necessary to the Directors/Owners of a firm to set standards for Audit governance. Many firms on the NSE have embraced audit and according to past studies expenditures on audit have significantly increased. It is therefore necessary to monitor the spending and use of audit to ensure value for money.

The research finding will be important to scholars by adding to the body of existing knowledge on internal audit and risk management.

## The Scope of the study

The study comprised of all the listed companies at the Nairobi stock exchange as at 31<sup>st</sup> December 2013. There were 60 companies as at that date.

### RESEARCH METHODOLOGY

## Research design

The research design was descriptive survey. The design was appropriate for the study because the study came up with findings that showed the relationship between the audit quality attributes and client satisfaction for the listed companies in Kenya.

## Sampling techniques

The population of interest in this study consisted of all the 60 listed companies at the Nairobi Securities Exchange as at 31<sup>st</sup> December 2013. Primary data was collected by use of "drop and pick later" questionnaire and in some instances the researcher discussed the contents of the questionnaire with the respondent and left to them to fill it at their own time. For companies located outside Nairobi, the questionnaires were sent via mail.

## Data analysis methods

Prior to Pearson correlation analysis, data was analyzed on the basis of descriptive statistics. Descriptive statistics described data on variables with single numbers. Arithmetic mean, maximum, skewness, kurtosis and the standard deviation were the main descriptive statistics applied in data analysis.

Pearson correlation was then be performed to establish the significance differences between the independent variables of audit quality attributes (responsiveness, assurance, empathy, tangibles, and reliability) and the dependent variable of client satisfaction, where quality attributes was regressed against the client satisfaction. t – test was used to test for the significance of each predictor variables (Audit quality attributes) in the model. The null hypothesis (i.e. the model lacking explanatory power) was rejected when the significance value t – statistic was less than 0.05 (significance level).

The Regression Equation

 $ACSaf = \alpha + b_1Tang + b_2Relia + b_3Resp + b_4Assu + b_5Emp + \varepsilon$ 

#### RESEARCH FINDINGS AND DISCUSION

The research findings were based on the research objectives. A total of 60 questionnaires were sent out, of which 49 were returned and 41 were satisfactorily filled, this formed 84 percent response rate. In order to achieve the study objective, the entire set of data for audit quality attributes and client satisfaction was analyzed using the statistical package for social scientist (SPSS).

## **Background Information of the Study Respondents**

This section presents a brief description of the demographic characteristics of the sampled respondents involved in this study. Such a description is considered to be very important in providing a better understanding of the respondents included in the study and therefore provide a good foundation for a detailed discussion of the results based on the stipulated objectives of the study. The demographic characteristics included gender, age bracket, level of education and years of service.

## **Respondents Gender**

The respondents were asked to state their gender and age. It was found out that 73 percent of the respondents were male while 27 percent were female. This confirms that most senior positions in finance in the listed companies are held by men, as the study targeted chief accountants. This is represented in the figure below:

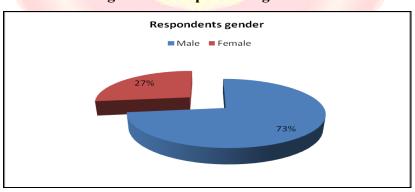


Figure 4.1: Respondents gender

Source: Research Data 2014

## Respondents age bracket

The researcher was interested to know the distribution of the age brackets of the respondents from the listed companies; the result was as indicated below;

Age Bracket

60% 55% 36% 36% 30% 20% 9%

Table 4.1: Respondents age bracket

Source: Research Data 2014

The study found 55 percent of the respondents were aged between 18-30 years old, 36 percent aged between 31-40 years old and 9 percent between 41-50 years old. The researcher revealed that most of the respondents were youth below 40 years, who clearly understands the dynamics of audit quality in the changing environment, the study further revealed that most senior management positions in the corporate world are held by the youth below the age of 40 years old who are male.

## Respondents duration in current organization

The researcher sought to establish the duration the respondents had been in their current organization and the findings are presented in the table below;

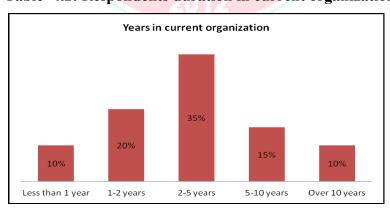


Table 4.2: Respondents duration in current organization

Source: Research Data 2014

Most respondents had been in their current organization for between 2-5 years at 35 percent, 20 percent had been there for between 1-2 years, 15 percent had worked for between 5-10 years while 10 percent had worked for over 10 years and less than 1 year respectively. The findings

supported the fact that most of the chief accountants were youth below the age of 40 years, who by virtue of their age could only have worked for less than 10 years.

## Respondents years in employment

After establishing the number of years in the current organization, the researcher was also interested to know for how long the respondents had been in employment and the results are presented below;

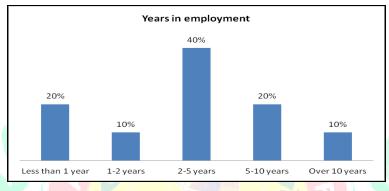


Table 4.3: Respondents years in employment

Source: Research Data 2014

Majority, 40 percent indicated to have worked for between 2-5 years, 20 percent had worked for below 1 year and between 5-10 years respectively while 10 percent had worked for between 1-2 years and over 10 years respectively. When the researcher inquired on the duration the respondents had worked cumulatively in employment, the results supported the findings on the age group of the respondents, given majority of them were below the age of 40 years, it was obvious for them to have worked for less than 10 years.

**Evaluation of the audit quality attributes and client satisfaction:** Prior to the testing of hypotheses, the data was subjected to descriptive analysis

Table 4.4. Descriptive statistics 14-41								
	Mean	Maximum	Std. Deviation	Kurtosis	Skewness			
Audit Tangibility	5.6275	19.00	3.75785	-0.136	0.226			
Audit Reliability	5.0000	21.00	1.12941	-0.676	0.891			
Audit Responsiveness	5.0033	23.00	1.18743	-1.009	0.986			
Audit Assurance	5.8675	21.00	1.11834	-0.74	0.846			
Audit Empathy Valid N (listwise)	5.6874	24.00	1.22650	-0.958	1.267			

Table 4.4: Descriptive statistics N=41

Source: Research Data 2014

Measures of distribution such as skewness and kurtosis indicate how much a distribution varies from a normal distribution. In general, a skewness value greater than one indicates a distribution that differs significantly from normal symmetric distribution. Tangibles had an average score of 5.6275 and the maximum value is 19.00. The standard deviation is 3.75785 indicating the spread of gaps away from the mean. The distribution is positively skewed with a skewness of 0.226 which indicates that the figures are deviated more to the right. The kurtosis value is -0.136 which mean that there is clustering somewhere away from the mean. The mean was 5.0000 which mean that clients are satisfied with the quality of services as depicted by the reliability dimension. The standard deviation is 1.12941 which means that the gaps are spread away from the mean. The maximum gap is 21.00. The distribution is positively skewed with a value of 0.891 indicating the gaps are deviated to the right of the mean and the gaps are clustered away from the mean with a kurtosis value of -0.676. Averagely clients are unsatisfied with the level of services in terms of responsiveness by audit firms. The average value was of 5.0033, the maximum value was 23. The standard deviation of the responsiveness dimension is 1.18743 which indicates that the gaps are not very widely deviated from the mean. The deviation is to the right with a positive skewness of 0.986. The gaps are also clustered at a point different from the mean of the distribution because the kurtosis value is -1.009. The average gap for audit assurance is 5.8675 depicting satisfaction. The maximum gap is 21. The standard deviation is 1.11834 showing little deviation from the mean which is spread towards the right as the distribution is positively skewed with a value of 0.846 and the gaps cluster at some point away from the mean with a kurtosis value of -0.74.

The average gap score for the empathy dimension is 5.6874. The maximum gap for this distribution is 24. It has a standard deviation of 1.22650 which means that the gaps are deviated from the mean but not very much. They are deviated to the right because the distribution is positively skewed with a value of 1.267 and clustered at a value away from the mean with a kurtosis value of -0.958.

**Inferential findings: Correlation coefficients** 

## Relationship between audit quality attributes and client satisfaction

The researcher sought to find out the relationship between the client satisfaction and the audit quality attributes of audit tangibility, reliability, responsiveness, assurance, empathy and the

independent variables and audit independence and audit firm experience as moderating variables using 0.05 significance level, the findings are presented in table 4.5 below;

Table 4.5: Relationship between audit quality attributes and client satisfaction

N=41 Sig = 0.05

	Audit tangibility	Audit reliability	Audit responsi veness	Audit assurance	Audit empathy	Audit firm indepen dence	Audit firm experien ce	Client Satisfac tion
Audit	1							
tangibility Audit	.929(*)	1						
reliability	.022							
Audit	.954(*)	.996(**)	1					
responsivene	.012	.000	/	EAR				
SS								
Audit	.946(*)	.995(**)	.999(**)	1				
assurance	.015	.000	.000					
Audit	.960(**)	.980(**)	.982(**)					
empathy	.010	.003	.003					
Audit firm	.978(**)	.971(**)	.989(**)	.988(**)	.967(**)	1 1		
independenc	.004	.006	.001	.002	.007			
e					1 N 2			
Audit firm	.995(**)	.891(*)	.921(*)	.910(*)	.938(*)	.953(*)	1	
experience	.000	.043	.026	.032	.018	.012		
Client	.985(**)	.977(**)	.987(**)	.980(**)	.991(**)	.986(**)	.966(**)	1
satisfaction	.002	.004	.002	.003	.001	.002	.007	

<sup>\*</sup> Correlation is significant at the 0.05 level (2-tailed).

Source: Research Data 2014

The results established that audit reliability and audit tangibility were positively related at 0.929 with a significance level of 0.022, this implies that the physical equipments and staff of the audit firm directly affects how the clients feel comfortable with their services in terms of reliability. Audit responsiveness was positively related to audit tangibility at 0.954 p-value and sig. of 0.12, this shows that the physical facilities and staff of the audit firm is seen to be directly related to their willingness to help clients and provide prompt service, for audit responsiveness and audit reliability they were positively related at 0.996 at sig. 0.000, this implies that the audit firms that are willing to help and responds to clients promptly are relied upon by the clients. Audit assurance and audit tangibility were positively related at 0.946 with sig. of 0.015, this shows that the ability of the client to inspire trust and confidence to the client directly influences the ability of the audit firm to deliver on the promise. For audit assurance and audit reliability, they were

positively related at 995 with sig. of 0.000, this shows that the ability of the audit firm to deliver on promises directly impacts on the trust the clients develops in the audit firms. For audit assurance and audit responsiveness they were positively related at .999 with sig. of 0.000, this shows that how fast the audit firm responds to the client's needs, has an impact on the trust and confidence that the clients develops towards the audit firm. The relationship between all the measurers of variables was found to be significant as for all the variables, the significance level was below 0.05, further all the measures of variables were positively related to one another as depicted by the positive signs of the Pearson correlations, this implied that all the variables had complimentary impact on the client satisfaction.

## Effect of audit quality attributes on client satisfaction

In order to determine and confirm the effects of audit quality attributes (audit tangibility; audit reliability; audit responsiveness; audit assurance and audit empathy on the dependent variable (client satisfaction), regression analysis was done and results summarized in Table 4.6 below.

Table 4.6: Regression result for audit quality attributes and client satisfaction

	Unstandardized Coefficients		Standardized Coefficients		
	В	Std. Error	Beta	t	Sig.
(Constant)	14.99	0.319		0.694	0.334
<b>Audit Tangibility</b>	-0.291	0.12	-0.305	0.000	0.019
<b>Audit Reliability</b>	0.078	0.204	0.046	0.784	0.704
<b>Audit Responsiveness</b>	0.497	0.216	0.336	0.000	0.026
<b>Audit Assurance</b>	0.243	0.193	0.19	0.481	0.208
<b>Audit Empathy</b>	0.351	0.227	0.17	1.633	0.321

Source: Research Data 2014

The researcher sought to test the hypotheses by regressing quality attributes against the client satisfaction where t – test was used to test for the significance of each predictor variables (Audit quality attributes) in the model. The null hypothesis (i.e. the model lacking explanatory power) was rejected when the significance value t – statistic was less than 0.05 (significance level). From table 4.6 above it can be formulated in a regression equation, the influence of audit tangibility, audit reliability, audit responsiveness, audit assurance and audit empathy on the client satisfaction as follows:

Y = 14.990-0.291 X1 + 0.078 X2 + 0.497 X3 + 0.243 X4+0.351X5+0.319

## **Discussion of Study Findings**

Ho1: There is no significant relationship between audit tangibility on client satisfaction. The t value and significance levels were 0.000 and 0.019 against the significance level of 0.05 respectively which indicates that the independent variable of audit tangibility explained a highly significant proportion of the variation in the dependent variable, client satisfaction. Therefore the first hypothesis was rejected.

## Relationship between audit reliability and client satisfaction:

Ho2: There is no significant relationship between audit reliability and client satisfaction

The study established a t – value of 0.784 against the significance level of 0.05 which indicates that there is no significant relationship between audit tangibility and client satisfaction; it shows that audit reliability is not a great attribute that needs much attention from the audit firms in order to win and maintain their clients.

## Relationship between audit responsiveness and client satisfaction

Ho3: There is no significant relationship between audit responsiveness and client satisfaction. The findings showed that responsiveness has a significant impact on client satisfaction, the t-value was found as 0.000 which was way below the significant level of 0.05, this shows that audit firms have to put more emphasis on audit responsiveness towards their clients.

### Relationship between audit assurance and client satisfaction

Ho4: There is no significant relationship between audit assurances on client satisfaction.

The t value was 0.480 which was higher than significance level of 0.05, this indicates that the independent variable, audit assurance, explain a non - significant proportion of the variation in the dependent variable (client satisfaction). Therefore the fifth hypothesis has been accepted, meaning that audit assurance does not affect client satisfaction.

## Relationship between audit empathy and client satisfaction

Ho5: There is no significant relationship between audit empathy client satisfaction.

The t value of 1.633 and significance level of 0.178 which was higher than 0.05 which indicates that the independent variable, audit empathy, did not explain a significant proportion of the variation in the dependent variable (client satisfaction). Therefore the sixth hypothesis has been accepted.

## Relationship between audit quality attributes and client satisfaction

Ho6 There is no significant relationship between audit quality attributes and client satisfaction for companies quoted at the Nairobi Securities Exchange.

The study found that the overall t-test was 0.694 against the significance level of 0.05. Only two out of five dimensions of audit quality attributes was statistically significant related to client satisfaction. It is audit responsiveness and audit tangibility which has a t-value of 0.000 respectively which was below 0.05 significance level. Audit reliability had a t-value of 0.784, audit assurance had a t-value of 0.480 and audit empathy had a t-value of 1.633 which were over 0.05 significance value. This may indicate those sampled companies are not quite pleased with this area. Specifically, we can conclude that audit firms needs to recognize and respond effectively to this area (audit tangibility and audit responsiveness), if they still want to retain customers in highly competitive environment.

## Effect of overall audit quality attributes on client satisfaction

The researcher sought to establish the autocorrelation and serial correlation among the dependent and independent variables, the results are presented in table 4.7 below;

Table 4.7: Effect of overall audit quality attributes on client satisfaction

Mod el	R	R Square	Adjuste d R Square	Std. Error of the Estima te		Chang	e Statis	stics		Durbin- Watson
					R	$\mathbf{F}$			Sig. F	
					Square	Chang			Chang	
					Change	e	df1	df2	e	
1	0.672	0.421	0.399		1.000		4	0		1.970

a Predictors: (Constant),

b Dependent Variable: Client Satisfaction

Source: Research Data 2014

The results of multiple regression analysis obtained multiple correlation coefficient (R) of 0.672 indicates multiple correlation (Audit reliability, audit assurance, audit tangibility, audit responsiveness and audit empathy) with the client satisfaction. Adjusted R2 value of 0.399 indicates the extent of the role or contribution of audit reliability, audit assurance, audit tangibility, audit responsiveness and audit empathy are able to explain client satisfaction variable as big as 39.9 percent.

The Durbin-Watson test is a widely used method of testing for autocorrelation. The Durbin-Watson Statistic was used to test for the presence of serial correlation among the residuals. The value of the Durbin-Watson statistic ranges from 0 to 4. As a general rule of thumb, the residuals are uncorrelated is the Durbin-Watson statistic is approximately 2. A value close to 0 indicates strong positive correlation, while a value of 4 indicates strong negative correlation (Durbin and Watson, 1971). Durbin-Watson should be between 1.5 and 2.5 indicating the values are independent (Statistica). The study found out the Durbin Watson value of 1.970, this implies that the independent variables and the dependent variable were uncorrelated in the model, thus there was no problem of collinearity and multicollenearity, and the model was found to be fit for further analysis.

## **Summary of findings**

Measures of distribution such as skewness and kurtosis indicate how much a distribution varies from a normal distribution. In general, a skewness value greater than one indicates a distribution that differs significantly from normal symmetric distribution.

Tangibles have an average score of 5.6275 and the maximum value is 19.00. The standard deviation is 3.75785 indicating the spread of gaps away from the mean. The distribution is positively skewed with a skewness of 0.226 which indicates that the figures are deviated more to the right. The kurtosis value is -0.136 which mean that there is clustering somewhere away from the mean.

The mean is 5.0000 which means that clients are satisfied with the quality of services as depicted by the reliability dimension. The standard deviation is 1.12941 which means that the gaps are spread away from the mean. The maximum gap is 21.00. The distribution is positively skewed with a value of 0.891 indicating the gaps are deviated to the right of the mean and the gaps are clustered away from the mean with a kurtosis value of -0.676.

Averagely clients are unsatisfied with the level of services in terms of responsiveness by audit firms. The average value was of 5.0033, the maximum value was 23. The standard deviation of the responsiveness dimension is 1.18743 which indicates that the gaps are not very widely deviated from the mean. The deviation is to the right with a positive skewness of 0.986. The gaps are also clustered at a point different from the mean of the distribution because the kurtosis value is -1.009.

The average gap for audit assurance is 5.8675 depicting satisfaction. The maximum gap is 21. The standard deviation is 1.11834 showing little deviation from the mean which is spread towards the right as the distribution is positively skewed with a value of 0.846 and the gaps cluster at some point away from the mean with a kurtosis value of -0.74.

The average gap score for the empathy dimension is 5.6874. The maximum gap for this distribution is 24. It has a standard deviation of 1.22650 which means that the gaps are deviated from the mean but not very much. They are deviated to the right because the distribution is positively skewed with a value of 1.267 and clustered at a value away from the mean with a kurtosis value of -0.958.

The first null hypothesis was; there is no significant relationship between audit tangibility on client satisfaction. The t value and significance levels were 0.000 and 0.019 against the significance level of 0.05 respectively which indicates that the independent variable of audit tangibility explained a highly significant proportion of the variation in the dependent variable, client satisfaction. Therefore the first hypothesis was rejected. The findings is supported by a study done by Ismail et al. (2006), which used SERVQUAL model in auditing sector and found that public listed companies in Malaysia were only satisfied with tangible dimensions and customer loyalty partially mediated the relationship between reliability and customer satisfaction.

The second hypothesis was; there is no significant relationship between audit reliability and client satisfaction, the study established a t – value of 0.784 against the significance level of 0.05 which indicates that there is no significant relationship between audit tangibility and client satisfaction; it shows that audit reliability is not a great attribute that needs much attention from the audit firms in order to win and maintain their clients. This study is supported by Bongsu (2004) study, in her studies on small medium enterprises (SME's) focused on quality of audit service and equated it with customer satisfaction. She found the SMEs were not satisfied with all five dimensions (reliability, responsiveness, assurance, empathy and tangibles).

The third hypothesis was; there is no significant relationship between audit responsiveness and client satisfaction. The findings showed that responsiveness has a significant impact on client satisfaction, the t-value was found as 0.000 which was way below the significant level of 0.05 and this shows that audit firms have to put more emphasis on audit responsiveness towards their

clients. This finding were not supported by Menon and Williams (1994) findings, who were able to identify responsiveness as an audit quality attribute that is unlikely to affect client satisfaction, the findings are further contradicted by Krishnan (2003) and Balsam et al. (2003) who found that responsiveness does not affect client satisfaction for the big 4 audit firms.

The fourth hypothesis was; there is no significant relationship between audit assurances on client satisfaction. The t value was 0.480 which was higher than significance level of 0.05, this indicates that the independent variable, audit assurance, explain a non - significant proportion of the variation in the dependent variable (client satisfaction). Therefore the fifth hypothesis has been accepted, meaning that audit assurance does not affect client satisfaction. The findings contradicts McKeown, Mutchler and Hopwood, (1991) who found out that assurance greatly affects the client satisfaction, the issuance of a going concern opinion by the auditor is likely to be preceded by increasing probability of bankruptcy.

The fifth hypothesis was; there is no significant relationship between audit empathy client satisfaction. The t value of 1.633 and significance level of 0.178 which was higher than 0.05 which indicates that the independent variable, audit empathy, did not explain a significant proportion of the variation in the dependent variable (client satisfaction). Therefore the sixth hypothesis has been accepted. The findings is supported by Cheng et al, (2008), who found out that audit empathy, does not affect the client's satisfaction.

From the empirical results, we may infer that the client believe that no matter which audit firm they choose, it should have a certain degree of service quality guaranteed in the highly competitive battle field. This indicates that clients need more responsiveness and tangibility from their audit firms and less care about audit firms' empathy. This result makes sense since most of the field work is performed at the client's sites. So if an audit firm needs to stand out in a highly competitive environment, more concerns to their clients are greatly needed.

### **Conclusion**

The first objective was to establish the relationship between audit tangibility on client satisfaction. The t value was 0.000 against the significance level of 0.05 which implies that there was a significant relationship between audit tangibility and client satisfaction. The second objective was to establish the relationship between audit reliability and client satisfaction. The study established a t – value of 0.784 against the significance level of 0.05 which indicates that there is no significant relationship between audit tangibility and client satisfaction; The third

objective was to establish the relationship between audit responsiveness and client satisfaction, the findings showed that responsiveness has a significant impact on client satisfaction, the t-value was found as 0.000. The fourth objective was to establish relationship between audit assurances on client satisfaction; the t-value was 0.480 which was higher than significance level of 0.05. The last objective was to establish the relationship between audit empathy client satisfaction, where the t-value was 1.633 and significance level of 0.178 which was higher than 0.05.

The study therefore established that only two out of five dimensions (i.e., Responsiveness, Assurance, Empathy, Tangibles, and Reliability) were statistically significant related to client satisfaction. They are audit tangibility and responsiveness. Specifically, the researcher concludes that audit firms needs to recognize and respond effectively to this area (audit tangibility and audit responsiveness). If they still want to retain customers in highly competitive environment. From the empirical results, the researcher may infer that the client believe that no matter which audit firm they choose, it should have a certain degree of service quality guaranteed in the highly competitive battle field. This indicates that clients need more responsiveness and tangibility from their audit firms and less care about audit firms' empathy. This result makes sense since most of the field work is performed at the client's sites. So if an audit firm needs to stand out in a highly competitive environment, more concerns to their clients are greatly needed.

### Recommendation

This research can be made as an input by ICPAK in policy improvement related to audit quality, especially in improving auditor understanding in area of client industry, the findings can also be used in drafting training material aimed at improving auditor's understanding of clients needs. The study can also be used by the audit firms since it gives a clear understanding of what the clients expects from the auditors especially in the area of tangibility and responsiveness.

## **Suggestions for further studies**

For academic world, this research result is expected to become a valuable input in studies related to the theories of audit quality and client satisfaction. This Research has not yet expressed all variables that can influence audit quality and client satisfaction, then in order to increase knowledge development, other researchers who are interested in similar problems are suggested to conduct a continuation research by adding variables like: auditor reputation, auditor size, auditor firm tenure, institute membership, auditor professionalism and auditor commutation.

The study was done on listed companies on how they perceive the audit firms. It is suggested that a similar study be done for other services e.g. banking industry, insurance companies', manufacturing companies and unlisted companies.

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