1. Management Competence And Sustainability Of SMEs: “Study Of SMEs’ In Ghana
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MANAGEMENT COMPETENCE AND SUSTAINABILITY OF SMEs:
“STUDY OF SMEs’ IN GHANA”

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ABSTRACT
Small and Medium Enterprises (SMEs) contribute immensely to the economic development of most developed and emerging economies however, research has proven over time that only five to ten of such SMEs operate beyond five years of formation. This quantitative research sought to establish the relationship between the theory of management competence and the sustainability of SMEs in the GAR of the Republic of Ghana. To establish this relationship, the study employed multiple regression analysis. The research design employed survey instruments to solicit information from respondents. A sample size of 500 respondents revealed a statistical relationship between three sustainable variables (return on capital employed, return on shareholders’ equity and length of existence) and the theory of management competence in the GAR of Ghana however, the result did not reveal significant relationship between project/sales ratio and the theory of management competence. The findings of this research study further revealed a non-significant difference between the demographic features of SME owners/founders and sustainability of their businesses into the unforeseeable future. A recommendation for future research for the application of secondary financial data will be of immense benefit to all stakeholders especially owners of SME’s in Ghana.

Keywords: SMEs, Sustainability, Management competence, Return on Investments, Republic of Ghana, Founders.

INTRODUCTION
Small and Medium Enterprises (SMEs) play major roles in economic development in emerging countries (Abraham, 2003; IFC, 2010 Kongolo, 2010). Ostensibly; their significant contribution to the development of various economies especially in the formal and informal sectors cannot be underemphasized. This phenomenon has generated a considerable interest in academia and the business environment to conduct series of research for further development of their operation (Asamoah, 2012). The World Bank’s (2010) report on MSMEs revealed that formal MSMEs employ more than one-third of the global population, contributing 33 percent of employment in developing countries. The operations of SME’s do therefore play a crucial role in stimulating growth, providing employment and contributing to reducing poverty (Abor & Quartey, 2010). In view of the concentration of SMEs in all sectors of economies, small businesses accounted for 84% and 83% in the Canadian transportation and warehousing sectors respectively and contributed more than 30% of the Canadian GDP (KSB Statistics, 2011).
In Ghana, an estimated 80 percent of SMEs operate in the informal sector (GSS, 2009). They provide about 85 percent of manufacturing employment, 70 percent to Ghana’s GDP and account for 92 percent of businesses in Ghana (Abor & Quartey, 2010). Notwithstanding the recognition of the significant roles SME’s play in various economies, most of these SMEs fail within a very short period after establishment. According to the Small Business Administration (2006), more than half of new SMEs fail within the first five years after their formation. SMEs with fewer than 20 employees only have a 37 percent chance of surviving for four (4) years and only have 9 percent chance of surviving for ten (10) years (Dun & Bradstreet, 2010). In Ghana, three out of every five SMEs fail within the first few months of establishment (Mensah, 2004).

The inability of SMEs to sustain their operations is normally characterized by numerous factors, hence the need to assess the critical success factors that will prolong and sustain their operations to meet their relevance in economic development. Previous research has enumerated various obstacles to the success of SMEs. The most commonly cited obstacles faced by SMEs in developing countries are access to finance, electricity, political instability, tax rates, corruption and practices of the informal sector (Buame, 2012; IFC, 2010; Abor & Quartey, 2010). Al-Mahrouq (2010), also identified and enumerated five significant factors that have positive success to the operations of SME’s: technical procedures and technology, structure of the firm, financial structure, marketing and productivity and human resources. Factors giving rise to success by SMEs cannot be disregarded because they reveal the necessary elements to facilitate strategies that seek to provide a conducive environment for SMEs to operate (Mensah 2004; Abraham, 2003 and Boynlon et al, 1984). Paramount among the factors accounting for failure of SMEs in operating beyond their maturity stage is proper management competence (IFC, 2011). According to Buame (2012), the main difficulty encountered by Ghanaian SMEs is the transition from the maturity stage to a sustainable stage. At the maturity stage, the operation of most of these SMEs either decline or liquidate. In their study, Rita & Viitala (2007), identified management competence as a major determinant in the sustainability of SMEs at the maturity stage of operations. In this regard, the study tested the theory of management competence and related it to the sustainability of SMEs. Management competency theories such as competence-based strategic management (Sanchez, 2004); becoming a master manager (Quinn et. al., 2010) and Garavan & McGuire (2001) were reviewed. The study further identified some other major factors which contribute to the sustainability of Ghanaian SMEs.

REVIEW OF LITERATURE

This section describe the literature in reference to SME definitions, practices and challenges as well as empirical studies conducted in this area.

One of the main challenges of performing a cross-country analysis of SMEs’ data is the absence of a universally accepted definition of what constitutes an SME (Ardic et al., 2011). In view of this challenge to find suitable definitions of SMEs, a number of researchers, organizations and countries have formulated their definitions on a number of components. Some attempt to use the number of employees (Abor & Quartey, 2010), others the employment of capital base and
turnover levels (EU, 2010), others market share of firms (Bolton, 1971) and there are many others. According to Vander Wijst (1989), SMEs are privately held enterprises with employees between nine (9) and ninety nine (99) persons respectively; whiles Lopez and Aybar (2000), recognizes firms with annual turnover below 15 million dollars as small. Michaela (1999) consider SMEs as private limited firms with maximum of 200 employees. The most common SME definitions used by researchers and regulators are based on the number of employees, turnover and / or loan size (IFC, 2010). However, many international organizations and countries across the globe have formulated their own set of guidelines to facilitate the definition of SMEs. Most of these definitions include those defined by organizations such as European Commission (EC), International Finance Corporation (IFC), Asia Pacific Economic Cooperation (APEC), Multilateral Investment Guarantee Agency (MIGA)/United Nations Industrial Development Organization (UNIDO) and individual countries across the world (Abor, 2010).

The European Commission (EC) defines SME’s as firms that employ fewer than 250 people and accumulated annual sales of not more than €50 million and/or total assets not exceeding €43 million (World Bank, 2011). The definition clearly shows that the EC considers three main indicators of staff headcounts, annual sales and total assets. The EC’s definition explicitly draws the line of distinction between micro-firms and SME’s. Given the distinction, it is mandatory to abide by the staff headcount threshold, however, SME’s can qualify under either the sales or total asset threshold (USAID, 2007). The distinction defines micro enterprises as those that employ less than ten (10) persons with an annual sales or aggregate asset not exceeding €2 million. Small enterprises are defined as those that employ less than fifty (50) persons with an annual sales or aggregate asset not exceeding €10 million.

<table>
<thead>
<tr>
<th>Firm Size</th>
<th>Head Count</th>
<th>Turnover</th>
<th>Balance sheet</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium Size</td>
<td>&lt; 250</td>
<td>≤ €50 million</td>
<td>≤ 43 million</td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>&lt; 50</td>
<td>≤ €10 million</td>
<td>≤ 10 million</td>
<td></td>
</tr>
<tr>
<td>Micro</td>
<td>≤ 10</td>
<td>≤ €2 million</td>
<td>≤ €2 million</td>
<td></td>
</tr>
</tbody>
</table>


The third threshold clearly defines SME’s as those firms that employ a maximum of two hundred and fifty (250) persons and have annual sales not exceeding €50 million and total asset not exceeding €43 million. It is worth mentioning that, a study conducted by the IFC (2010) revealed that at least twenty seven (27) countries follow the EU definition. Table 1 presents the numerical definition of SMEs by the European Commission.

The United Nations Industrial Development Organization (UNIDO) defined SMEs as an important issue for policy development and implementation (Elaian, 1996). The definition
depends primarily on the purpose of classification which varies among countries as well as within the country over a period of time (USAID, 2007). It defines SME’s by distinguishing among the specific features between developing and developed countries. This is set below:

Table 1.2: UNIDO Definition of SMEs

<table>
<thead>
<tr>
<th>Enterprise Categories</th>
<th>Developing Countries</th>
<th>Industrialized Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Head count</td>
<td>Head Count</td>
</tr>
<tr>
<td>Large</td>
<td>&gt; 100</td>
<td>&gt; 500</td>
</tr>
<tr>
<td>Medium</td>
<td>20 – 99</td>
<td>100 – 499</td>
</tr>
<tr>
<td>Small</td>
<td>5 – 19</td>
<td>≤ 99</td>
</tr>
<tr>
<td>Micro</td>
<td>&lt; 5</td>
<td>-</td>
</tr>
</tbody>
</table>


In addition to the above definitions, the International Finance Corporation (IFC) defines SMEs as small enterprises that meet two of the following three conditions:

i. Less than 50 employees

ii. Less than $3 million total assets

iii. Less than $3 million total annual sales

It is therefore evidenced that organizations or researcher has no specific consensus over the constitution of SME’s (Abor & Quartey, 2010), therefore the definition varies among countries and organizations. These definitions have been criticized by researchers. According to Abor (2010), the multiplicity of definitions to SMEs makes it difficult to do critical comparative analysis.

According to Weston and Cooland (1998), the attempt to define enterprises based on the size suffer from lack of universal acceptability. This is because almost all the definitions formulated along the sizes of employees have been given a different context. For instance, UNIDO defines micro enterprises as having less than five (5) employees whilst the EC defines the same micro enterprises as having less than ten (10) employees. The Organization for Economic Cooperation and Development (OECD) also asserts that the definition of SME does not only reflect in the economic patterns of countries but also the social dimensions which is lacking in the various definitions. In effect, most of the definitions are based solely on employment and turnover rather than a multiplicity of criteria (Kayanula & Quartey, 2000).
Definition of SME’s in Ghana

A number of definitions have been used to describe the operations of small scale enterprises in Ghana but the most commonly used criteria is the size of employees in the enterprise (Agyapong, 2010). The Ghana Statistical Service (GSS), National Board for Small Scale Industry (NBSSI), Ghana Enterprise Development Commission (GEDC) and some individuals employ the size and other categories to define SME’s in Ghana (Mensah, 2004). The GSS considers firms with fewer than ten (10) employees as small scale enterprise where as their counterparts with more than (10) employees are considered as medium and large-sized enterprises (Abor&Quartey, 2010). The GSS in its national accounts defined firms with up to nine (9) employees as small and medium enterprises. Alternatively, the NBSSI defined SME’s by considering both the value of fixed assets and the number of employees as a criterion (Agyapong, 2010). It defines small scale enterprise as a firm with not more than nine (9) workers with the value of their non-current assets (excluding land, building and vehicles) not exceeding ten (10) million Ghana cedis (Mensah, 2004). The GEDC also considers SME’s as enterprises that have plant and machinery amounting to ten (10) million Ghana cedis as the upper limit as criteria.

Apart from definitions from these recognized organizations in Ghana, individual authors such as Steel and Webster (1991), Osei et. al, (1993) and Quartey (2010), used an employment upper limit of thirty (30) employees to define small scale enterprises into three segments ranging from micro (employing less than 6 persons), very small scale (employing between 6 and 9 persons) and small scale (employing between 10 and 29 persons). In recent times, the Regional Project on Enterprises Development Ghana manufacturing survey paper also defined SME’s by classifying firms into the following:

i. Micro enterprise: less than 5 employees
ii. Small enterprise: 5-29 employees
iii. Medium enterprises: 30-99 employees
iv. Large enterprises: 100 and above employees

It must also be noted that in applying this definition to the operations of SMEs’ difficulties normally arise as a result of the arbitrariness and cut-off points used by the various official sources (Kayanula & Quartey, 2000). Another criticism leveled against the definitions of SME’s in Ghana has to do with the inability to back the number of SMEs by legislation as patterned in other parts of the world.

Working Definition for the Study

It is evidenced from the above numerous definitions of SMEs that any research on the operations of SME’s will be confronted with multiplicity of definitions (Buame, 2012). By implication, researchers, organizations, nations and individuals globally are likely to formulate their own definitions to suit their particular “target” group (Storey, 1994). Consistent with the definition of SMEs globally, the definitions of GSS, NBSSI and UNIDO will be synthesized and adopted. For the purposes of this study, fewer than nine (9) employees and a maximum of one hundred (100) employees will be classified as small and medium enterprises.
Management Competency Theories.
To investigate the relationship between management competence and sustainability of SME’s, management competency theories such as competence-based strategic management (Sanchez, 2004); becoming a master manager (Quinn et. al., 2010) and Garavan & McGuire (2001) were reviewed. The review of these models sought to describe the characteristics of individuals and organizations that will emanate into success or performance on a job in an entity (Thomas & Herrisier, 1991; Vernhout, 2009). Lucia and Lepsinger (1999) identified competency models as logical and generic tools that define knowledge, abilities and skills required for successful performance in an organization. These competency tools form the basis for measuring the performances of individuals on jobs (Viitale, 2005). In view of the significant roles management competence plays in organizations, the study reviewed the following management competency theories.

Competence-based strategic management theory
Established as a theory in the 1990s, the competence-based strategic management theory postulates the basis for organizations’ ability to develop and sustain competitive advantage in a systematic and structural manner (Sanchez & Heene, 2004). The fundamental basis of this theory is to explain differences in organizations’ performance by examining differences in their competences (Sanchez, Heene & Martins, 2008). The competence-based strategic management theory defines competence as a firm’s ability to coordinate and sustain their activities and resources in such a manner that will facilitate the achievement of their goals (Vernhout, 2009). In effect, a competent organization permeates a structural and systematic environment capable of committing and coordinating sustainable resources for value creation and distribution to customers and stakeholders (Vernhout, 2007). The theory was advanced established on an integrated approach that incorporates economic, organizational behavioural concerns in a system that is dynamic, systemic, cognitive and holistic (Sanchez & Heene, 2004). The approach conceptualized the theory into “five modes of competence”. Each mode is formulated on specific level of activity within the organisation and should be flexible enough to respond to changing and diverse conditions such as evolving market demands, technological change and competitive issues in a particular industry (Sanchez et al., 2008). The theory recognizes the five competence modes as competence mode I (cognitive flexibility to imagine alternative strategic logics); competence mode II (cognitive flexibility to imagine alternative management processes; competence mode III (coordination flexibility to identify, configure and deploy resource; competence mode IV (resource flexibility to be used in alternative operations and competence mode V (operating flexibility in applying skills and capabilities to available resources (Sanchez & Heene, 2004).

The competence-based strategic management theory is depicted in a diagram as “organization as open social system”. This figure is shown in the diagram below:
This hierarchy of assets explains the manager’s ability to blend knowledge and resources to create value and achieve the company’s goals in the short and long term.

In view of its significant role, competence-based strategic management theory plays significant role in the strategic positioning of organizations eventhough, the theory has been criticized by a number of scholars. In their study “predicting rent generation in competence-based competition” Elaine & Mekelve (1997) described the problem encountered as absence of agreed basis for selecting the vast number of competences that contribute to generation and persistence of rent. Vernhout (2007) also identified the problem with the definition of financial assets. According to the International financial Reporting standard (2011), the definition of financial assets encompasses cash and cash equivalents, receivables, derivative contracts and other contractual rights. The theory does not also identify and decompose competences among small and large scale enterprises. It does not provide any basis for technical competence, social competence, succession plan and financial literacy. In view of these limitations of the theory, the study further reviewed other management competency concepts formulated by other authors.
Methodology

The main purpose of this quantitative study is to test the theory of management competence and relate it to the sustainability of SME’s in the Greater Accra Region (GAR) of the Republic of Ghana. To achieve this purpose, a quantitative research method was employed. The quantitative method aids in eliciting a wide range of information from respondents (Arbour & Berke, 1997; Dawson, 2008). Employing the quantitative technique facilitated the eliciting of information by the use of both primary and secondary sources of data from some selected CEO’s/owners. Primary data was collected using questionnaires from respondents. According to Bryman (2005) and Borden and Abbot (2002), the questionnaire approach is a suitable means of eliciting responses by observing the behavior of respondents in answering the questions posed to them. The study’s target population is the owners/CEO’s of SME’s in the four (4) selected Districts in the GAR of the Republic of Ghana. To reduce the constraints involved in using large population sizes, a sample of the population is usually taken to define sub-groups of the population targets from which information will be obtained, analyzed and presented (Saunders et al, 2003). To achieve the purpose of this survey, a stratified sampling technique was employed to decompose the target population (GAR) into four strata with specific characteristics: Accra Metropolitan, Tema Metropolitan, GA East and GA West municipalities. To obtain a clear view of the population, a sample size is eminent for a fair judgment (Zikmund, 2003). This was obtained by independently selecting a separate sample by the simple random technique from each population stratum. The population was divided into different groups based on characteristics such as gender, location of the respondents and other specific characteristics. The questionnaires were administered by the researcher and research teams through personal contacts. The questionnaire was categorized into four segments. The first segment captured the demographic data of the respondents which comprises of age level, gender and education. The second segment also captured business information such as the nature of business, sources of funds, and ownership of business while the third segment collected data on the success and sustainability factors. The fourth segment relates to data on management competence. In this segment, information on managers’ attributes, composition of Board of Directors, management expertise, management training, availability of internal control systems were collated. In formulating their competitive model of competence Man & Lau (2002), identified all these variables as the main determinants of entrepreneurial competence, competitive scope, form performance and organizational capabilities. To ascertain the validity of the questionnaire, a content validity was conducted through pre-testing on some selected founders/CEO’s of SME’s in the GAR. To analyze the collected data, the extrapolation was conducted in two stages using Statistical Package for Social Sciences (SPSS version 12). The first stage analyzed descriptive statistics collected from respondents and presented it in tabular form with corresponding diagrams. The second stage also involved the employment of multiple logistic regressions to establish the relationship between management competence and its dependable variables of sustaining the operations of SMEs.
Independent and Dependent variables

To achieve the objectives of this study, the general independent variable to be investigated is management competence. The specific independent variables under management competence are internal controls, organizational structure, financial literacy, succession plans, management training, managerial background and personal attributes. The general dependent variable is sustainability defined as growth and profitability. Intervening variables such as gender, and age, were statistically controlled in the study.

Hypotheses and Null Hypotheses

The research questions are: 1) R1 is: is there a relationship between management competence and sustainability of SMEs? 2) R2 is: is there a relationship between management competence and profitability of SMEs? 3) R3 is: is there a link between the theory of management competence and sustainability of SMEs in GAR? 4) R4 is: what are the critical factors that affect the sustainability of SMEs? These research questions are hypothesized as follows:

1H₀: There is no significant relationship between management competence and sustainability of SMEs.

1H₁: There is a significant relationship between management competence and sustainability of SMEs.

2H₀: There is no significant relationship between management competence and profitability of SMEs.

2H₁: There is a significant relationship between management competence and profitability of SMEs.

3H₀: There is no significant association between management competence and sustainability of SMEs in GAR.

3H₁: There is a significant association between management competence and profitability of SMEs.

4H₀: There is no significant difference between demographic factors and sustainability of SMEs GAR.

4H₁: There is a significant difference between demographic factors and sustainability of SMEs in GAR.

Validity and Reliability Test
To ascertain the validity of the questionnaire, a content validity was conducted through pre-testing on twenty (20) respondents selected from founders/CEOs of SMEs in the four (4) District Assemblies in GAR using the Cronbach's alpha for all the competency variables. Out of eighty

9
one (81) instruments, a range of 0.818 (81.8%) reliability was ascertained. A Cronbach reliability test above 0.60 is generally acceptable in an exploratory research (Heir et al., 1998). The table 4 below shows the reliability test. The validation of all the instruments developed by Man (2005), reported coefficient ranging from 0.70 to 0.82 (Man & Lau, 2005). Man (2001), focused this behavioral study in Hong Kong. In his validated survey, all the instruments were structured to reflect the respondents ratings of their respective competence with seven-point scale from "strongly disagree" to strongly agree". Consistent with this survey instrument Man (2001), the researcher modified it by including returns from equity, returns on capital employed, companies’ vision and competence traits to measure management competence and sustainability.

Table 3.3: Reliability Test

<table>
<thead>
<tr>
<th>Cronbach's Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.818</td>
<td>86</td>
</tr>
</tbody>
</table>

Source: Survey Data (2013)

The questionnaire was categorized into four segments. The first segment captured the demographic data of the respondents which comprises of age level, gender and education. The second segment captured business information such as the nature of business, sources of funds, ownership of business, while, the third segment collected data on the sustainability. The fourth segment was related to data on management competence.

Econometric Estimation

To capture the relationship between management competence and sustainability of SME’s in Ghana, a simple model by Mcfadden (1989) and Pollard (1989) was adapted for this study. The model posits that the determination of asset prices $Y_t$ depends on unknown parameter $\beta_0$. This model was developed from the normal regression model. In this regard, data collected from the survey will be estimated using multiple regression techniques from the following basic models:

\[
S^1(LOE) = a + b1(IC) + b2(SP) + b3(FL) + b4(MB) + b5(MT) + b6(ICC) + b7(ME) + B8(SOS) + B9(AQ)
\]
\[
S^2(ROCE) = a + b1(IC) + b2(SP) + b3(FL) + b4(MB) + b5(MT) + b6(ICC) + b7(ME) + B8(SOS) + B9(AQ)
\]
\[
S^3(PSE) = a + b1(IC) + b2(SP) + b3(FL) + b4(MB) + b5(MT) + b6(ICC) + b7(ME) + B8(SOS) + B9(AQ)
\]
\[
S^4(ROSE) = a + b1(IC) + b2(SP) + b3(FL) + b4(MB) + b5(MT) + b6(ICC) + b7(ME) + B8(SOS) + B9(AQ)
\]

Where:

$S^1(LOE) =$ Sustainability (Length of existence)

$S^2(ROCE) =$ Sustainability (Return on capital employed)
Summary of Multiple Regressions

After analyzing the multiple regression equations to test specific relationship between the dependent variables and independent variables, the ANOVA table was used to analyze the overall relationship between the dependent variables and the predicting variables. The result will suggest the overall significance level (p-value) to either reject the null hypothesis or accept the alternative hypothesis of each model. To suggest the level of relation between the defined variables, a significance level of .005 (p-value) was used to predict the relationship between management competence and sustainability and profitability. A p-value is better fitted if it is lower than 0.05, thus the lower the p-value, the better. The following hypothesis and their related models were tested to establish the levels of relationship:

(a) Null Hypothesis (1H0): there is no significant relationship between management competence and sustainability of SME’s,

Associated model:

\[
\text{Sustainability } G(LOE) = 1.757 + .146 \times (AQ) + .061 \times (FL) + -.038 \times (ICS) + -.043(ICC) + .243 (SOS) + -583 \times (SP) + .046(CMD) + .231 \times (PYE) + -.036 (AOE)
\]

Where:

\[
\begin{align*}
S^1(LOE) &= \text{Sustainability (Length of existence)} \\
S^2(ROCE) &= \text{Sustainability (Return on capital employed)} \\
S^3(P/SR) &= \text{Sustainability (Project/sales ratio)} \\
S^4(ROSE) &= \text{Return on shareholders’ equity} \\
b^1(ICS) &= \text{Internal Control Systems} \\
b^2(SP) &= \text{Succession Planning} \\
b^3(FL) &= \text{Financial Literacy} \\
b^4(MB) &= \text{Management experience} \\
b^5(MT) &= \text{Management Training} \\
\end{align*}
\]
The result (Table 15) of the multiple regression equation for “length of existence” suggest a fair overall significance (p-value = .010). This indicates its usability for predicting the relationship between a business’ length of operation and sustainability thereby rejecting the overall null hypothesis (H0): there is no significant relationship between management competence and sustainability of SME’s. In view of the result in Table 15, the overall significant level of .010 depicts a positive relationship between sustainability (length of existence) and management competence. The overall sum of squares ($R^2$) also reveals a positive rate of approximately 37.89%. This shows a positive but low relationship between a business’ lengths of existence and management competence.

**Table 4.4: ANOVA of Length of Existence**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>37.882</td>
<td>9</td>
<td>4.209</td>
<td>2.487</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>355.478</td>
<td>210</td>
<td>1.693</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>393.359</td>
<td>219</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Survey Data (2013)

a. Predictors: (Constant), Area of experience, Prior working experience, Academic Qualification, Financial literacy, Internal control system, Supervision of subordinates, Succession plan, Continuous management training and development, Internal control compliance

(b) Null Hypothesis (2H0): there is no significant relationship between management competence and profitability (ROCE) of SME’s in the GAR.

Associated model:

\[
Profitability (ROC) = 2.024 - .001 \times (AQ) + .192 \times (FL) + -.076 \times (ICS) + \\
- .152(ICC) + .044 (SOS) + -298 \times (SP) + .006 \times (CMD) + .091 \times (PYE) + \\
- .016 (AOE)
\]

The result (Table 14.11) of the multiple regression equation for “Return on capital employed” also suggest a fair overall significance (p-value = .005). This indicates its usability for predicting the relationship between a business’ Return on capital employed and sustainability thereby
rejecting the overall null hypothesis (2H0): there is no significant relationship between management competence and sustainability (ROC) of SME’s in the GAR. In view of this result in Table 16, the overall significant level of .005 shows a positive relationship between sustainability (Return on capital employed) and management competence. The overall sum of squares ($R^2$) also reveals a positive rate of approximately 20.35%. This shows a positive but low relationship between a business’ Return on capital employed and management competence.

Table 4.5: ANOVA of Return on Capital Employed

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>20.350</td>
<td>9</td>
<td>2.261</td>
<td>2.711</td>
<td>.005a</td>
</tr>
<tr>
<td>Residual</td>
<td>175</td>
<td>.177</td>
<td>210</td>
<td>.834</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>195.527</td>
<td>219</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Survey Data (2013)

a. Predictors: (Constant), Area of experience, Prior working experience, Academic Qualification, Financial literacy, Internal control system, Supervision of subordinates, Succession plan, continuous management training and development, Internal control compliance

b. Dependent Variable: Return on capital employed

c) Null Hypothesis (3H0): there is no significant relationship between management competence and profitability (Project/sales ratio) of SME’s in the GAR.

Associated model:

\[
\text{Profitability}(P/S) = 3.809 \pm 0.031(AQ) + 0.23(FL) + -0.009(IC) + 0.174(ICC) \\
+ -0.096(SOS) + -0.170(SP) + -0.087(CMD) + -0.155(PWE) \\
+ -0.022(WE)
\]

The result (Table 17) of the multiple regression equation for “Project/sales ratio” also suggest a high overall significance (p-value = .217). The result suggests that the p-value did not reject the overall null hypothesis (3H0): there is no significant relationship between management competence and sustainability (PSR) of SME’s in the GAR. In view of this result in (Table 17), the overall significant level of .217 does not show a relationship between sustainability (Return on capital employed) and management competence. The overall sum of squares ($R^2$) also reveals a positive rate of approximately 9.50%. This suggests that the value is not usable for predicting relationship between a business’ Project/sales ratio and management competence.
Table 4.6: ANOVA of Project/sales ratio

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>9</td>
<td>1.056</td>
<td>1.342</td>
<td>.217a</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>210</td>
<td>.786</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>219</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Survey Data (2013)

a. Predictors: (Constant), Area of experience, Prior working experience, Academic Qualification, Financial literacy, Internal control system, Supervision of subordinates, Succession plan, continuous management training and development, Internal control compliance

b. Dependent Variable: Project/Sales ratio

(d) Null Hypothesis (1H0): there is no significant relationship between management competence and profitability (Return on shareholders’ equity) of SME’s in the GAR.

Associated model:

\[ P(ROSE) = 1.546 + -0.066(AQ) + 0.299(FL) + -151(IC) + 0.028(ICC) + -0.101(SOS) \\
+ 0.250(SP) + 0.244(CMD) + -0.320(PWE) + -0.019(WE) \]

The result (Table 18) of the multiple regression equation for “Return on shareholders’ equity” also suggest a good overall significance (p-value = .000). This indicates its usability for predicting the relationship between a business’ sustainability (ROSW) thereby rejecting the overall null hypothesis (1H0): there is no significant relationship between management competence and sustainability (ROSE) of SME’s in the GAR. In view of this result in Table 18, the overall significant level of .005 shows a positive relationship between sustainability (Return on shareholders’ equity) and management competence. The overall sum of squares \( (R^2) \) also reveals a positive rate of approximately 57.59%. This shows a positive but low relationship between a business’ Return on shareholders’ equity and management competence.
Table 4.7: ANOVA of Return on Shareholders' Equity

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>57.590</td>
<td>9</td>
<td>6.399</td>
<td>5.074</td>
<td>.000a</td>
</tr>
<tr>
<td>Residual</td>
<td>264</td>
<td>.847</td>
<td>210</td>
<td>1.261</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>322.436</td>
<td>219</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Survey Data

*a.* Predictors: (Constant), Area of experience, Prior working experience, Academic Qualification, Financial literacy, Internal control system, Supervision of subordinates, Succession plan, Continuous management training and development, Internal control compliance

*b.* Dependent Variable: Return on shareholder equity

**Conclusions**

In view of the objective to establish the degree of relationship between the theory of management competence and sustainability of SMEs in the GAR of the Republic of Ghana, the findings of the study have provided evidence of the significant relationship amongst the defined variables. Out of the four dependent variables, the overall results established a significant relationship between the independent variables with the exception of project/sales ratio which did not reveal a significant relationship between management competences. The result established a significant relationship between the theory of management competence and length of existence, Return on capital employed and Return on shareholders’ equity. The Analysis of demographic factors with the sustainability of SMEs did not reject the null hypothesis showing strong evidence that there is no significant difference demographic factor of SMEs and their sustainability. The study has therefore provided strong evidence that there is a significant relationship between the theory of management competence and sustainability of SMEs. The findings clearly impact on four stakeholders of the country: the founder/owners of SMEs, regulators, policy makers, and new entrants in small scale business sectors. For owners/founders, the finding of the research provides evidence that owners/founders of SMEs in the GAR of Ghana can enhance their operations through continues management training and development, design and implement succession plan and adhere to the strict recommendation of internal control systems. On the part of policy makers, favorable policies ought to be formulated to protect the growth of SMEs especially in the area of finances. Incentives such as access to low interest rate of accessing loans to create enabling environment for willing entrepreneurs to sustain their businesses. In addition to this, government agencies responsible for trade should also facilitate the organization of periodic training for SME’s concerning the need to sustain their businesses. The limitation of this study is clear evidence that suggests further research to be conducted in this area. Since the number of SMEs in the Ghanaian economy will continue to
grow, further research in the area of investigating into management competence and the life-span of SMEs to really ascertain the reasons behind the inability of most SMEs to blossom into large-scale enterprises. To have a clear picture of the relationship between profitability and management competence theory, it will be suitable conducting future research using the financial reports of these SMEs to define dependent variables such as return on capital employed, return on equity, project/sales ratio and return on investment.
REFERENCE


AN ASSESSMENT OF THE LINK BETWEEN CUSTOMER SATISFACTION AND RETENTION IN THE MOBILE TELECOMMUNICATIONS INDUSTRY IN GHANA: AN UNDERGRADUATE STUDENTS PERSPECTIVE.

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ABSTRACT
The objective of the study was to assess customer satisfaction and its’ link with customer retention from the perspective of undergraduate students in Ghana. A cross sectional survey and quantitative methodological approaches were adopted for this study. Using quota and convenient sampling techniques, a total of 200 undergraduate students were selected from four state universities in Ghana Boyd, Leonard and White’s standard instrument for mean weighted method of rating was adopted and applied to the gap score. Results from the study indicated that a gap exists between students’ expectations and perceptions in the mobile telecommunications sector. Again, the results show that the youngest age group are least satisfied with the service delivery of mobile telecommunications companies. The study identified three most important variables influencing student’s satisfaction as low call rates, wider coverage and auxiliary services. The study concludes that below poor performance of mobile telecommunication companies does not necessarily result in customer switching. In similar vein, customer satisfaction does not necessarily result in customer retention. Appropriate recommendations were made to respond to the gaps identified.

Keywords:
Customer satisfaction, customer retention, mobile telecommunication industry, undergraduate students, Ghana

INTRODUCTION
For over four decades, customer satisfaction and retention has been an intensely discussed subject in the area of consumer and marketing research. Customer satisfaction indeed has become one of the key determinants of organizational success. Marketing centres on customer needs. Without the customer, businesses would not exist. Indeed, as far back as 1950, Theodore Levitt led the debate in the marketing world to redefine marketing as being proactive to situations in the marketing world instead of the “marketing myopia” (marketing shortsightedness) which was prevailing at the time. In other words, customer satisfaction is key. Levitt’s argument is supported by the various definitions in the marketing literature. A common feature in this definition is that customer satisfaction measures the gap between customer perception and customer expectation (Zeithaml, Bitner & Gremler, 2009; Kotler & Keller, 2012).

Since the inception of mobile telecommunications in Ghana in 1999, the sector has witnessed stupendous growth within a decade. The National Communications Authority reports that as at the last quarter of 2012, twenty-two million Ghanaians have subscribed to one mobile network...
or the other (www.nca.org.gh). This translates to about 90 percent of the total population of Ghana which according to the 2010 census stands at 25 million (Ghana Statistical Service Report, 2012). Ironically, the NCA quarterly report on the performance of the mobile telecommunications companies has consistently indicated subscribers’ dissatisfaction with the service of the operators. Subscribers have complained about the quality of the service and are generally dissatisfied with the service. However, mobile network operators have not only managed to retain their customers but have been experiencing growth in their subscriber base as well. With the exception of Expresso which has experienced a decline in their subscriber base in the last three quarterly reports, MTN, Vodafone, Tigo, Airtel, and new entrant, GLO, have all witnessed substantial growth in their subscriber base. The debate therefore is reignited as to the relationship between customer satisfaction and customer retention. The undergraduate student population represents a very important segment to the mobile network operators as aggressive promotional campaigns are targeted at them with the aim of winning their loyalty. Indeed, a casual observation will reveal that almost every university student has subscribed to at least one mobile network. The study looks at the relationship between customer satisfaction and retention in the mobile telecommunications industry in Ghana from the perspective of undergraduate students in four state universities.

The objective of this paper is to determine students’ satisfaction in the mobile telecommunications industry in Ghana using both users’ expectations and perceptions of service delivery. The study further seeks to investigate the relationship between students’ satisfaction and retention in relation to mobile telecommunication services. The use of the student cohort comprising a unique segment of undergraduate students provides information which will help enrich the marketing literature.

The study therefore posed the following research questions:

What are the specific students’ expectations with respect to mobile telecommunication services?
How do students perceive service delivery in the mobile telecommunication industry?
What are the critical variables that most influence students’ satisfaction in the mobile telecommunication industry?
Is there a link between students’ satisfaction and retention in the mobile telecommunication industry?

The rest of this study is organized as follows: section one covers the literature review, while section two focuses on the methodology employed. Section three contains the data analysis while the last section provides discussions and conclusions.

LITERATURE REVIEW
A brief review of the literature covered customer satisfaction, relationship marketing, customer loyalty and customer retention. The review provided the context which enabled the research gap to be identified.
Customer Satisfaction
For more than three decades, customer satisfaction has been an intensively discussed subject in the area of consumer and marketing research. The mid-1970’s, for example, saw annual conferences being held on customer satisfaction with proceedings published in leading journals (Hening-Thurau & Gremler, 2002) in the United States. Since then several articles have been published in the area of customer satisfaction research (Kotler & Keller, 2012). The customer is the reason for the existence for any business. Without the customer, no business will exist. The customer has expectations. Expectations are the reference point customers have coming into a business experience (Zeithaml et al., 2009). Thus, customer satisfaction is seen a measure of how products and services supplied by a company meet or suppress a customer expectation. Customers also have perceptions which reflect the services actually received (ibid).

Work done by Zeithaml, Parasuraman, and Berry between 1985 and 1988 provides the basis for the measurement of customer satisfaction with a service by using the gap between the customer’s expectation of performance and their perceived experience of performance. Muddie and Cottam (1998 pp16 -17) emphasized the above assertion and defined customer satisfaction as:

\[ \text{Satisfaction} = \text{Perception} - \text{Expectation} \]

The difference between expectation and perception is what is referred to as the customer gap model (Zeithaml et al., 2009 p33). Firms will therefore want to close the gap.

Thus, the measurer is provided with a “gap” which is objective and quantitative in nature. Measuring satisfaction is supposed to provide an indication of how successful the organization is at providing products or services to the marketplace. It must however be pointed out that the actual manifestation of the state of satisfaction will vary from person to person and product/service to product/service (Kotler & Keller, 2012). Thus, the state of satisfaction depends on a number of both psychological and physical variables (Zeithaml et al., 2009). Because satisfaction is basically a psychological state, care should be taken in the effort of quantitative measurement, although a larger quantity of research in this area has recently been developed. Okoe et al. (2007) found that customer satisfaction in the mobile telecommunication industry have been measured both quantitative and qualitatively but the target has largely focused on main segments while neglecting smaller segments like the student cohort.

Relationship Marketing Concepts
Relationship Marketing represents a paradigm shift within marketing – away from an acquisition/transaction focus towards a retention focus. This philosophy assumes that consumers prefer to have an ongoing relationship with one or more organizations than to switch continually among providers in their search for value (Nartey & Owusu-Frimpong, 2011). Groonroos (1996) states that relationship marketing is the process whereby a firm builds long term alliances with both prospective and current customers so that both seller and buyer work together toward a common set of goals. It is a philosophy of doing business, a strategic orientation that focuses on keeping and improving current customer rather than acquiring new
customers. This philosophy assumes that many customers, particularly the business ones prefer to have an ongoing relationship with one organization than to switch continually among providers in their search for value. Building on this assumption and the belief that it is usually cheaper to keep a current customer than to attract a new one (Anabila & Dadson, 2013), successful marketers are working on effective strategies for retaining customers.

Advocates of relationship marketing maintain that firms frequently focus on attracting customers (thus, ‘the first act’) but then pay little attention to what they should do to keep them (the ‘second act’) (Berry & Parasuraman, 1998). They argue that the business brought into an organization by sales, advertising, and promotion programmes are not capable of keeping an organization running at full capacity, since when operation is weak and customers are not satisfied with what they get, business starts falling out of the organization faster than they can be brought in.

Major differences exist between the relationship focus and the traditional transaction focus marketing. These are mainly concerned with the emphasis placed upon continuous commitment to meeting the needs, wants and expectations of individual customers, with particular emphasis on quality, customer service and customer care (Christopher and McDonald, 1995; Anabila & Dadson, 2013). As Okoe et al. (2007) noted, quality, customer service and customer care are critical in building relationship with customers in the mobile telecommunication industry.

**Customer Loyalty**

Jones and Jones and Sasser (1995 p.88) defined customer loyalty as “the feeling of attachment to or affection for a company’s people, products or services”. To Buchanan and Gilles (1990), “customer loyalty is a deeply held commitment to repurchase or patronize a preferred product or service consistently in the future despite situational influences and marketing efforts having the potential to cause switching behaviors”. By these definitions, the writers seem to hold the view that customer loyalty has an emotional component even though Oliver points to the behavioral aspect as well. To Ehigie (2006), the key to generating high customer loyalty is to deliver high customer value. Gnsel (2007) says that a company must design a competitively superior value proposition aimed at a specific market segment, backed by a superior value-delivery system. The value proposition consists of the whole cluster of benefits the company promises to deliver; it is more than the core positioning of the offering. For example, Volvo’s core positioning has been “safety” but the buyer is promised more than just a safe car, other benefits include a long-lasting car, good service, and a long warranty period. Basically, the value proposition is a statement about the resulting experience customers will gain from the company’s market offering and from their relationship with the supplier. The brand must represent a promise about the total experience customers can expect. Whether the promise is kept depends on the company’s ability to manage its value – delivery system. The value delivery system includes all the experiences the customer will have on the way to obtaining and using the offering from the point of view of the customer therefore, value is synonymous with satisfaction. The premise by most writers is that satisfaction would lead to loyalty.
Customer Retention
Zeithaml, et al. (2009) state that the primary goal of relationship marketing is to build and maintain a base of committed customers who are profitable for the organization. To achieve this goal, according to So & Speece (2000), the firm will focus on the attraction, retention, and enhancement of customer relationships. As the oft-quoted axiom goes, it costs at least five times as much to get a new customer as it does to keep an existing customer.

Thus the whole idea of customer satisfaction, customer value and relationship marketing is to retain the customer for long term growth and profitability. As Keller et al. (2008) summed it, it is not enough to attract new customers; the company must keep them and increase their business. Too many companies suffer from high customer churn. Kotler likened the situation to adding water to a leaking bucket. Cellular phone users in the United States for example, according to Kotler and Keller (2012), switch carriers at least three times a year looking for the best deal. Many companies lose 25 per cent of their subscribers each year at an estimated cost of $2 billion to $4 billion. Unfortunately, several marketing theories and practices center on the art of attracting new customers, rather than on retaining and cultivating existing ones.

Duffy (1988) however argued that consumers value different kinds of relationships and do not wish to be restricted to just one. Customers may have favorite service providing companies but however good they are may want to try new or different ones and indeed value the change. The argument is that the customer gets variety form being able to buy different brands, or to engage with different services at different times and for different situations. To them, when customers show a complete loyalty towards a single brand or service, it is for negative rather than positive reason. For example where there is no alternative and therefore the customer has no choice, he sticks with the same product. This, he referred to as “spurious loyalty” rather than the “partner for life.”

Customer Retention Strategies
Once a firm has carefully identified its market segments and developed quality services, what are some of the specific tactics it can use to accomplish the goal of retaining its customers? Asked Zeithaml et al. (2009). To them the most successful retention strategies will be built on foundations of quality service, market segmentation, and monitoring of changing relationship needs over time. Berry and Parasuraman (1998) have also developed a framework for understanding types of retention strategies. The framework suggests that retention marketing can occur at different levels and that each successive level of strategy results in ties that bind the customer a little closer to the firm. At each successive level, the potential for sustained competitive advantage is also increased. Building on the levels of the retention strategy idea, Zeithaml et al. (2009) illustrate four types of retention strategies which are as follows;

Financial bonds: At level 1, the customer is tied to the firm primarily through financial incentives, lower prices for greater volume purchases or lower prices for customers who have been with the firm for a long time. Social bonds: Level 2 strategies bind customers to the firm more than financial incentives. Building relationships with customers is an important part of
conducting business and arguably, the existence of most businesses depends on establishing sound relationships with their clientele. **Customization bonds:** Level 3 strategies involve more than social ties and financial incentives, although there are commonly elements of level 1 and 2 strategies encompassed within a customization strategy and vice versa. **Structural bonds:** According to Zeithaml et al. (2009) Level 4 strategies are the most difficult to imitate and involve structural as well as financial, social and customization bonds between the customer and the firm. Structural bonds are created by providing services to the client that are frequently designed right into the service delivery system for that client.

**Research Methodology**

**Research Design and Sampling Technique**

The study is causal in nature and relied on the cross-sectional survey method. The research design considered for the study is quantitative. The population of the study consists of university students in Ghana comprising thousands of students. The sample was drawn from the undergraduate students’ population. Fifty (50) respondents each was taken totaling two hundred (200). The study considered four state universities, namely, the University Of Ghana (UG), Kwame Nkrumah University of Science and Technology (KNUST), University of Cape Coast (UCC) and the University of Professional Studies, Accra (UPSA). State Universities were selected on the basis that compared to private universities, they have been in existence longer, with the minimum being over forty (40) years, as opposed to the oldest private university (Valley View University College) which has been in existence for just over a decade.

**Data Collection Method and Instrumentation**

The study is a cross-sectional survey and therefore the instrument employed for the collection of data was the questionnaire. The study adopted and adapted an instrument that previous studies have employed (Jones & Sasser, 1995; Okoe et al., 2007; Szmigin & Bourne, 1998; Wallin, 2000). The adoption of this instrument was informed by the fact that it has been validated in previous studies and therefore will ensure that the various constructs in the study are appropriately measured. Furthermore, the adoption of this instrument will promote reliability of the study. The questionnaire was largely structured and collected data on customer expectations (10 questions), customer perceptions (10 questions), customer retention (5 questions) and demographics (10 questions). The instrument was used to collect information from the sample using a five point Likert scale covering: strongly agree, agree, neutral, disagree and strongly disagree.

**Data Analysis Technique**

Data collected from the questionnaire was analyzed by adapting the serval model and conducting a gap score. The gap score measured the difference between customer expectation and perception which form the basis for determining customer satisfaction. The study further sought to establish if satisfied customers will be retained. Boyd, Leonard and White’s Standard Instrument for mean weighted method of rating the variables was adapted and applied to the gap
score. Descriptive statistics were also employed in profiling the students on the basis of the university attended.

**Validity**

Face validity was conducted on the initial questionnaire by pre-testing the questionnaire on ten students at UPSA campus. On the basis of the search in the literature on previous studies, content validity of the questionnaire is assured.

**Reliability**

Internal consistency method was employed as a reliability method where several items on the questionnaire attempted to measure the same construct to test coherence in respondents’ answers. The Cronbach alpha of 0.85 was obtained in the instrument independently tested and considered to be sufficiently high. The instrument was therefore adopted for this study.

**Results of the Study**

*Figure 1: Age distribution of respondents by institution*

<table>
<thead>
<tr>
<th>Institution</th>
<th>18 - 24 years</th>
<th>25 - 29 years</th>
<th>30 - 39 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>KNUST</td>
<td>90</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>UG</td>
<td>78</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>UPSA</td>
<td>42</td>
<td>40</td>
<td>18</td>
</tr>
<tr>
<td>UCC</td>
<td>34</td>
<td>4</td>
<td>6</td>
</tr>
</tbody>
</table>

**Source:** Field data, April 2013

Figure 1 indicates that overwhelming majority of respondents (90%) in KNUST are below the age of 25 years indicating their youthful nature. This is followed by UG with 78% below 25 years. UCC on the other hand, have a majority of respondents (62%) between the age brackets 25 and 29 years. In the case of UPSA, 40% of respondents are between 25 and 29 years. Compared with figures 1 and 2, this could explain why most KNUST students are full-time students.
As figure 2 shows, the dominant mobile telephone network among respondents is the MTN network with Expresso as the least network used. This finding is consistent with the market knowledge that MTN has the largest market share followed by Vodafone, Tigo, Airtel, Glo and Expresso in that order. Most respondents (62%) at KNUST subscribe to MTN confirming the perception that MTN marketing strategies target the youth most (KNUST has the most youthful population). Again, in some instances, some respondents indicated that they have subscribed to more than one network.

**Source:** Field data, April 2015
Figure 3: Rational for choosing network by institution

<table>
<thead>
<tr>
<th>Rational for choosing network</th>
<th>UCC</th>
<th>UPSA</th>
<th>UG</th>
<th>KNUST</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like their services</td>
<td>6</td>
<td>21</td>
<td>36</td>
<td>35</td>
</tr>
<tr>
<td>Their prices are moderate</td>
<td>8</td>
<td>21</td>
<td>17</td>
<td>13</td>
</tr>
<tr>
<td>It is a requirement from my work</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>It has a good name.</td>
<td>13</td>
<td>13</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>My friends/family influenced me</td>
<td>33</td>
<td>45</td>
<td>44</td>
<td>69</td>
</tr>
</tbody>
</table>

Source: Field data, 2015

Figure 3 reveals that students across the four state universities largely choose a network because of the influence of family and friends (69%, 45%, 44% and 33% for UCC, UPSA, KNUST and UG respectively). The second most important reason for the choice of a network for three of the universities, namely, UG (36%), KNUST (35%) and UPSA.

Analyses of Students expectations and perceptions

Research questions One and Two sought to determine students’ expectations and perceptions of service delivery in the mobile telecommunication industry. Tables 1-7 covered the analysis in terms of frequencies, percentages, weighted means and gap scores.
Table 1: Frequency distribution of respondents’ expectation (Exp) and perception (Per) of service delivery

<table>
<thead>
<tr>
<th></th>
<th>Strongly Agree / Agree</th>
<th>Neutral</th>
<th>Strongly Disagree / Disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>KNUST</td>
<td>UG</td>
<td>UPS</td>
<td>UCC</td>
</tr>
<tr>
<td>Exp</td>
<td>48</td>
<td>9</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>Per</td>
<td>16</td>
<td>23</td>
<td>19</td>
<td>35</td>
</tr>
<tr>
<td>Exp</td>
<td>46</td>
<td>48</td>
<td>47</td>
<td>43</td>
</tr>
<tr>
<td>Per</td>
<td>17</td>
<td>18</td>
<td>21</td>
<td>35</td>
</tr>
<tr>
<td>Exp</td>
<td>48</td>
<td>49</td>
<td>45</td>
<td>47</td>
</tr>
<tr>
<td>Per</td>
<td>17</td>
<td>20</td>
<td>15</td>
<td>32</td>
</tr>
<tr>
<td>Exp</td>
<td>48</td>
<td>48</td>
<td>45</td>
<td>43</td>
</tr>
<tr>
<td>Per</td>
<td>16</td>
<td>17</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Exp</td>
<td>46</td>
<td>48</td>
<td>46</td>
<td>42</td>
</tr>
<tr>
<td>Per</td>
<td>25</td>
<td>26</td>
<td>23</td>
<td>32</td>
</tr>
<tr>
<td>Exp</td>
<td>46</td>
<td>49</td>
<td>44</td>
<td>44</td>
</tr>
<tr>
<td>Per</td>
<td>20</td>
<td>19</td>
<td>18</td>
<td>30</td>
</tr>
<tr>
<td>Exp</td>
<td>47</td>
<td>50</td>
<td>50</td>
<td>45</td>
</tr>
<tr>
<td>Per</td>
<td>25</td>
<td>29</td>
<td>29</td>
<td>34</td>
</tr>
<tr>
<td>Exp</td>
<td>42</td>
<td>45</td>
<td>47</td>
<td>44</td>
</tr>
<tr>
<td>Per</td>
<td>21</td>
<td>26</td>
<td>27</td>
<td>35</td>
</tr>
<tr>
<td>Exp</td>
<td>44</td>
<td>44</td>
<td>47</td>
<td>43</td>
</tr>
<tr>
<td>Per</td>
<td>20</td>
<td>24</td>
<td>21</td>
<td>31</td>
</tr>
<tr>
<td>Exp</td>
<td>49</td>
<td>47</td>
<td>50</td>
<td>45</td>
</tr>
<tr>
<td>Per</td>
<td>16</td>
<td>24</td>
<td>22</td>
<td>38</td>
</tr>
</tbody>
</table>

Source: Field work 2015

Table 1 above reveals the number of respondents from the four state universities in the sample who experienced the services of MTN, Vodafone, Tigo, Airtel, Glo and Expresso in line with the customer satisfaction variables identified (meeting needs, coverage, call charges, efficiency, easy access, staff knowledge, customer service, innovative products, favorable environment, and convenience) based on respondents expectation (Exp) and perception (Per). These variables are rated strongly agree/agree, neutral, strongly disagree/disagree. The numbers indicate that expectations of respondents exceed their perceptions or experiences with the service. In each of the four universities, more than 40 out of the 50 respondents expect their mobile network to meet their needs, have good coverage, moderate prices, efficient operations, easy access to network offices, knowledgeable staff, friendly frontline staff, innovative products, favourable environment, and provide convenient delivery of services. Thus, irrespective of the network subscribed to, expectations are high and widespread with respect to their service delivery.
Compared to expectations however, respondent’s perceptions or experiences with the service are low. With the exception of UCC which had more than 30 out of the 50 respondents at least agreeing that their expectations are being met, the rest of the universities each had less than 30 out of the 50 respondents agreeing that their expectations are being met.

Table 2: Percentage distribution of respondents’ expectation (Exp) and perception (Per) of service delivery

<table>
<thead>
<tr>
<th>Strongly Agree / Agree</th>
<th>Neutral</th>
<th>Strongly Disagree / Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>KNUST</td>
<td>UG</td>
<td>UPSA</td>
</tr>
<tr>
<td>Exp</td>
<td>96</td>
<td>98</td>
</tr>
<tr>
<td>Per</td>
<td>32</td>
<td>46</td>
</tr>
<tr>
<td>Exp</td>
<td>92</td>
<td>96</td>
</tr>
<tr>
<td>Per</td>
<td>34</td>
<td>36</td>
</tr>
<tr>
<td>Exp</td>
<td>96</td>
<td>98</td>
</tr>
<tr>
<td>Per</td>
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<td>40</td>
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<tr>
<td>Exp</td>
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<td>96</td>
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<tr>
<td>Per</td>
<td>32</td>
<td>34</td>
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<tr>
<td>Exp</td>
<td>92</td>
<td>96</td>
</tr>
<tr>
<td>Per</td>
<td>50</td>
<td>52</td>
</tr>
<tr>
<td>Exp</td>
<td>92</td>
<td>98</td>
</tr>
<tr>
<td>Per</td>
<td>40</td>
<td>38</td>
</tr>
<tr>
<td>Exp</td>
<td>94</td>
<td>100</td>
</tr>
<tr>
<td>Per</td>
<td>50</td>
<td>58</td>
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<tr>
<td>Exp</td>
<td>84</td>
<td>90</td>
</tr>
<tr>
<td>Per</td>
<td>42</td>
<td>52</td>
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<tr>
<td>Exp</td>
<td>88</td>
<td>88</td>
</tr>
<tr>
<td>Per</td>
<td>40</td>
<td>48</td>
</tr>
<tr>
<td>Exp</td>
<td>98</td>
<td>94</td>
</tr>
<tr>
<td>Per</td>
<td>32</td>
<td>48</td>
</tr>
</tbody>
</table>

Source: Field work 2015

Table 2 translates table 1 into percentage terms. It presents percentage of respondents in the sample who experienced the services of MTN, Vodafone, Tigo, Airtel, Glo and Expresso based on the customer satisfaction variables identified (meeting needs, coverage, call charges, efficiency, easy access, staff knowledge, customer service, innovative products, favorable environment, and convenience) in line with respondents expectations (Exp) and customer perceptions (Per). These variables are rated strongly agree/agree, neutral, strongly disagree/disagree. The percentages indicate that respondents’ expectations exceed their perceptions or experiences with the service. In each of the four universities, more than 80% of
respondents expect their mobile network to meet their needs, have good coverage, moderate prices, efficient operations, easy access to network offices, knowledgeable staff, friendly frontline staff, innovative products, favorable environment, and provide convenient delivery of services. Respondents’ expectations are therefore high with regards to the service delivery irrespective of the network involved.

A comparison with respondents’ expectations indicates that perceptions are relatively low. With the exception of UCC which had a minimum of 60% of respondents agreeing to the fact that their expectations are being met, a maximum of 58% was recorded for the rest of the respondents in the other three universities in terms of their expectations being met.

Table 3: Weighted Responses of Customer Satisfaction by Institution

<table>
<thead>
<tr>
<th></th>
<th>KNUST</th>
<th>UG</th>
<th>IPS</th>
<th>UCC</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp</td>
<td>235</td>
<td>238</td>
<td>220</td>
<td>207</td>
<td>900</td>
</tr>
<tr>
<td>Per</td>
<td>154</td>
<td>160</td>
<td>157</td>
<td>187</td>
<td>658</td>
</tr>
<tr>
<td>Exp</td>
<td>232</td>
<td>221</td>
<td>231</td>
<td>218</td>
<td>902</td>
</tr>
<tr>
<td>Per</td>
<td>150</td>
<td>142</td>
<td>158</td>
<td>181</td>
<td>631</td>
</tr>
<tr>
<td>Exp</td>
<td>234</td>
<td>232</td>
<td>229</td>
<td>216</td>
<td>911</td>
</tr>
<tr>
<td>Per</td>
<td>147</td>
<td>147</td>
<td>141</td>
<td>182</td>
<td>617</td>
</tr>
<tr>
<td>Exp</td>
<td>237</td>
<td>232</td>
<td>227</td>
<td>217</td>
<td>913</td>
</tr>
<tr>
<td>Per</td>
<td>158</td>
<td>150</td>
<td>151</td>
<td>178</td>
<td>637</td>
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<tr>
<td>Exp</td>
<td>230</td>
<td>236</td>
<td>229</td>
<td>212</td>
<td>907</td>
</tr>
<tr>
<td>Per</td>
<td>168</td>
<td>167</td>
<td>171</td>
<td>184</td>
<td>690</td>
</tr>
<tr>
<td>Exp</td>
<td>228</td>
<td>226</td>
<td>222</td>
<td>215</td>
<td>891</td>
</tr>
<tr>
<td>Per</td>
<td>165</td>
<td>158</td>
<td>160</td>
<td>181</td>
<td>664</td>
</tr>
<tr>
<td>Exp</td>
<td>235</td>
<td>236</td>
<td>239</td>
<td>216</td>
<td>926</td>
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<tr>
<td>Per</td>
<td>172</td>
<td>176</td>
<td>181</td>
<td>193</td>
<td>722</td>
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<tr>
<td>Exp</td>
<td>217</td>
<td>216</td>
<td>224</td>
<td>208</td>
<td>865</td>
</tr>
<tr>
<td>Per</td>
<td>166</td>
<td>170</td>
<td>179</td>
<td>188</td>
<td>703</td>
</tr>
<tr>
<td>Exp</td>
<td>226</td>
<td>218</td>
<td>227</td>
<td>214</td>
<td>885</td>
</tr>
<tr>
<td>Per</td>
<td>158</td>
<td>163</td>
<td>166</td>
<td>189</td>
<td>676</td>
</tr>
<tr>
<td>Exp</td>
<td>238</td>
<td>232</td>
<td>242</td>
<td>218</td>
<td>930</td>
</tr>
<tr>
<td>Per</td>
<td>150</td>
<td>156</td>
<td>159</td>
<td>194</td>
<td>659</td>
</tr>
<tr>
<td>TOTAL</td>
<td>3900</td>
<td>3976</td>
<td>3913</td>
<td>3998</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field work 2015

Table 3 has weighted the responses of respondents presented in table 1. Respondents’ preferences of customer satisfaction variables were weighted as: Strongly Disagree/Disagree=1, Neutral=2 and Strongly Agree/Agree=3. Thus, the weighted responses were calculated for each of the ten expectation and the corresponding ten perception variables and the composite figures reported for each university as shown above. It is clear from table 3 above that the weighted
responses for each of the expectation variables outweigh the corresponding perception variables for each of the four universities signifying that customer expectations are not being adequately met.

Table 4: Gaps of Weighted Responses by Institution

<table>
<thead>
<tr>
<th></th>
<th>KNUST</th>
<th>UG</th>
<th>IPS</th>
<th>UCC</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>My network offer services that meet my need</td>
<td>81</td>
<td>78</td>
<td>63</td>
<td>20</td>
<td>242</td>
</tr>
<tr>
<td>Coverage goes through the first time</td>
<td>82</td>
<td>79</td>
<td>73</td>
<td>37</td>
<td>271</td>
</tr>
<tr>
<td>Network give the call charges that are moderate</td>
<td>87</td>
<td>85</td>
<td>88</td>
<td>34</td>
<td>294</td>
</tr>
<tr>
<td>My network is efficient in handling my needs</td>
<td>79</td>
<td>82</td>
<td>76</td>
<td>39</td>
<td>276</td>
</tr>
<tr>
<td>My network have enough offices for easy access</td>
<td>62</td>
<td>69</td>
<td>58</td>
<td>28</td>
<td>217</td>
</tr>
<tr>
<td>The staff work together to meet my needs</td>
<td>63</td>
<td>68</td>
<td>62</td>
<td>34</td>
<td>227</td>
</tr>
<tr>
<td>The frontline staff is customer friendly</td>
<td>63</td>
<td>60</td>
<td>58</td>
<td>23</td>
<td>204</td>
</tr>
<tr>
<td>The network comes out with new products that meets my needs</td>
<td>51</td>
<td>46</td>
<td>45</td>
<td>20</td>
<td>162</td>
</tr>
<tr>
<td>My network creates favourable conditions for me</td>
<td>68</td>
<td>55</td>
<td>61</td>
<td>25</td>
<td>209</td>
</tr>
<tr>
<td>My network makes it easy for me to call other networks</td>
<td>88</td>
<td>76</td>
<td>83</td>
<td>24</td>
<td>271</td>
</tr>
<tr>
<td>TOTAL</td>
<td>724</td>
<td>698</td>
<td>667</td>
<td>284</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field work 2015

Table 4 above reveals the differences between weighted expectation and perception (gap = expectation - perception) of the ten customer satisfaction variables relating to mobile telecommunications service delivery in four state universities in Ghana. High figures meant that gaps are wider indicating the wider gulf between respondents’ expectations and perceptions and vice versa. Table 4 therefore shows that UCC respondents have the least gap levels with an overall total of 284 followed by UPSA (667), UG (698) and KNUST (724) respectively.
Table 5: Weighted Means of Responses by Institutions

<table>
<thead>
<tr>
<th>Item</th>
<th>KNUST</th>
<th>UG</th>
<th>IPS</th>
<th>UCC</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>My network should offer services that meet my needs</td>
<td>0.94</td>
<td>0.95</td>
<td>0.88</td>
<td>0.83</td>
<td>3.60</td>
</tr>
<tr>
<td>The services of my network meets my needs</td>
<td>0.62</td>
<td>0.64</td>
<td>0.63</td>
<td>0.75</td>
<td>2.63</td>
</tr>
<tr>
<td>I expect the coverage to go through the first time</td>
<td>0.93</td>
<td>0.88</td>
<td>0.92</td>
<td>0.87</td>
<td>3.61</td>
</tr>
<tr>
<td>My network’s coverage go through the first time</td>
<td>0.60</td>
<td>0.57</td>
<td>0.63</td>
<td>0.72</td>
<td>2.52</td>
</tr>
<tr>
<td>I make a call</td>
<td>0.94</td>
<td>0.93</td>
<td>0.92</td>
<td>0.86</td>
<td>3.64</td>
</tr>
<tr>
<td>My network must give me the call charges that are moderate</td>
<td>0.59</td>
<td>0.59</td>
<td>0.56</td>
<td>0.73</td>
<td>2.47</td>
</tr>
<tr>
<td>The call charges are moderate</td>
<td>0.67</td>
<td>0.67</td>
<td>0.68</td>
<td>0.74</td>
<td>2.76</td>
</tr>
<tr>
<td>When I have a problem I expect my network to be efficient in handling my needs</td>
<td>0.95</td>
<td>0.93</td>
<td>0.91</td>
<td>0.87</td>
<td>3.65</td>
</tr>
<tr>
<td>My network is efficient in handling my needs</td>
<td>0.63</td>
<td>0.60</td>
<td>0.60</td>
<td>0.71</td>
<td>2.55</td>
</tr>
<tr>
<td>My network should have enough offices for easy access</td>
<td>0.92</td>
<td>0.94</td>
<td>0.92</td>
<td>0.85</td>
<td>3.63</td>
</tr>
<tr>
<td>My network has enough offices which allow for easy access</td>
<td>0.66</td>
<td>0.63</td>
<td>0.64</td>
<td>0.72</td>
<td>2.66</td>
</tr>
<tr>
<td>I expect the staff to work together to meet my needs</td>
<td>0.91</td>
<td>0.90</td>
<td>0.89</td>
<td>0.86</td>
<td>3.56</td>
</tr>
<tr>
<td>The staff work together to meet my needs</td>
<td>0.66</td>
<td>0.63</td>
<td>0.64</td>
<td>0.72</td>
<td>2.66</td>
</tr>
<tr>
<td>I expect the frontline staff to be customer friendly and polite</td>
<td>0.94</td>
<td>0.94</td>
<td>0.96</td>
<td>0.86</td>
<td>3.70</td>
</tr>
<tr>
<td>The frontline staff and call centre’s are friendly and polite</td>
<td>0.69</td>
<td>0.70</td>
<td>0.72</td>
<td>0.77</td>
<td>2.89</td>
</tr>
<tr>
<td>The network should come out with new products regularly to meet my needs</td>
<td>0.87</td>
<td>0.86</td>
<td>0.90</td>
<td>0.83</td>
<td>3.46</td>
</tr>
<tr>
<td>My network comes out regularly to meet my needs</td>
<td>0.66</td>
<td>0.68</td>
<td>0.72</td>
<td>0.75</td>
<td>2.81</td>
</tr>
<tr>
<td>I expect my network to create favorable conditions for me</td>
<td>0.90</td>
<td>0.87</td>
<td>0.91</td>
<td>0.86</td>
<td>3.54</td>
</tr>
<tr>
<td>My network creates favorable conditions for me to enjoy the service</td>
<td>0.63</td>
<td>0.65</td>
<td>0.66</td>
<td>0.76</td>
<td>2.70</td>
</tr>
<tr>
<td>I expect my network to make it easy for me to call other networks</td>
<td>0.95</td>
<td>0.93</td>
<td>0.97</td>
<td>0.87</td>
<td>3.72</td>
</tr>
<tr>
<td>My network makes it easy for me to call other networks</td>
<td>0.60</td>
<td>0.62</td>
<td>0.64</td>
<td>0.78</td>
<td>2.64</td>
</tr>
</tbody>
</table>

Source: Field work 2015
Table 5 presents weighted means of responses of the four state universities, KNUST, UG, UPSA, and UCC based on respondents’ expectations (Exp) and perceptions (Per). The weighted mean values indicate that compared to the rest of the universities, UCC respondents had higher perception values relative to their expectations indicating that their expectations are relatively being met.

Table 6: Gaps of Weighted Means of Responses by Institution

<table>
<thead>
<tr>
<th></th>
<th>KNUST</th>
<th>UG</th>
<th>IPS</th>
<th>UCC</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>My network offer services that meet my need</td>
<td>0.32</td>
<td>0.31</td>
<td>0.25</td>
<td>0.08</td>
<td>0.97</td>
</tr>
<tr>
<td>Coverage goes through the first time</td>
<td>0.33</td>
<td>0.32</td>
<td>0.29</td>
<td>0.15</td>
<td>1.08</td>
</tr>
<tr>
<td>Network give the call charges that are moderate</td>
<td>0.35</td>
<td>0.34</td>
<td>0.35</td>
<td>0.14</td>
<td>1.18</td>
</tr>
<tr>
<td>My network is efficient in handling my needs</td>
<td>0.32</td>
<td>0.33</td>
<td>0.30</td>
<td>0.16</td>
<td>1.10</td>
</tr>
<tr>
<td>My network have enough offices for easy access</td>
<td>0.25</td>
<td>0.28</td>
<td>0.23</td>
<td>0.11</td>
<td>0.87</td>
</tr>
<tr>
<td>The staff work together to meet my needs</td>
<td>0.25</td>
<td>0.27</td>
<td>0.25</td>
<td>0.14</td>
<td>0.91</td>
</tr>
<tr>
<td>The frontline staff is customer friendly and polite</td>
<td>0.25</td>
<td>0.24</td>
<td>0.23</td>
<td>0.09</td>
<td>0.82</td>
</tr>
<tr>
<td>The network comes out with new products regularly that meets my needs</td>
<td>0.20</td>
<td>0.18</td>
<td>0.18</td>
<td>0.08</td>
<td>0.65</td>
</tr>
<tr>
<td>My network creates favourable conditions for me</td>
<td>0.27</td>
<td>0.22</td>
<td>0.24</td>
<td>0.10</td>
<td>0.84</td>
</tr>
<tr>
<td>My network makes it easy for me to call other networks</td>
<td>0.35</td>
<td>0.30</td>
<td>0.33</td>
<td>0.10</td>
<td>1.08</td>
</tr>
</tbody>
</table>

Source: Field work 2015

Table 6 reveals differences between weighted mean expectation and perception (gap = expectation – perception) of the customer satisfaction variables of respondents of KNUST, UG, UPSA and UCC. For each of these universities, the total difference between expectations and perceptions are positive values (KNUST, 0.35; UG, 0.30; UPSA, 0.33; and UCC, 0.10) indicating that their perceptions fall below their expectations. Respondents of UCC however had the lowest of the gaps (0.10) which means that relatively they were more satisfied with the services of the mobile telecom companies.
Table 7: Distribution of Overall Customer Satisfaction by Institution

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>KNUT</th>
<th>UG</th>
<th>IPS</th>
<th>UCC</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Yes</td>
<td>16</td>
<td>32</td>
<td>29</td>
<td>58</td>
<td>16</td>
</tr>
<tr>
<td>No</td>
<td>28</td>
<td>56</td>
<td>15</td>
<td>30</td>
<td>23</td>
</tr>
<tr>
<td>Not really</td>
<td>6</td>
<td>12</td>
<td>6</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td><strong>Areas of Satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall services</td>
<td>10</td>
<td>21</td>
<td>11</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>Call rates</td>
<td>9</td>
<td>19</td>
<td>10</td>
<td>16</td>
<td>11</td>
</tr>
<tr>
<td>None</td>
<td>8</td>
<td>17</td>
<td>3</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Bonus/Promotion</td>
<td>5</td>
<td>11</td>
<td>7</td>
<td>11</td>
<td>3</td>
</tr>
<tr>
<td>New products</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>3</td>
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<tr>
<td>Network coverage</td>
<td>6</td>
<td>13</td>
<td>18</td>
<td>29</td>
<td>9</td>
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<tr>
<td>Internet service</td>
<td>6</td>
<td>13</td>
<td>12</td>
<td>19</td>
<td>10</td>
</tr>
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<td>Call credit</td>
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</tr>
<tr>
<td>Messaging</td>
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<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Areas not satisfied</strong></td>
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<td></td>
<td></td>
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</tr>
<tr>
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<td>33</td>
<td>23</td>
<td>35</td>
<td>22</td>
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</table>

**Source:** Fieldwork 2015
Table 7 addresses the issue of respondents’ overall satisfaction with the services of the mobile telecom companies. KNUST respondents are the least satisfied with more than half of the respondents (56%) emphatically indicating that they were not satisfied with the service and 12% indicating that they were not really satisfied. This means that at the minimum, 68% of KNUST respondents were not really satisfied with the services of network operators. They were followed by UPSA respondents with 46% emphatically saying they were unhappy with the services of mobile telephone operators and 22% saying they were not really pleased with the service, totaling 68% of respondents who have expressed misgivings about the service. UG had 30% of respondents emphatically stating they were displeased with services of mobile telephone operators and 12% of respondents who were not really pleased with the services, implying that 42% of respondents were not enthused about the services. UCC on the other hand had only 16% of its respondents who categorically stated they were dissatisfied with the services of the network operators whilst a relatively high percentage of 42% indicated that they were not really pleased with the service. Overall, 37% of all respondents categorically emphasized that they were not satisfied with the operations of the mobile network operators whilst 22% of all respondents expressed the view that the services were not really satisfying. In effect, their expectations have not been met.

In the case of KNUST three areas that most respondents mentioned they were satisfied with aside the overall service, included; call rates (19%), network coverage (13%), and internet rates (13%). Interestingly 17% failed to mention any specific area they were satisfied with. For UG, the three areas that most respondents were satisfied with aside overall services, included; network coverage (29%), internet rates (19%) and call rates (16%). Only 5% of respondents failed to identify any specific area they were happy with. With regards to UPSA, the three specific areas most respondents were satisfied with aside the overall services included; call rates (20%), internet rates (18%) and network coverage (16%). 16% of respondents did not identify any particular area they were satisfied with. Finally, the three areas that most respondents were specifically satisfied with aside the overall service included; call rates (37%), network coverage (13%) and internet rates (13%). Only 8% of respondents did not indicate any particular area of satisfaction. In totality, call rates represented 23% of respondents; network coverage represented 18% of respondents whilst internet rates represented 16% of respondents. It is instructive to note that these specific common areas were identified by the respondents themselves in the open-ended part of the questionnaire without any promptings emphasizing the importance of these three areas to the respondents across the four universities.

With regards to specific areas that respondents were dissatisfied with, majority of respondents identified the following areas: In the case of KNUST, three specific areas included; call rates (33%), network coverage (25%) and customer rates (10%). 10% of respondents failed to identify any specific area they were dissatisfied with. For UG, the specific areas most respondents were dissatisfied with included; call rates (35%), network coverage (21%) and customer service (17%). With respect to UPSA, three areas most respondents were displeased with included; call rates (44%), network coverage (22%) and internet rates (12%).
Finally, for UCC, three specific areas that most respondents were dissatisfied with included; network coverage (26%), call rates (18%) and internet rates (12%). Overall, three areas that most respondents in all four universities are dissatisfied with were; call rates (33%), network coverage (23%) and internet rates (10%). Again, these areas were identified by respondents in the open-ended section of the questionnaire indicating their displeasure with certain service elements.

Respondents further expressed their views on areas they believed their respective networks can improve upon. In respect of KNUST, these areas focused on network coverage (26%), call rates (19%), internet service (16%) and customer service (16%). With regards to UG, the areas identified covered call rates (34%), internet service (19%), network coverage (17%) and customer service (15%). For UPSA, the specific areas identified by respondents for improvements were call rates (39%), internet services (20%) and network coverage (17%). In the case of UCC, particular areas identified for improvements were customer service (30%), call rates (28%) and internet rates (18%). In totality, respondents want improvements in call rates (27%), customer services (20%), internet rates (17%) and network coverage (16%). Respondents provided this information on the open-ended part of the questionnaire implying their importance to them.

**Analysis of students’ retention**

Research question two sought to establish the link between students’ satisfaction and retention. Table 8 analyzed the reasons why students will stay or switch a mobile telecommunication provider.
## Table 8: Distribution of Customer Retention by Institution

<table>
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<tr>
<th></th>
<th>KNUST N</th>
<th>KNUST %</th>
<th>UG N</th>
<th>UG %</th>
<th>IPS N</th>
<th>IPS %</th>
<th>UCC N</th>
<th>UCC %</th>
<th>TOTAL N</th>
<th>TOTAL %</th>
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<td>9</td>
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</table>

**Source:** Fieldwork 2015
Table 8 focuses on retention of customers. Interestingly, overwhelming majority of UG respondents (71%) would not switch network providers as opposed to KNUST where barely half of respondents (53%) would seek to stay with their network providers. With respect to UPSA, less than half of respondents (42%) were willing to stay with their mobile telecom providers. In the case of UCC though majority of respondents consistently indicated that their expectations were being met, only about half of respondents (54%) indicated their willingness to stay loyal to their network operators. Overall, slightly more than half of respondents (55%) would want to be loyal to their mobile telecom providers.

Following the same trend, 53%, 69% and 44% of KNUST, UG and UPSA respondents respectively believed they would recommend their network to a third party. These percentages are largely consistent with the percentages of respondents who would want to be loyal to their network providers. However, in the case of UCC, a relatively high percentage of respondents (66%) indicated they would recommend their network to others as opposed to a lower percentage of 54% of respondents who were willing to stay with their network providers.

Looking ahead, majority of respondents at UPSA (71%) and KNUST (61%) hoped to change their providers in future. This may mean that they have high expectations or in the current situation they do not think they have a choice and so they have lowered their expectations. In the case of UCC and UG, 48% and 43% respectively constituting less than half of respondents in each case, expressed their willingness to change network in future.

Of the four universities, majority of respondents at UG (59%) believed that their network provider is the best followed by UCC (52%), KNUST (35%) and UPSA (26%) in that order. This finding is consistent with the preceding finding which indicates that majority of UG and UCC respondents would not want to change their networks in future. This is because they hold the view that their network is the best despite the challenges they face.

Analyses of key students’ satisfaction variables in the mobile telecommunication industry

Research question three sought to identify key variables mostly influencing students’ satisfaction and retention. The data is captured in Table 8 above. The analysis is provided below.

Finally, respondents identified the three most important attributes they expect from their network operators which would cause them to be loyal. For KNUST, these were low call rates (27%) widen coverage (24%) and provision of important services (17%); UG respondents identified low call rates (33%), provision of important services (17%) and widened coverage and improved internet services (16% respectively); Respondents of UPSA had them as follows: low call rates (32%), widened coverage (21%) and improved internet services (13%); and for UCC, these three included low call rates (28%), widened coverage (16%) and provision of important services (7%). It is therefore clear that low call rates is very important to customers followed by wide coverage and provision of important services respectively.
Discussions
The study found that Ghanaian undergraduate students in the state universities have high expectations of their mobile telecommunication service providers but their perception (or experiences) of the service fall below their expectations. These findings appear to support previous studies in developing countries context that experiences of mobile telecom subscribers fall below their expectations (Byarugaba & Osarenkhoe, 2012; Okoe et al., 2007).

On the basis of the responses given, four perceptual mindsets can be deduced irrespective of the university involved, namely; (a) Respondents whose expectation levels were met. On the average, table 7 reveals that 41% of the respondents indicated that they were satisfied with the mobile network providers in overall terms. (b) Respondents whose expectations were not met. Table 7 reveals that on the average 37% of the respondents emphatically stated that they were dissatisfied with the services of their mobile telecom providers. Studies by Kotler & Keller (2012) and Zethaml et al. (2009) conclude that satisfied customers will be retained while dissatisfied customers will switch. (c) Respondents who were satisfied with the service but were still unwilling to stay with their providers. (d) Respondents who were dissatisfied with the service but would still be loyal to their service providers. For instance, table 8 reveals that though on the average, 45% of the respondents indicated their willingness to switch, only 41% of the respondents admitted that they were satisfied with the service as revealed in table 7. These last two findings confirm previous studies by Byarugaba & Osarenkhoe (2012). Thus the findings from these studies seems to suggest that the students segment is not different from the main segments and the considered debate relating to customer satisfaction, defection and retention is still relevant to the students market.

Findings from the study as shown in table 8 also indicated that in spite of the fact that 55% of respondents would not defect, 58% of respondents still contemplate changing their network in future. It appears therefore that some retained customers do so because they do not see a better competition out there. This assertion is corroborated by the fact that a similar number of respondents (57%) do not think their network is the best on the market. These findings contribute to the literature as it brings to the fore that retention of customers today does not guarantee their retention in the future. Customers may be busy purchasing the product today but will still be willing to change providers in future for a variety of reasons.

The most important reasons adduced by most respondents which would compel them to continue to stay loyal is call rates. This may not be surprising as similar studies have shown that the students market tend to be price-sensitive (Mokhlis, Mat and Sellah, 2008). Other important reasons advanced by respondents include wider coverage and what they termed as important services. Important services may relate to add-on services that students may consider trendy.

A look at the demographics presented in table 1 reveal that respondents from KNUST were the most youthful and are mostly full time students. They also had the highest of the gaps of the weighted means of responses as shown on Table 6 (0.35) implying they were the least satisfied.
This finding may point to the fact that younger population has higher expectation with regard to technological devices and tend to be frustrated easily with a service.

Conclusions and Implications

Students’ expectations of mobile telecommunication service: The study revealed that students have high expectations with regards to their mobile telecommunication services. Specifically, they expect the following attributes from their network providers: to meet their needs, provide wider coverage, low call charges, efficiency, easy access, staff knowledge, customer service, innovative products, favourable environment and convenience. The study found that the more youthful students have higher expectations. The study further revealed students’ expectations are primarily influenced by family members and friends and a favourable attitude towards the brand. Marketing communication strategies should aim at managing expectations. Firms must under-promise but over-deliver (Zeithaml, Bitner & Gremler, 2009)

Students’ perceptions of mobile telecommunication services: The second research objective and its attendant research question were to ascertain students’ perceptions of service delivery of mobile telecommunications in Ghana. The study found that students’ perception (or experience) with the mobile telecommunication services were relatively low. In other words, students experienced frustrations with the service. Since majority of the students’ expectations exceed their perceptions of the services, a gap is created resulting in customer dissatisfaction. These findings are consistent with several research findings in the mobile telecommunication industry (Byarugaba & Osarenkhoe, 2012; Okoe et al., 2007). Improving service delivery matched by appropriate communication strategies should be the focus of organizations.

Overall students’ satisfaction: The third research objective and the respective research question was to outline the key variables that best predict overall students’ satisfaction with the mobile telecommunication services. The study identified three key predictors of overall student’s satisfaction namely; low call rates, wider coverage and important services (example, internet service). These findings those related to the Ghanaian mobile telecommunication market, were also found to be consistent with the findings regarding the Ugandan mobile telecommunication market (Byarugaba, 2012). These key variables were also found to determine the future retention of students.

The link between students’ satisfaction and retention in relation to mobile telecommunication services: In relation to the link between students’ satisfaction and retention, the study concluded that four perceptual mindsets can be identified, namely (a) students whose expectations were met and would be retained (b) students whose expectations were not met and would therefore defect (c) students whose expectations have been met but would still want to switch and (d) students who were dissatisfied with the service but would continue to be loyal.
Limitations and future studies
This study contributes to the debate on customer satisfaction and retention. As a result of the focus on the student cohort, transferability of findings cannot be broadly applied. Future studies can focus on other segments like the children’s segment and private tertiary institutions. The study also limited itself to the mobile telecommunications industry. Future studies can be carried out on other industries like retail markets and micro-finance institutions, among others.
REFERENCES


RELATIONSHIP BETWEEN VALUES PREFERENCE AND LEADERSHIP EFFECTIVENESS IN PUBLIC HIGHER EDUCATION IN GHANA

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ABSTRACT
The study ascertained the relationship between leaders values preference and leadership effectiveness in higher education institutions (HEIs) in Ghana. The study employed cross-sectional survey design using a quantitative approach to assess the relationship employing Structural Equation Modeling (SEM) and Chi-Square Statistics. A total of 143 Academic leaders from eight public higher education’s institutions were considered for the study. The study established a significant positive relationship between personal values preference and leadership effectiveness among academic leaders in higher education institutions. Personal values preference accounted for 64% of higher education leadership effectiveness. However, 89% of HEIs do not consider the values profile of academic leaders in their quest to ascend into various leadership positions within the institutions. Based on the findings, the study recommends that there is the need for higher education governing council and academic boards to measure and assess personal values profiles of academic leaders during recruitment, selection and or appointments into leadership roles.

Key words: Values: Leadership Effectiveness: Higher Education

INTRODUCTION
The 21st century higher education institutions are required to be entrepreneurial by playing an increasingly central role in the new knowledge-intensive economic landscape by producing graduates to meet the contemporary demands of society and job market. The nature and complexity associated with the operation of higher education makes researchers like Cohen and March (1986) described it as an organized anarchy. As a result, the role of leaders has become dispersed and diverse and the caliber and values of leaders chosen to manage these institutions of higher learning has become critical. The extent to which the higher education leaders values profile are considered as requirements for ascension into academic leadership roles or for determining leadership effectiveness in the higher education institutions is a major concern for research.

The discussion of the field of leadership has evolved over time with focus on the internal dispositions associated with effective leaders to broader examinations that emphasizes on traits, attributes, behaviors, situational and contexts in which leaders and followers are dynamically embedded (Avelio, 2007). Hill (2007) posits that there are crises in leadership in many sectors of society today, and higher education with the complexities of diverse faculty and stakeholders is not immune to these concerns. The quality of output and effectiveness of HEIs have been
brought to question (Alabi, 2012). The profound challenges such as fiscal constraints, commoditization of education, escalating competition, demands for greater accountability, massification, increasingly diverse faculty appointments, shifts in public attitudes, dwindling public funding, and continuous expansion of new technologies among others makes the effective management of HEIs quite a challenge unlike in the corporate environment and this calls for effective leadership (Leveille, 2006).

Leadership is therefore, a relationship and negotiation process for power between leaders and followers. Building this relationship requires an appreciation of the personal values of those who would be willing to give their energy and talents to accomplish shared objectives. An important characteristic of leadership is using human talents to enhance performance, trust and integrity in employees and the organization (Daft, 2005). One’s personality plays a major role in the way they lead. Personality is a combination of traits that classifies an individual’s behavior. Personality affects conduct as well as insight and attitudes. Knowing personalities helps explain and forecast others’ behavior and job performance (Lussier & Achua, 2004). Posner and Schmidt (1992) argues that values form the very core of personality because it affect the choices people make, the manner in which time and energy is invested and how to respond to issues (Posner & Schmidt, 1992). Lichtenstein (2005) also asserts that personal values are a more fundamental leadership attribute than the age, tenure, functional experience, and level of education in the process of leadership effectiveness. The role of values as important factors in leaders’ choice is not without questions (Woodward, 1994). It thus preempt that in all spheres of leadership drive in any discipline, industry, field or sector of society, values may undoubtedly have a role to play. Finkelstein and Hambrick (1996) recognized the research void that exists in the examination of strategic leaders’ values and their relationship with effectiveness, noting, Even though values are undoubtedly important factors in leaders choice, they have not been the focus of much study.

Moreover, Gomes and Knowles (1999) as cited in Alabi (2012) also confirms that ‘although academic institutions have been appointing leaders for decades, little research exists on the leaders’ effectiveness to departmental performance, culture, and team atmosphere. A cursory observation of the public HEIs in Ghana reflects similar assertion by Gomes and Knowles (1999). In Ghana it appears HEIs select academic leaders such as Vice-Chancellors, Deans and HODs without much attention to the values profile of the leaders elected, selected or appointed into these positions. Harris et al (2004) also reiterate the assertion that few research studies have focused on leadership effectiveness or the means for increasing effectiveness in higher education. The literature is therefore faint in this regard, and as a result the paper intend to fulfil this gab by exploring values profile and leadership effectiveness in higher education sector. This study thus hypothesis that, Leaders Values Preference (LVP) has relationship with leadership effectiveness in higher education institutions in Ghana.
Purpose Statement
The study seek to test the Schwartz (1992) values theory and the Upper Echelon theory in public higher education institutions. The theories premised that executives’ values, experience and personalities greatly influence their interpretations of situations and leadership effectiveness. The study thus examines the relationships among; personal values preference, leadership style and leadership effectiveness in higher education institutions in Ghana. Additionally, the aim is to test the contingency leadership theory which relates leadership styles to situational variables. The study will first measure the values preference of the Vice-Chancellors, Deans, HODs, Directors of study centres/institutes and coordinators of academic programmes using the Schwartz PVQ. The study also measured their effectiveness using Alabi (2012) LEI and correlate the results using Structured Equation Modeling- LISREL to establish the relationships among the aforementioned variables. The objective are to ascertain whether leaders in higher education institutions personal values preference are considered in their quest to ascend to leadership positions and whether the values profile have an association with their level of effectiveness.

Hypothesis
Is there relationship between Leaders Values Preference and Leaders’ Effectiveness in Higher Education Institutions in Ghana?

H₀: Leader Value Preference has no relationship with Leadership Effectiveness

H₁: Leader Value Preference has relationship with Leadership Effectiveness

LITERATURE REVIEW

Concept of Leadership
The term “leadership” as argued by scholars has many connotations without precision of its meaning, thus there is no precise definition for this phenomenon (Gary, 1994; Simonton 1994). Several studies described the phenomenon in their own context. For instance Lussier and Achua, (2004) define “Leadership is the influencing process of leaders and followers to achieve organizational objectives through changes”. Also Brungardt, & Maughan, (2005) and Crosby & Bryson (1999) as cited in Alabi (2012) defined leadership as the process of influencing an organized group toward accomplishing its goals”. O’Niell (2003) as well defines leadership as influencing people to get things done to a standard and quality above their norm and doing it willingly. In addition, Kouzes & Posner, (2002) explain Leadership as a relationship between those who aspire to lead and those who choose to follow”.

From the reviews in literature it can be seen that while some studies emphasize individual leadership traits (Northouse, 1997; Stogdill, 1948, and Mann 1959), others describe different
leadership skills, behaviors and styles (Katz 1955; Blake & Mouton 1961; Burns, 1978; Kotter, 1990; Northhouse 2004; Lussier 2004), yet others concentrate on the context or situational factors (Hersey & Blanchard 1988; Northhouse 2004). For centuries the field of leadership has been an area of great interest for scholars and yet the least understood (Alabi 2012). Contemporary view of leadership emerges as Kouses & Posner (2007) also add to state "Leadership is ultimately about creating a way for people to contribute to making something extraordinary happen." As Rost (1993) observes, leadership is not what leaders do; rather, leadership is what leaders and followers do together for collective good. Thus contemporary leadership paradigm is characterized by collaboration, power-sharing facilitation, and empowerment, (Alabi 2012).

**Leadership in Higher Education**

Higher education is operating within what some scholars call a “turbulent environment” (Middlehurst, 2002). Higher education is experiencing increased competition, increased expectations from students and parents, increased internet use, and a push for more flexible models of learning including open and distance learning. Higher education is challenged by an increase in accountability measures as well as the “commercialization of higher education” (Middlehurst, p. 23). A current burden within higher education is the increased competition for both funding and students (Tucker, 1992). Potentially driven by this trend, is the increase in pressure for efficiency in management of colleges and universities and this requires leadership.

Bolden (2008) as cited in Alabi (2012) argues that leadership is a relatively new concept within the higher education sector and is harder to define. Bolden reports that Hefce (2004) in setting out a strategic plan for the UK higher education sector, defined leadership as “Agreeing strategic direction in discussion with others and communicating this within the organization; ensuring that there is the capability, capacity and resources to deliver planned strategic outcomes; and supporting and monitoring delivery. As such this definition embraces elements of governance and elements of management” (Hefce 2004, p35).

Bolden further argues that such a definition, however, offers little insight into how leadership is actually enacted in higher education. Furthermore, it neglects the long and heated debate on the nature of leadership that makes it an ‘essentially contested’ concept which makes it more difficult to clearly conceptualize in education. Leadership is argued to be essential to achieve, for example, quality teaching and learning, (Lomas, 2003) excellent research, (Ball, 2007) diversity and inclusion, (Bebbington, 2009) and to turn around underperforming HEIs (Fullan, & Scott 2009). Filan and Seagren (2003, p21) state that “the context of the higher education leadership mantle is dynamic, complex and multidimensional”. Yorke (2001) appears to include both vision-making and motivating others, as well as the day-to-day administrative duties as essential academic leadership skills. Bryman (2009) notes that the concept of leadership as a form of collaboration or give and take interaction between leaders and followers is characteristic of the higher education environment where leadership is a shared-power interaction between leaders and members through the committee system of decision making. The elusiveness of the leadership notion has enticed researchers to interpret and analyze the essence of leadership in
higher education from different perspectives. Although these studies identified leadership as a concrete and observable phenomenon, no consensus has been reached on the exact characteristics of a successful leader in higher education (Buller 2006). The concept of leadership in higher education thus presents numerous opportunities for further investigation (Alabi, 2012).

**Leadership Effectiveness in Higher Education**

Higher education institutions (HEIs) are required to demonstrate the virtue of good governance and Channing out quality graduate who can solve industrial and societal problems. Astin and Astin (2000) suggest that one means of providing proof of good governance is by examining academic leadership effectiveness and how graduates contribute to development and value creation of industries and society. Insights into leadership activity offer the possibility of analyzing the impact of actions and which approaches to leadership are more effective than others. The more developed methodological and empirical base related to educational institutions, has grappled with the conceptual pitfalls and practical difficulties of defining and judging leadership effectiveness since at least the 1970s, (Muijs, 2006; Sammons, 1996; 1999) as cited in Lumby (2012).

The evidence of this statement can be found in the review as discussed: Creswell, Wheeler, Seagren, Egly, & Beyer (1990) noted that Effective leaders in department chairs in the US are seen by their staff as those providing helpful feedback on performance. Similarly, Ambrose, Huston & Norman, (2005) found that current and former academic staff depicted effective departmental leaders as providing constructive feedback and mentoring. Effective department chairs in Trocchia and Andrus’s (2003) investigation were perceived as evaluating faculty fairly. Yet, in Lindholm’s (2003) research on academic staff reveals that effective leadership was viewed as securing the resources that allowed them to maximize the congruence between their needs and faculty realities. On the contrary to these findings, the study argued that leadership effectiveness in higher education does not focus on harness resources for alignment of leaders and faculty needs but it transcends beyond that to include meeting all stakeholders’ requirements and expectations in the academic ladder.

This includes ensuring that the requirements of the regulatory bodies, students, faculty, industry players, international partners and the community in which the university operates. Most paramount among the assessment criteria for effectiveness is the task of leaders in ensuring that HEIs produce quality graduates to meet the demands of contemporary work environment. The time span for graduates to secure jobs as well as their performance at the job market are also consider as part of the indicators of assessing the leadership effectiveness in higher education. The literature appears to be narrowly concerned with the role of the leaders in relationship to their subordinates without much focus on the performance indicators of the institutions as a whole. Again, in reference to the stands of Trocchia and Andrus (2003) and Benoit and Grahams (2005) effective departmental leaders are those who provide clear guidance concerning the routes their departments should be taking. They provide a strategic leadership for their department
Moreover, Bryman (2008) reviewed extensively literature on departmental leadership effectiveness in universities and assert that there are thirteen (13) aspects of leader behavior that are associated with leadership effectiveness: Clear sense of direction/strategic vision, Preparing department arrangements to facilitate the direction set, Being considerate, Treating academic staff fairly and with integrity, Being trustworthy and having personal integrity, Allowing the opportunity to participate in key decisions/encouraging open communication, Communicating well about the direction the department is going, Acting as a role model and having credibility, Creating a positive and collegial work atmosphere in the department, advancing the department’s cause with respect to constituencies internal and external to the university and being proactive in doing so, providing feedback on performance, providing resources for and adjusting workloads to stimulate scholarship and research and making academic appointments that enhance department’s reputation. It appears in Bryman (2008) findings that demonstration of high sense of values profile such as integrity, respect and trust featured as part of the behaviours of leadership effectiveness. This preempts the need for the study to examine whether there is relationship between the values preferences of leaders and their quest to be effective in higher education environment.

In the leadership challenge, Kouzes and Posner (2007) explain five practices of exemplary leadership associated to effectiveness and emphasizing the relational nature of leadership. Kouzes and Posner (2007) suggest that effective leadership is a function of how well people interact. Positive relationships between leaders and followers are crucial in “enabling people to get extraordinary things done” (p. 25). Kouzes & Posner (2007) five practices of effective leadership reflect in the following:

- Modelling the way which includes leaders commitments to “Clarify Values” and “Set the Example”
- Inspiring a shared vision- “Envisioning the Future” and “Enlisting Others within this Practice
- Challenging the process- Commitment to innovation and creativity to developing solutions
- Enabling others to act - Strengthen subordinates and fostering climate of collaboration, trust and facilitating relationships
- Encouraging hearts- Recognize and Celebrate Contributions

Out of the concept, Kouzes and Posner developed the 360 Leader Practice Inventory (LPI) for measuring leadership effectiveness with five (5) variables with six items measuring each indicator. The current study adopted the LPI as part of it methodology. To further explain leadership effectiveness from theoretical perspective, several theories could be employed: the great-man theory, trait theory, behavioral theories, Styles theories, situational, substitute for leadership theory, servant leadership, path-goal theory, contingency leadership theories and transformational theories.
Development and explanation of Values

The agenda of values has become an important item of debate in many arenas, particularly in the field of contemporary leadership (Russell, 2000). Values are psychological characteristics that are developed in a social context and may be influenced by national culture, regional culture, social institutions, and family (Finkielstein and Hambrick, 1996). However, Massey (1979) identifies several factors influencing values choices: friendship, family, religion, education, media, geographic roots, technology, and current events. Similarly, Kuczynski and Kuczynski (1995) identified four factors: childhood experience and family, conflict events that invoke self-discovery, major life changes and experiential learning, and personal relationships. In addition, the research also perceives that the work environment and individual background characteristics, such as race, gender, might influence the development of values preferences.

Most social scientists view values as deeply rooted, abstract motivations that guide, justify or explain attitudes, norms, opinions, and actions (Halman & de Moor, 1994; Schwartz, 1992). Values may be thought of as internalized normative beliefs that guide behaviors and distinguished as values in action or espoused value (Argyris & Schon 1996). Values are conceptualized in two distinct ways: ipsative in which values are rank-ordered, and non-ipsative in which various values are measured independently of each other (Rokeach, 1973). Henderson and Thomson (2003) defined values as a sum of our preferences and priorities. Preferences are what we would like to have in our life while priorities indicate how important each preference is in relation to our desires. Values are therefore a blend of our preference and priorities that shape behaviors and guide decision-making processes.

In contemporary business practices, Chandrakumara (2011) asserts that issues such as excellence, due diligence, quality, zero defect, and value for money would cease to exist if organizations and individuals decide to exist without personal values. The study further argues that terms like integrity, freedom, security, privacy, confidentiality, among others in daily life affairs and social and cultural settings, terms like relationships, trust, faith, compassion, sharing among others and in work life parlance, terms like effectiveness, efficiency, productivity, fairness, flexibility, discipline, teamwork, achievement, loyalty, order, simple represent values. Rokeach (1973) also defined value as an enduring belief, an end-state of existence that is personally or socially preferable. This presupposed that values can exist in three different levels: personal, organizational, and societal level. At the individual or organizational level, the value preference serves as a standard that guides their behavior and mode of operations. At society level, it reflects the community behavior, lifestyle, and attitude towards their collective goals. The assertion is in line with Chandrakumara (2011) arguments that value system is key element that guides behavior, thinking pattern, and decision-making styles. Values sometimes are misconstrued to mean ethics and morality but they represent different phenomena. According to Chandrakumara (2011) ethics are agreed code of conduct adopted by association, while morals are adopted viewpoints. Or established belief about the desirability, preference, and priority of something. Therefore values provide predictive and explanatory power in the analysis of attitudes, opinions, and actions of people of which leaders are no exception.
Empirical Review
The impact of value congruence on performance outcomes are enormous, as cited in Chandrakumara (2011), “Research findings indicate that congruence between employees’ value and firms’ value leads to greater satisfaction (Meglino, Ravlin & Alkins, 1989), job involvement (Nymbegera, Sparrow and Daniels, 2000) and less turnover (Sheridan, 1992). Also there is significant relationship between values and work satisfaction, organizational and job commitment productivity, job involvement, contextual/citizenship and task performance (Sparrow & Wu, 1998: Nyambegera et al., 2001: Chandrakumara & Seneviratne, 2009; Chandrakumara 2011). In reference to the degree of managerial success, England (1975) as cited in Chandrakumara (2011), found that successful and unsuccessful managers espouse the following values: values of pragmatism, dynamic action, influential leadership, expertise, prestige, duty conscious were held by successful managers, while less successful managers held the values of passivity, security, status quo, resistance to change and inflexibility, affection, and pleasure. It can be inferred that the successful managers used the task oriented leadership style by focusing on the work to be done whiles the unsuccessful leaders were people oriented by being compassionate and values affection and pleasure.

Additionally, in a study of 163 owners, senior and middle managers, Lichtenstein (2005) empirically found that executive values had a direct and significant impact on organizational performance, whereas age, tenure, functional experience, and level of education did not. This finding reflects that personal values are a more fundamental leadership attribute than the age, tenure, functional experience, and level of education in the process of how leaders become effective in influence organizations. The study concludes that executive selection based on age, experience, tenure, and education to the neglect of their values ignores the invisible force that drives visible results. This implies that in recruitment of higher education leadership it’s necessary to consider the values pattern of executive as values was found in the study to have more influence than education or experience. Moreover, the globe project, an international study of the cultural modulations of leadership, identified six leader attributes and behaviours that are globally desirable; charismatic, values-based, team orientated, participative, autonomous, humane, and self-protective (House, Hanges, Javidan, Dorfman, Gupta & Associates 2004). Lewis and Murphy (2008) assert that in the field of school leadership, a recent review of relevant literature concluded that effective leaders establish direction, systems and structures “in a motivational, optimistic and enabling manner”.

METHODOLOGY
Research Design
The study was conducted employing a quantitative approach to analyze the relationship between leaders value profile and leadership effectiveness in public higher education institutions in Ghana. Quantitative research provides simple descriptive of the variables involved, to establishing statistical relationships among variables through complex statistical modelling (Saunders et al., 2009). Cross sectional data was collected using a survey approach through
perceptual measures by administering questionnaires. According to Cooper and Schindler (2003) survey approach can be used for data collection when questionnaire or interviews are employed to assess thoughts, opinions, and feelings of respondents about a topic of study.

The study was a field based research that employed primary data from 146 respondents consisting of academic leaders in managerial roles through an adopted survey instruments such as Leadership Effectiveness Index (LEI), Portraits Values Questionnaire (PVQ) and Least Preferred Co-worker (LPC). The population of interest for this study includes academic leaders in public higher education institutions (HEIs) in Ghana. The target was institutions that have been in existence for at least 10 years with a programme diversity of both postgraduate and undergraduate programmes purposively selected based was on size, location and programme diversity and their unique features as public higher education in Ghana. As a result, 80% of the public higher education institutions were considered in the study. The data collected was analyzed using both descriptive (frequencies, percentages, means and standard deviations) and inferential analytical techniques (SPSS version 20 and Structural Equational Modelling- LISREL software to run the analysis).

Population and Sampling
The population of interest for this study includes academic leaders in public Higher Education Institutions (HEIs) in Ghana and the target population was the institutions which have been in existence for at least 10 years with a programme diversity of both postgraduate and undergraduate programmes. Purposive sampling method was employed to select eight (8) institutions based on size, location and programme diversity. As a result, 80% of the public higher education institutions were considered.

Featured in the study includes: University of Professional studies, Accra (UPSA), University of Cape Coast, Ghana Institute of Management and Public Administration (GIMPA) Accra, University of Ghana (UG), University of Education, Winneba (UEW), Kwame Nkrumah University of Science and Technology (KNUST), University for Development Studies(UDS) and University of Mines and Technology (UMAT). The institutions were purposively selected by their unique features that are representative of all public higher education institutions in Ghana. UPSA is a professional university and the only public university accredited to run both degree and professional programmes. University of Ghana is the premier, UCC the institution with the largest population in Ghana; KNUST is the largest public university in Ghana providing pure science related degree programmes. GIMPA is a public university that does not rely on government subvention unlike the other universities. UDS is the only public university serving the higher education needs of the three northern regions. UMAT is one of the new accredited public universities specialized for training competencies in the mining related areas.
Sample Size
The study operationalized leaders in higher education as individuals who are in senior formal leadership roles and have the formal responsibility to align and motivate people in the direction of strategic goals. As a result, the sample frame consisted of Vice-Chancellors, Rectors, Prov-Visors, Deans, Directors of study centers/institutes, Coordinators of academic programmes and HODs, who have been in office for at least a 1 year. These subjects are considered because they head the various structures in the university and they the responsible for the institutional performance (Effah, 2003). Most of the institutions were not able to provide the complete list of the sample frame in time to enable the researcher determines the appropriate sample size. However, according to Hair, Anderson, Tatham and Black (1998), how large a sample size should be, is unanswered. The study employed for structural equation modeling (SEM) and Hair et’al (1998), are of the opinion that for Structural Equation Modeling (SEM), based on a large sample distribution theory; reliable estimates can be obtained from sample between 100-150 respondents. As a result, the target sample size for this study was one hundred and fifty (150) respondents with an expected response rate of not less than 90%. The study was therefore a field based research that employed primary data from 146 respondents. Purposive and convenience sampling methods was deployed for the study. Depoy and Gitlin (1998) stated that purposive or convenience sampling is normally employed when the target population is known and consists of people with special knowledge and characteristics.

Data Collection
The study collected primary data from the academic leaders of the universities involved. The primary data was acquired through multiple adopted survey instruments. The data on the leaders’ values profiles was collected using the Schwartz Portrait Values Questionnaire (PVQ) whiles the data on Leadership Effectiveness was ascertained using adopted version of Alabi (2012) leadership effectiveness Index (LEI) survey instrument which combined Kouzes and Postner (2007) Leaders Practices Inventory (LPI 360) and Stolts (2009) Adversity Response Profile (ARP) items (Version 8.1).

Instrumentation
The following instruments discussed in details were used for the study:

Portrait Values Questionnaire (PVQ)
The Portrait Values Questionnaire (PVQ) was employed to measure the personal values preference of leaders. The PVQ measures ten (10) constructs (Power, Achievement, Hedonism, Stimulation, Self-direction, Conformity, Benevolence, Tradition, Universalism and Security). As the name implies the Portrait Value Questionnaire is a sematic scale that uses persons, portrayed in terms of their goals, as stimuli and asks the respondents to compare these persons to themselves. Research proves that the PVQ is more contextualized and caused fewer difficulties than the SVS which was the initial instrument developed by Schwartz which entails 40 items for measuring values preference of leaders (Schwartz, Melech, Lehmann, Burgess, Harris & Owens, 2001).
The PVQ-21 was used successfully in the European Social Survey (ESS) and allows for measuring the Schwartz’s values in a shorter way. Considering the time required for filling the questionnaire, the shortened version was chosen. Research reveals that the PVQ have been used with different populations in face-to-face interviews, telephone interviews, internet surveys, and written questionnaires and suitable for a self-completion questionnaire (Schwartz, 2009). It is estimated that the proposed 21-item version should take about 5-6 minutes to answer. Respondents to the PVQ report no difficulty in making judgments and rarely ask questions or comment on the significance of the research. The respondents treat the PVQ as a simple task (Schwartz, 2009). For these reasons the PVQ-21 was used in the present study.

The Leadership Effectiveness Index (LEI)
The Leadership Effectiveness Index (LEI) was developed by Alabi (2012) to assess leadership effectiveness in public higher education in Ghana. The LEI is five point likert-scale with 40 items measuring six (6) concepts and was adopted for the present study. The Alabi (2012) LEI is the combination of Leadership Practice Inventory (LPI) and Adversity Response Profile (ARP). The validity and reliability of the instrument has being established with a Cronbach’s alpha of 0.9233 by Alabi (2012) which used the instrument in the same public higher education environment. As a result it was considered that recalibration of the instrument would be necessary in this case. This is considered as above the average of 0.7.0 (McMillan & Schumacher 1997).

Validity and Reliability
The validity and reliability of the instruments used in the present study were previous established in other research studies. The findings of these tests were as follows:

PVQ – was used in the European Social Survey for reasons of being the comprehensive model and extensively validated cross culturally with high reliability (Saris, 2009). However a recalibration of the instrument showed a cronbach alpha ranging from 0.7 to 0.86 as showed in table 2. Using a split half method in a pilot survey of 10 respondents drawn from UPSA, the instrument was recalibrated to test its’ reliability.

LPI – According to Postner and Kouzes (1994), the Reliability and validity tests involving 2,876 managers and their subordinates, representing both genders have been established. Internal consistency of the 5 sub-scales ranged from .70 to .91, with test-retest reliability .93 and above. Alabi (2012) adapted the LPI for studying higher institutions of learning in Ghana, where the instrument was recalibrated with a cronch bar alpha of 0.9415

Data Analysis
The data collected was analyzed using descriptive and inferential statistics by employing SPSS version 20 and SEM LISREL software to run the analysis. The descriptive statistics were used to explain the leaders’ personal values profiles and Leadership effectiveness whiles quantitative procedures was used to determine the relationship between the variables. Specifically, the Principal Component Analysis was used to explore the main components measuring leadership.
effectiveness and value preferences of the leaders. The independent samples t-test was also used to compare the mean responses of the leaders and subordinates on the leadership effectiveness index scale. As to the relationship between leaders’ value preferences and leadership effective, the Ordinary Least Squares (OLS) was used to test the relationship.

**Model specification**

Based on the conceptual framework, the following equations are simulated to measure leadership effectiveness. Generally, the equations demonstrate that leadership effectiveness is a function of leaders’ values preference. Where LE represents leadership effectiveness; MTW, model the way; ISV, inspire a shared vision; EOA, enable others to act; ETH, encourage the heart; CTP, challenge the process; AQ, adversity quotient and ε represents the stochastic error term

\[
LE = F(MTW, ISV, EOA, ETH, CTP, AQ)
\]

(1)

\[
LE = \beta_0 + \beta_1 MTW + \beta_2 ISV + \beta_3 EOA + \beta_4 ETH + \beta_5 CTP + \beta_6 AQ + \varepsilon
\]

(2)

To illustrate the relationship of leadership effectiveness and personal values preference, the following were used. It is hypothesized that Leader value preference (LVP) have no relationship with Leadership Effectiveness (LE): the personal values preference components included (PW) represents power; (CON) represent conservatism; (CR) represent creativity and (ST) represent self-transcendence.

\[
LE = f( LVP)
\]

(3)

\[
LE = f( PW, CON, CR, ST)
\]

(4)

\[
LE = \beta_0 + \beta_1 PW + \beta_2 CON + \beta_3 CR + \beta_4 ST + \varepsilon
\]

(5)

**Discussion of Results**

**Socio-Demographics**

In all, 146 respondents were captured and the results show that more males (88.36%) than females (11.64%) occupy leadership positions in higher education Institutions in Ghana. As regards to academic rank, majority of the Academic leaders were Associate Professors (39.04%). The results of the gender parity lends credence to the assertion that leadership positions are largely male dominated (Andersen & Hansson, 2011). This again points to the fact that perhaps women in Ghana are faced with the ‘glass ceiling syndrome’, which is preventing them from occupying leadership positions. Though, Leithwood, (1994) found that there is a growing willingness of
women to take up leadership positions in educational institutions, this is yet to fully reflect in the Ghanaian context.

**Dominant Personal Value Profile (PVP) of Academic Leaders in Higher Educations in Ghana**

An Exploratory Factor Analysis (EFA) using Principal Component Analysis (PCA) was carried out to explore the dominant personal values among academic leaders. The decision to subject the variables to PCA follows Pallant (2005) recommendation that PCA is a ‘data reduction’ technique which prioritizes a bulky set of data by summarizing them into reliable and valid measures in context specific.

As a prelude to employing PCA in this study, the two main requirements: sampling adequacy and the factorability of the data were examined to ensure that required assumptions were met. In ensuring the factorability of the data, the Bartlett’s test of sphericity and the Kaiser-Meyer-Olkin (KMO) measures of sampling adequacy were examined. To Tabachnick and Fidell (2001), the Bartlett’s test of sphericity should be significant (p<0.05) while the KMO index ranges from 0-1, with 0.6 recommended as the minimum value. For this scale as showed in table 2 the Bartlett’s test of sphericity was found to be very significant (p=0.00) while the KMO index of 0.877 confirmed the suitability of the data for PCA (Kaiser, 1974). Aside, correlation matrix of ≥0.3, eigenvalues of ≥ 1.0 and communalities of 0.50 thresholds were retained for further investigation (Pallant, 2005).
Table 1: Personal Value Preferences of Leaders in Higher Education

<table>
<thead>
<tr>
<th>Factor</th>
<th>Loadings</th>
<th>Eigenvalues</th>
<th>% of Variance Explained</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Power</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent</td>
<td>0.94</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desire to be rich</td>
<td>0.91</td>
<td>3.69</td>
<td>28.3</td>
<td>0.87</td>
</tr>
<tr>
<td>Success is important</td>
<td>0.85</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respect from others</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II Conservatism</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Live in secure surrounding</td>
<td>0.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State welfare</td>
<td>0.73</td>
<td>2.33</td>
<td>17.9</td>
<td>0.72</td>
</tr>
<tr>
<td>obedient to rules and regulations</td>
<td>0.72</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III Creativity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk raking</td>
<td>0.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New ideas</td>
<td>0.73</td>
<td>1.92</td>
<td>14.8</td>
<td>0.70</td>
</tr>
<tr>
<td>Doing several new things</td>
<td>0.70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV Self-transcendence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equality for all</td>
<td>0.79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Listening to other people</td>
<td>0.77</td>
<td>1.617</td>
<td>12.4</td>
<td>0.78</td>
</tr>
<tr>
<td>Helping people</td>
<td>0.70</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total variance explained</td>
<td></td>
<td></td>
<td>73.4</td>
<td></td>
</tr>
</tbody>
</table>

KMO = 0.877, Bartlett’s Test of Sphericity (Approx. $X^2$) = 6310.38, P = 0.000

Source: Fieldwork, 2014

Table 1 above displays the results including eigenvalues and factor loadings and Cronbach’s alphas of each component. The latter was used to test the reliability of the scales used and the extent to which the variables contribute in explaining a factor. A Cronbach’ alpha coefficient of $\geq 0.70$ is regarded as a good measure of reliability (McMillan & Schumacher 1997).

On the whole, the 21 statements of the Portrait Values Questionnaire (PVQ) scale were subjected to the PCA with varimax rotation. These were reduced to 13 variables constituting four (4) main underlying sub-scales. These uncorrelated sub-scales explained 73% of the variance in the personal value preferences of leaders in higher education in Ghana. However, sub-components in their own right however, contributed differently to the explanation of the total variance which was as follows (Table 2):

Factor one (I) labelled as power consisted of issues pertaining to respect, independence, desire to be rich and success. This factor explained majority of the variance in LVP with an eigenvalue of 3.69 which is equivalent to (28.3%) of the total variance. This result is very obvious because power is the key foundation for effective leadership. Kousez and Postner, (1993) maintains that power is one of the key life sustaining properties involved in social institutions existence whiles
respect as the most admired characteristics of leaders, follow by achievement which is proxy of success. Power brings about change and for leaders of HIEs to be successful in their positions, they need to embrace their strength to give directives and achieve results.

More importantly, conservatism was the second factor, which explained 2.33(17.9%) of the variation. In this rubric, security, safety and obedience to rules and regulations were the values loaded ranging from 0.72–0.88. This attributes were expected because the institutions surveyed are public institutions where government is supposed to responsible for their welfare and security, this maybe the reason why conservatism came out very strongly. It is perceived that most leaders in public institutions believe their welfare and conditions of services is the responsibility of the state. As a result if those expectations are met by government it provides the fertile ground for leaders to work assiduously to achieve higher results. The findings explain the myriad agitations and negotiations for emoluments within public higher institutions of learning in Ghana. Additionally, due to the nature of work engaged by academic leaders, it is profound that conformance to rules and regulation may contribute to their success and, as a result a value preference for them.

The last factor was self-transcendence. Equality for all, listening to other people and helping people were the values that tapped into this construct, accounting for 12.4% (1.62) of the total variance explained. The results are self-reflective because, the leadership dominant style for the academics as shown in table 2 is task oriented. Hence it is an indication that leaders of HEIs have less concern for emotions of people and as an inactive value profile. That traits of universalism though important, the leaders of HEIs does not holds it in high esteem as a value preference. All in all, the eigenvalues for the four (4) uncorrelated factors resenting Eight values profile decreased in magnitude from factor one to four (Factor I: 3.69, Factor II: 2.33, Factor III: 1.92, and Factor IV: 1.62). On this ground, a case can be made that the EFA technique successfully provided four (4) essentials value preferences of leaders in higher education as showed in table 2 which sub components.

According to the study (table 2) power values relate to the importance of personal autonomy respect and success. Conservation values relate to the importance of state welfare, obedience to regulations and personal security. Creativity values refers to desire for new ideas, risk taking and stimulation. Self-transcendence values relate to equality for all, enhancing the wellbeing of those members as well as the welfare of all people and nature. The summary of the findings therefore reveal the following are the predominant personal values preference of leaders in higher education institutions in Ghana:

- Power- represented by (Respect, Achievement)
- Conservation- represented by (State Welfare and Conformance)
- Creativity- represented by (Risk taking and Stimulation)
- Self-Transcendence- represented by (Universalism and Benevolence)

The results as confirmed by Egri and Ralston (2004) in their review of Schwartz's (1994, 1997)
ten values classified them into a system of four types of higher-order values: Conservation (conformity, security, tradition), Openness to change (self-direction, stimulation, hedonism), Self-enhancement (achievement, power) and Self-transcendence (benevolence, universalism). The observation however was intriguing, as academic leaders appear to find no time for pleasure. Hedonism and traditions which forms part of the adapted Schwartz value survey instrument did not surface as part of the values profile of leaders in HEIs in Ghana. This implies possibility of accumulated stress on leaders which can stifle their thinking and level of effectiveness. The adage that “all work and no play” make junk a dull boy, seeming to be catching up with HEI leaders in Ghana. The findings appears to be confirmed by cursory observation of the Ghana situation in relation to the work life balance of academic leaders. Per the National Accreditation Board (NAB) and National Council for Tertiary Education Norms and requirements of terminal degrees, the number of qualified academics are limited in the universities and majority of them are found in the public universities. As a result, most of these academics engage in excessive moonlighting in several private universities that needs their services. Hence they make no time for pleasure and this might explain why hedonism was not part of the values preference of leaders in HEIs in Ghana. Also the ridiculous demands of academics as researchers, teachers and community developers might play major role to influence why they finds no time for pleasure. In their quest to get promotion, they spend their entire life working to meet work demands, family demand and social demands.

4.5 Effectiveness of Academic Leaders in Higher Educational Institutions in Ghana
The study also sought to measure leadership effectiveness in higher education institutions’ in Ghana as part of the research objectives. As a result, an adapted version of Alabi (2012) Leadership Effectiveness Index (LEI) for higher education was administered to respondents and subsequently analyzed. Similarly to the values preference scale, the adopted LEI was also first subjected to Explorative Factor Analysis (EFA) with a KMO value of 0.833 and Bartlett’s Test of Sphericity of 6310.38 ($p < .001$). Consequently, the 40 variables of the LEI were subjected to Varimax rotation which yielded six (6) related but discrete components. These explained 79.4% of the variation in higher education leadership effectiveness in Ghana. These sub-scales in order of magnitude were: inspired a shared vision, model the way, enable others to act, encourage the heart, challenging the process and adversity quotient.
Table 2: Means Responses on Leadership Effectiveness

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Leaders (Mean)</th>
<th>Subordinates (Mean)</th>
<th>Gap scores</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model the way</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follows through promises and</td>
<td>2.68</td>
<td>2.89</td>
<td>-0.21</td>
<td>0.45</td>
</tr>
<tr>
<td>commitments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ensure that principles and</td>
<td>3.00</td>
<td>2.58</td>
<td>-0.42</td>
<td>0.19</td>
</tr>
<tr>
<td>standards are followed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clear about my philosophy</td>
<td>2.81</td>
<td>2.98</td>
<td>-0.17</td>
<td>0.28</td>
</tr>
<tr>
<td>Category rating</td>
<td>2.83</td>
<td>2.82</td>
<td>-0.01</td>
<td>0.11</td>
</tr>
<tr>
<td><strong>Inspire a shared vision</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talks about future trends that</td>
<td>2.79</td>
<td>1.39</td>
<td>-1.40</td>
<td>0.00**</td>
</tr>
<tr>
<td>would influence our work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discuss a compelling image of the</td>
<td>2.52</td>
<td>1.34</td>
<td>-1.18</td>
<td>0.01**</td>
</tr>
<tr>
<td>organization’s future</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paint the big picture of what we</td>
<td>2.36</td>
<td>1.35</td>
<td>-1.01</td>
<td>0.02*</td>
</tr>
<tr>
<td>aspire to accomplish</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Show others how their long term</td>
<td>2.41</td>
<td>1.33</td>
<td>-1.08</td>
<td>0.03*</td>
</tr>
<tr>
<td>interest can be realized</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category rating</td>
<td>2.52</td>
<td>1.35</td>
<td>-1.17</td>
<td>0.01**</td>
</tr>
<tr>
<td><strong>Enable others to act</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treat me with dignity and respect</td>
<td>2.72</td>
<td>2.64</td>
<td>-0.08</td>
<td>0.85</td>
</tr>
<tr>
<td>Actively listen to diverse views</td>
<td>2.56</td>
<td>2.89</td>
<td>0.33</td>
<td>0.41</td>
</tr>
<tr>
<td>Support decentralized decisions</td>
<td>2.65</td>
<td>2.83</td>
<td>0.18</td>
<td>0.87</td>
</tr>
<tr>
<td>Promote career development</td>
<td>2.54</td>
<td>2.74</td>
<td>0.20</td>
<td>0.75</td>
</tr>
<tr>
<td>Category rating</td>
<td>2.62</td>
<td>2.73</td>
<td>0.11</td>
<td>0.54</td>
</tr>
<tr>
<td><strong>Encourage the heart</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Praise me for work done</td>
<td>2.81</td>
<td>2.92</td>
<td>0.11</td>
<td>0.97</td>
</tr>
<tr>
<td>Find ways to celebrate</td>
<td>2.72</td>
<td>2.77</td>
<td>0.05</td>
<td>0.62</td>
</tr>
<tr>
<td>accomplishments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Show appreciation and support</td>
<td>2.54</td>
<td>2.78</td>
<td>0.24</td>
<td>0.46</td>
</tr>
<tr>
<td>Reward for contribution to</td>
<td>2.01</td>
<td>2.81</td>
<td>0.80</td>
<td>0.16</td>
</tr>
<tr>
<td>university’s projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category rating</td>
<td>2.52</td>
<td>2.69</td>
<td>0.17</td>
<td>0.20</td>
</tr>
<tr>
<td><strong>Challenging the process</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Set out challenging opportunities</td>
<td>2.34</td>
<td>2.78</td>
<td>0.44</td>
<td>0.43</td>
</tr>
<tr>
<td>Experimentation and risk taking</td>
<td>2.40</td>
<td>2.88</td>
<td>0.48</td>
<td>0.94</td>
</tr>
<tr>
<td>Set achievable goals, objectives</td>
<td>2.73</td>
<td>2.44</td>
<td>-0.29</td>
<td>0.21</td>
</tr>
<tr>
<td>and milestones</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Category rating</td>
<td>2.48</td>
<td>2.70</td>
<td>0.22</td>
<td>0.45</td>
</tr>
</tbody>
</table>
Adversity quotient

<table>
<thead>
<tr>
<th>Description</th>
<th>Mean 1</th>
<th>Mean 2</th>
<th>Std. Deviation Mean 1</th>
<th>Std. Deviation Mean 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Know when to pursue and not to pursue an action</td>
<td>2.67</td>
<td>2.87</td>
<td>0.20</td>
<td>0.43</td>
</tr>
<tr>
<td>Take challenges positively and face them as opportunities</td>
<td>2.70</td>
<td>2.73</td>
<td>0.03</td>
<td>0.76</td>
</tr>
<tr>
<td>Becomes more vigilant</td>
<td>2.50</td>
<td>2.83</td>
<td>0.33</td>
<td>0.71</td>
</tr>
<tr>
<td>Category rating</td>
<td>2.62</td>
<td>2.81</td>
<td>0.19</td>
<td>0.23</td>
</tr>
<tr>
<td>Overall leadership effectiveness</td>
<td>2.59</td>
<td>2.52</td>
<td>0.07</td>
<td>0.67</td>
</tr>
</tbody>
</table>

Scale: 1–1.49 = Disagreed, 1.50 – 2.49 = Neutral, 2.50–3 = Agreed.

**p<0.01   *p<0.05**

Specifically from table 2, ‘inspire a shared vision’ was the first factor. Its underlying variables loaded between 0.76-0.85 and together explained 8.59 (18.3%) of the total variance. On that account, leaders’ subordinates were of the view that leaders spoke future trend that would influence members work, discusses a compelling image of institutional future that staff aspire to accomplish (Table 3).

Moreover, Factor II captured variables measuring model the way [5.02(17.6%)]. ‘Talking about future trends that would influence subordinates work’, ‘discussing a compelling image of the organization’s future’, ‘paint the big picture of what they aspire to accomplish’ were mentioned under this construct. These issues reliably measured the sub-scale at a Cronbach alpha value of 0.92.

Last but not least, ‘encourage the heart’ was captured in Factor IV. Here leaders treat subordinates with dignity and respect (0.93), find ways to celebrate accomplishments (0.93) and show appreciation and support (0.89). This factor also estimated an eigenvalue of 2.82 which is equivalent to 9.88% of the total variance in leadership effectiveness. Finally on this, adversity quotient [1.64(8.21%)] was the last sub-scale that met the loading criteria established earlier. Know when to pursue and not to pursue an action and Take challenges positively and face them as opportunities featured prominently in this component.

Haven extracted the main factors that accounted for leadership effectiveness, it was again necessary to further examined whether leaders and their subordinates significantly differed to these indexes measuring leadership effectiveness or not. Hogan, Curphy and Hogan (1994) advocate that the best way to determine leadership effectiveness is to compare the views of the leader (The performer) against the subordinates (the receivers and the evaluators). This guards against biases in judgment, but enables one to understand where there are unanimous views by both leaders and subordinates in their ratings of the variables measuring leadership effectiveness. Therefore, the paired-samples t-test also termed as repeated measures was used to compare the mean response differences between the leaders and the subordinates to ascertain whether there was leadership effectiveness or not. The results are presented on table 4 (see appendix)
The Leadership Effectiveness Index (LEI) for higher education was initially captured under various constructs on a Five-point Likert scale (1-Strongly disagree, 2-disagree, 3-Neither agree nor disagree, 4-agree, 5-Strongly agree). To facilitate the interpretation of the result the 5-point Likert scale was collapsed to 3 points (1–1.49 = disagreed, 1.50–2.49 = neutral, 2.50 –3 = agreed). This decision was informed by the fact that the data transformation exercise will not lead to any information lost, rather would enhance the interpretation of the results (Likert, 1932; Tabachnick & Fidell, 2001). Besides, the decision was taken because the points ‘strongly agree’ and ‘strongly disagree’ which are at the extreme ends of the scale, merely emphasize the extent of agreement or otherwise.

On the overall, leaders in higher institutions of learning were effective as shown by the mean ratings in the table. However, the subordinates and the leaders varied in their responses on some of the indicators measuring the degree of leadership effectiveness, particularly ‘inspired a shared vision’. Therefore, leaders were highly effective in some specific dimensions while low in others.

From table 4, as regards modeling the way, respondents did not vary significantly on their views (Gap = -0.01, p = 0.11). Specifically, the subordinates acknowledged that their leaders do model the way (M = 2.82), likewise the leaders. Further, the subordinates agreed that their leaders ‘follow through promises and commitments’ (M = 2.89), and they are clear about their leaders’ philosophy (M = 2.89). These issues were also confirmed by the leaders themselves. Similarly, respondents did not significantly differ (Gap = 0.17, p = 0.20) in their opinions on ‘encourage the heart’. The leaders admitted that they do, which also was established by the followers as shown by the mean values (Table). Under this construct, leaders acknowledged that they promote the heart (M = 2.81), likewise the subordinates did too (M = 2.92). The results also indicate that leaders show appreciation and support for work done (Gap = 0.24; p = 0.46).

It was further observed that both response groups agreed on ‘leaders challenging the processes. The mean rating for the subordinates was 2.70 and that of the leaders was 2.48. ‘Experimentation and risk taking (Gap = 0.48; p = 0.94), as well as set out challenging opportunities (Gap = 0.44; p = 0.43) were the issues that respondents did not significantly vary in their opinions.

Contrarily, the t -test results indicate that there were significant differences in the subordinates views viz the leaders’ on ‘inspired a shared vision’ (Gap = -1.17, p =0.01). Whereas, the leaders agreed (M = 2.52) that they inspire a shared vision, their subordinated contested (M = 1.35). Per the issues under this component, subordinates bemoaned that leaders do not talk about future trends that would influence their work (M = 1.39), leaders do not paint the big picture of what they aspire to accomplish (M = 1.35) among others (Table).

Four (4) of the five practices: ‘encouraging the heart’, enable others to act and model the way were rated very high, and low on challenging the process whereas subordinates outstandingly contested that leaders do not inspire a shared vision. Also, leaders’ resilience as represented by adversity quotient was rated low. In all, LPI and AQP had the greatest influence on LE. This is
similar to findings of Kouzes and Posner (2002) which concluded that LE could be ascertained based on the five practices of exemplary leader in LPI. Meanwhile Alabi (2012) findings also confirmed that two of the five practices - Modeling the Way and Encouraging the Heart - were statistically significant at 1% and 5% respectively in public higher education whereas the other three practices - Inspire a Shared Vision, Challenge the Process and Enable Other to Act - were not.

Thus, it can be argued that the academic leaders of higher education’s perspective of leadership effectiveness are related to Keith (2008) contemporary view of leadership. Keith (2008) maintains that leadership is ultimately about creating a way for people to contribute to making something extraordinary happen. Therefore, the results portray that in higher education environment, the academic leaders are only effective in creating an enabling atmosphere. This manifested largely through the use of rewards and recognition as a mechanism for achieving institutional goals.

The result is consistent with Hogan, Curphy and Hogan (1994) who noted that an effective leader is someone who motivates a person or a group to accomplish more than they would have otherwise accomplished without that leader’s involvement. One fact that remains non-negotiable was that leaders in higher education are not able to establish a compelling vision. Envisioning as a key attribute of effective leadership was poor among the leaders. This is an obvious manifestation of most Africa leaders, visionless in the abundance of resources (Kamper, 2008). Gayle, Tewarie and White (2011) attribute this form of leadership to the fact that most of the public institutions resources’ are mainly provided by the government and as a result whether vision or no vision, the government has a responsibility to provide resources for their development. Conceivably, this in a way may have appeared to have affected the degree to which academic leaders envision towards constructive change in their departments, faculty and colleges.

**Relationship between values profile and leadership effectiveness**

To examine the relationship between LVP and LE in higher education in Ghana, the covariance SEM was again computed. All tolerance values of the predictor variables were greater than .10 and Variance Inflation Factors (VIFs) were less than 10, suggesting the absence of multicollinearity. Also, the Durbin–Watson statistic test of autocorrelation stood at 2.0 implying the absence of autocorrelation (Chatelain & Ralf, 2014). The overall model fit was assessed statistically using a number of goodness-of-fit statistics; Results of the SEM showed that the measurement model fit the data very well. The ratio of (CFI = .98, NNFI = .98, IFI = .98, and RMSEA = .02) were in line with the established criteria (Hu & Bentler 1999; Joreskog & Sorbom 1996). Generally, a significant positive relationship was established between leaders’ values preference and leadership effectiveness at p<0.001. LVP explained 64% of the variance in Leadership Effectiveness as indicated by the adjusted $R^2$ (Graph 1).
Therefore, the empirical simulated model is restated as

\[ LE = 1.46 + 0.24 \times PW + 0.43 \times CON + 0.52 \times CR + 0.21 \times ST + 0.14 \]

As to the disaggregated sub-scales, creativity had the greatest significant positive association with leadership effectiveness \((\beta = 0.518, P\text{-value} = 0.000)\). This implies that for every deployment of "creativity value" in action by a leader, there would be a corresponding enhancement of leader’s effectiveness by 0.518. Similarly, ‘conservatism’ also had a positive significant bearing on Leadership effectiveness \((\beta = 0.43, P\text{-value} = 0.000)\). The least was self-transcendence \((\beta = 0.21, P\text{-value} = 0.000)\). Based on these results, the study failed to accept the null hypothesis. Thus, the study concludes that there is a relationship between leaders’ values preferences and leadership effectiveness in higher education institutions in Ghana. The finding is similar to Bruno and Lay (2008) observation among 400 Brazilian executives which they established a high positive relationship between personal values balances and leadership effectiveness. It also amazing that ‘creativity (0.52)’ and ‘conservationism (0.43)’ as values profile had greatly influence leadership effectiveness among those surveyed. This may be due to the fact that the institutions under the study were public higher education institutions funded predominantly by government.

Hence ‘state welfare’ and ‘security’ as subcomponents of ‘conservatism’ value preference was found to be very relevant and held in high esteem to the determination of leaders effectiveness in public higher education. This explains perhaps why leaders of higher institutions of learning in Ghana constantly and continually engage the government for negotiations and adjustments to their salaries and allowances. As a result, if the conservatism value profile of leaders are not met, it may lead to conflicts, dissatisfaction, agitations and strike actions by members of the higher education environment. The results is therefore in tandem with the observation among University Teachers Association of Ghana (UTAG) with their numerous strikes due to failure of government to meet their emoluments issues. To thus imperative for leadership of higher education to encourage and initiate measures for creativity and innovation among faculty in order to strengthen their quest for leadership effectiveness.
Conclusion and Recommendation
In nutshell, the study found that majority of HEIs Management do not consider the personal values profile of Academic leaders in their quest to ascend into leadership positions. However the dominant personal values preference among academic leaders as revealed after the explorative factor analysis included Power (Achievement and Respect), Conservations - (Security and Conformity), Creativity (Risk taking and stimulation) and Self-Transcendence (Universalism and Benevolence). The study also found a significant positive relationship between personal values profile and leadership effectiveness. Personal values profile accounted for 64% of leadership effectiveness. It was observed that out of the values profiles, creativity and conservatism values had greater influence on leadership effectiveness of academic leaders’ hedonism as key value preference in Schwartz initial values did not surface in the current study among academics. The academics appear to not have time for pleasure and leisure. Future studies may focus on the level of stress accumulated by academic leaders and how the stress are managed or detoxified. The study thus recommends the following:

That academic boards and university council should assess the values profile of academic leaders in appointment or selection into leadership positions. The level of effectiveness in inspiring a shared vision was rated abysmally. Leaders should endeavor to consciously establish shared visions by describing a compelling image of the future and encourage members to share in the

Figure 1: Results of SEM analysis – Leaders’ Values Preference and Leadership Effectiveness
big dream. It would help significantly influence the substantial efforts needed from members to accomplish both institutional and individual visions and goals. Academic Leaders in HEIs in Ghana should measure and database all the values profile of their members which would form the bases of institutional shared values, for task assignment, and membership of committees. The congruence between the values systems would create an energetic culture that would enhance commitment and job satisfaction. The study was not conclusive in itself there may be other factors that could affect the outcome of leadership effectiveness such as the leadership style, the individual personality and other socio-demographics that need to be explored. Further studies should therefore explore the possibility of analyzing the relationship of these variables to leadership effectiveness.
REFERENCES


ABSTRACT

The study sought to examine the role of downsizing on employee morale taking into consideration psychological contracting using a qualitative approach. Semi-structured interviews with line managers, human resources managers and union executives of ten (10) purposively selected insurance companies in Ghana were considered for the study. The study found that downsizing is tantamount to a breach of the psychological contracts employees have with management. The ripple effect of the breach results in a loss of trust and credibility, reduced employee morale, increased labor turnover and absenteeism, loss of job satisfaction and worsening employee performance. These findings contrast existing literature proclaiming that remnant employees display highness of morale. Appropriate recommendations were made to respond to the key findings identified in the study.

Key words: Downsizing, trust, insurance, morale, commitment.

INTRODUCTION

The Insurance industry in Ghana has had a chequered history. It began in the colonial era- 1924, with the establishment of the Royal Guardian Enterprise now known as the Enterprise Insurance Company Ltd. The first indigenous private insurance company, the Gold Coast Insurance Company Ltd, was established in 1955. In 1962, the State Insurance Corporation was established. Eleven more were established in 1971 (Tsen, 1982) and five years later in 1976, seven more companies were established and one reinsurance company and insurance brokerage firm were established. The 1989 Insurance Law (PNDC Law 229) and the Insurance Act of 2006, Act 724 provide the statutory framework currently for the regulation of insurance business in Ghana. To date, there are 40 insurance companies, 20 brokerage firms, and two firms of loss adjusters, two actuarial firms, and four reinsurance firms and over 4000 insurance agents operating in the country (NIC Annual Report, 2011).

Anecdotal evidence suggest that insurance companies in Ghana have contributed immensely to the socio-economic development in Ghana. These insurance companies often time engage in downsizing which leaves employees in psychological trauma. On a whole the performance of an insurance company is assessed on some important variables. The insurance industry is assessed on the basis of two results- the technical result or underwriting income which shows the balance between products sold (principally premiums) and expenses directly associated with insurance per se principally claims and administrative expenses; and financial result which represent the income generated by the investment of the collected insurance premium. Importantly, the time lag between the collection of insurance premium and the payment of claims

gives rise to investment opportunities (Brilys & Varenne, 2001:2). A financially viable insurance company requires not only that overall profits be positive enough to allow for a fair risk-adjusted return on investment but also by implication, that both the underwriting and financial results should be separately profitable on a stand-alone basis (Brilys & Varenne, 2001). To the extent that an insurance company is a business venture and ought to consider continuity in business operations.

It observed that a critical component in the determinant of profitability in all industries (the insurance industry inclusive) is management expenses or overhead costs of which employees’ salaries constitute a major part. It is therefore not unexpected that in recent years firms are downsizing their employees in order to operate leanly, reduce labour costs and declare profits at all costs. Hence, downsizing, a purposeful human resource intervention of reducing the number of people employed in organizations to create businesses that are lean, fit and flexible (Torrington et al, 1998) has been a common business practice with financial imperative in the twenty-first century.

Thus, the general purpose of the study was to discover the strength of motivation and morale of remaining or surviving employees from a cross-section of insurance companies operating in the Ghanaian insurance industry after a downsizing exercise. Downsizing, a purposeful human resource intervention of reducing the number of people employed in organizations to create businesses that are lean, fit and flexible (Torrington et al, 1998) has been a common business practice with financial imperative in the twenty-first century. Notwithstanding this phenomenon, human resources need be managed strategically in order for organizations to achieve mission and vision. Management of organizations certainly needs to take long and hard looks at their operations and figure out what interventions need to be formulated and implemented to revamp or revitalize themselves so as to be operationally efficient. To this effect the study sought to unravel the link between downsizing and psychological contract of employees in reference to their morale.

The objectives of the study are to:

- Ascertain the role of downsizing on employee morale.
- Establish whether job satisfaction (their turnover, absenteeism, productivity) will change on the part of employees who survive a downsizing program.
- Find out whether downsizing affects employees’ perceptions of job security and commitment to the organization (that is their acceptance of the goals and values of the organization, their willingness to exert effort on behalf of the organization and intention to stay with the organization).
LITERATURE REVIEW
A critical component in the determination of profitability in all industries (the insurance industry inclusive) is management expenses or overhead costs of which employees’ salaries constitute a major part. It is therefore not unexpected that in recent years firms are downsizing their employees in order to operate leanly, reduce labour costs and declare profits at all costs (Gault, 2013).

The employer-employee relationship is generally expressed in a contract of employment, the essence of which is considered as promises made by each party, (the employer and the employee) a promise to work in return for which payment is promised (Rollinson, , Broadfield and Edwards 1998). This implies that the relationship between an organization and its employees can be congealed into an economic contract the terms of which may be explicitly expressed. However, this relationship is not a rigid one but one that evolves over time after the consummation of the initial contract of employment. This evolution makes the employer-employee relationship a complex one. A framework that captures some of the complexities is Homans (1961) and Blau (1964) social exchange theory. The concept of Psychological contract clearly expresses this view of the employer-employee relationship (Schein, 1980) as one of the three types of contract in an employment relationship in addition to formal and informal contracts.

Social Exchange Theory
In actuality, there are three types of contracts in an employment relationship (Schein, 1980), the formal contract that reflects the economic aspects of the exchange and finds expression in the legal conception of a contract of employment, the informal contract, some of the components of which are derived from wider social norms about how people should treat each other and the psychological contract which largely consists of unvoiced expectations and obligations (Rollinson et al, 1998:701).

Defined as a theory that views all relationships as an exchange of social performances and acknowledges that the basic motivation for entering into a relationship with someone else is the expectation of obtaining rewards of some sort (Rollison et al, 1998), social exchange theory considers all relationships as an exchange of social performances, and admits that the process of social exchange is replete with unspecified expectations and obligations. Thus, for the relationship to be meaningful, each party must be prepared to provide a quid pro quo of value, meaning that both benefits and costs need be incurred by each party. Regrettably, between 2013 and 2014, International Business Machines (IBM) laid off some 10,000 employees on account only that the company was unable to achieve its targeted revenue of $24.77 billion in the previous year (Bort, 2015) and Sony laid off 2,000 of its 7,000 mobile unit workers during the same period in attempts to eke out a profit and fare better against Apple and other market leaders (Pfanner and Mochizuki, 2015). Trust, which is the central oil of all ongoing relationships including the employer-employee relationship, is of the essence here requiring both the employer and the employee to trust each other to play fair now and in the future.
Cost-benefits ratio computations constitute critical components in the evaluation of social exchange theory. The normal criteria parties apply is that their costs are balanced by the receipt of benefits. A corollary of this is that the social exchange process is replete with equivocal expectations and obligations. The continuity in the receipt of benefits after the consummation of a social relationship hinges on the initial belief or expectation that the exchange will continue to be fair. Thus, if the relationship is to continue, trust is of most importance. The hitch is that if the trusting person has no control over the behaviour of the trusted person, the trusting person is placed in a highly vulnerable position (Zand, 1972, Rollinson et al, 1998). Handy (1993) has argued that the mainstay of delegation is in the trust-control dilemma- that is an increase in control by the person in charge reduces the degree to which a subordinate is likely to perceive that he or she is trusted, whereas an increased degree of trust by the superior is usually accompanied by a reduction in control. Handy (1993) acknowledges that the dilemma is that control costs money, trust is cheap and breeds responsibility but it is risky. This underscores the essence of trust in all continual relationships. Both parties need to trust each other to be fair in the future and this trustworthiness is patently demonstrated by adhering to the rules that regulate how the parties have to behave toward each other. Thus, the employer and employee’s perception of one another’s adherence to the psychological contracts, managers’ behavioral adherence to espoused values, mission statements and other short and long-term commitments to employees cement employee trust in management.

Seen as the ‘willingness of a party to be vulnerable to the actions of another party based on the expectations that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control the other party’ (Rousseau et al, 1998),

‘The reliance … upon voluntarily accepted duty on the part of another … to recognize and protect the rights and interests of all others engaged in a joint endeavor or economic exchange’ (Hosmer, 1995:393) or ‘as one’s expectations or beliefs about the likelihood of another’s future actions will be beneficial or at least not detrimental to one’s own interests’ (Robinson, 1996), trust is weakened when there is a misalignment between a person’s words and deeds.

Lewicki and Bunker (1996) offer a longitudinal perspective for the role of behavioral integrity in the establishment of trust. They indicate that deterred-based trust (also referred to as calculus-based trust) is hinged on persistent behavior –that the promisor will do exactly as promised and concluded that a failure of one trust prevents advancement to the next level of trust. When employees realize that their managers do not trust them, they tend in turn to mistrust those managers and reciprocity of mistrust emerges from an employee’s inference from management’s demonstration of mistrust that management must hold goals or values that are incompatible with those of the employee (Fox, 1974).

**Psychological Contract**

Psychological contract is an expression of permutations of convictions held by an employee and by his/her employer about what they expect from one another. It is concerned with assumptions, expectations, promises and mutual obligations (Guest, 1996:605). Differing from a legalistic
oriented employment contract by virtue of an employment contract spawning from mistrusts of one another and thus having to have the employment relationship written down in clear unambiguous language, the psychological contract does not have to be written down and there are no witnessed signatures. Strategies for promoting a positive psychological contract include comprehensive communication and involvement processes, fair reward systems, minimizing status differentials, provision of opportunities for learning, training and development, promotion and career development, fair reward systems and focus on job security.

The psychological contract has latent contents consisting of unvoiced expectations and obligations, Schein (1980). The term refers to an individual’s beliefs regarding the terms and conditions of a reciprocal exchange agreement between that person and another party (Rousseau and Parks, 1993). Psychological contracts differ from general employee expectations in that psychological contracts must emerge from perceived explicit or implicit promises (Robinson, 1996). Typical employee expectations include pleasant working conditions, receipt of courteous and fair treatment, interesting and satisfying jobs, involvement and consultation in decisions that affect them, fair and equitable remuneration and benefits, equality of opportunity and fairness in selection and promotion and reasonable effort to provide job security (Rollinson et al, 1998).

The employer’s unvoiced expectations include acceptance of the main values of the organization by employees, trustworthiness and honesty, loyalty and willingness to tolerate a degree of personal inconvenience for the good of the organization (Rollinson et al. 1998). The psychological contract is the most important in the employment relationship in terms of integrating these reciprocal, unvoiced expectations and obligations within the organization. It is linked to trust, its discussion often throwing up the issue of trust (Robinson, 1996).

Torrington et al (2005:18) identify the shift from an old Psychological contract that entails unvoiced employee obligation of hard work and loyalty in return for job security and opportunities for development and promotion to a new psychological contract characterized by employee obligation of work effort and creativity in return for appropriate remuneration commensurate with employee contribution and market worth and developmental opportunities for career growth within a possibly short-term employment relationship. This shift involves employers giving less job security and receiving less loyalty from employees in return, Torrington et al (2005).

Research supports the mutually beneficial nature of the new psychological contract to employers and employees with employees providing high productivity and total commitment and employers providing enhanced employability rather than long term employment. The provision of employability to employees enables them to develop skills that are in demand and allows them the opportunities to practice these and be abreast with changes. This prepares them for other appropriate jobs elsewhere when they are no longer needed by their current employers (Waterman et al, 1994). In fact a study by King (2003) found that graduates rated the offer of employability as of most importance in career terms.
There are differing views in literature as to whether the new psychological contract is replacing
the old one. Whilst Coyle-Shapiro and Kessler (2000) note that there is reduced employee
loyalty in the new psychological contract, Guest and Kessler (20001) have indicated that while
some change has occurred in the public sector, perceptions closer to the old psychological
contract remain a great deal more common than those associated with the new approach. The
old psychological contract is characterized by employee promise of hard work and loyalty
towards the employer in return for job security and opportunities for development and
promotion, in contradistinction to the new one in which the employee promises to provide work
effort and creativity in return for a remuneration commensurate with contribution and market
worth, the employee promising to remain in so long as he or she receives developmental opportunities( Torrington, Hall and Taylor, 2005) Guest and Conway (2001) have indicated that ‘while some change has occurred in the public sector, perceptions closer to the old psychological
contract remain a great deal more common than those associated with the new approach’.

The new psychological contract offers a conceptual framework for this research as it specifies
the theory used as a basis for this study, citing critical characteristics such as employee obligation
of work effort and creativity in return for appropriate remuneration commensurate with
employee contribution and market worth and developmental opportunities for career growth
within a possibly short-term employment relationship. The employer, within this framework, is
at liberty to downsize dammed the consequences in so long as it serves whatever purpose
management may have. This research unearths the effect of this intervention on the trust
employees have for management, their sense of job security, productivity, work attitude, job
satisfaction, labour turnover as well as organizational commitment they may exhibit in the
aftermath of a downsizing exercise.

A corollary of human resource planning may be downsizing where top management foresees
excess manpower in upcoming periods. Whether seen as a reduction in the number of people
needed to run a business effectively (Goss, 1997:6), reducing the number of people employed to
create businesses that are lean, fit and flexible (Torrington, et al, 2005:4), the planned
elimination of positions or jobs (Cascio, 1993:96) or a reduction in staff numbers through
reorganization (Bloisi, 2007:447), the goal of any downsizing program certainly is to improve
organizational performance. Downsizing may also occur when an organization reduces work
(not just employees) and implements cost-containment strategies that streamline activities such
as transaction processing, information systems and even re-engineering. Thus, the decision to
downsize may be a strategic one embarked upon to eliminate inefficiency, improve business
development and situate the organization for future growth and success (Isabella, 1989:37).

METHOD

Research Design
An investigative research design was used in carrying out the research. Basically a qualitative
one, which, compared to quantitative approaches, can provide rich information on respondents’
perceptions (Eisenhardt, 1989) of phenomena of interest. Seen by Edmund Husserl as the
reflective study of the essence of consciousness as experienced from the first-person point of view (Smith, 2007), phenomenology takes the epiphany or flashes of cognitive insights relating to one’s initial experience with phenomena and endeavours to extricate from it the essential characteristics of the experiences. The methods usually used in phenomenologically-based researches are focus meetings, action research, analysis of personal texts, participant observation, conversations and interviews.

Population and Sampling
The population for the study constituted employees of insurance companies in Ghana. However ten companies were selected for the study. The Employees, local union officials and managers from these institutions. Purposively sampling were used to select responses taking into consideration institutions that have been involved in downsizing over the past twenty-four months. In all, a total of forty(40) human resources, underwriting, claims and marketing managers together with six local union representatives were interviewed using semi-structured since it was deemed flexible and offered opportunities for exploring any ideas which came up in the course of the investigation. These participants were from the ten companies purposively selected from the forty insurance companies in the industry which had downsized over the past two years. Apart from underwriting managers which each of the ten companies had, this was not the case with the other categories of participants. Also, the study had a focus group discussion involving a total of two hundred and seven employees (207) in the human resources management, underwriting, claims and marketing departments of the ten (10) insurance companies purposely selected for the study.

Data Collection and Instrumentation
The study deployed focus group discussion and interviews to collect primary data for the study. The study conducted semi-structured interview where the researcher had a list of questions on fairly specific topics to be covered on role of downsizing on employees, reactions of survivors, survivors’ expectation, survivors’ attitudes and reasons for downsizing. This kind of approach often referred to as an interview guide, but the interviewee has considerable latitude in how to reply (Bryman and Bell, 2007:474). The interview questions were carefully crafted in order to address the research questions of the study. Each interview lasted fifteen minutes (15) and the questions were mostly open-ended that allow respondents to articulate their views without restrictions.

Data Analysis
The responses were tape-recorded and later transcribed for qualitative analysis. Similar themes were identified and discussed through content analysis. The key themes were aggregated and organized under the rubrics survivors’ performance, attitude of survivors and survivors’ expectation for the analysis.
RESULTS
The responses from respondents on the issues covered in the interviews with managers, union representatives and employees, were tape recorded and later transcribed. The interview transcripts and personal texts thoroughly perused to appreciate what participants said identified key themes and issues which were aggregated and organized under the rubrics survivors’ performance, attitude of survivors and survivors’ expectation for analysis.

Survivors’ performance
Five aspects of survivor performance were taken cognizance of namely survivors’ personal satisfaction with the organization, levels of absenteeism, labour turnover and overall performance as demonstrated in the percentage component bar chart labeled figure 1. The first component bars indicate measures before downsizing, the second ones indicate measures in the immediate aftermath of downsizing and the third ones are distal measures after downsizing.

Personal satisfaction of survivors with the organization monetarily strong in the immediate aftermath of the downsizing only to fall precipitously a few months thereafter. One notices a ‘fake’ jump in satisfaction which was short-lived, survivors apparently putting up airs of false personal satisfaction and commitment to the organization just so to escape ongoing downsizing or be slated for ensuing downsizings. The levels of survivor absenteeism and labour turnover followed similar patterns. Absenteeism decreased from a high of 60% to as low as 10% immediately after the downsizing only to revert to a high of 85% in periods after the downsizing. This demonstrates their apprehensions to be fired so cutting absenteeism momentarily to relapse into it thereafter. This affected output considerably. The overall performance amply delineates that survivors became more task-focused in the immediate aftermath of downsizing with a jump from 35% to 75% which later dropped considerably to 25%.

It is obvious that in order to keep or secure their jobs, survivors were working harder in the short term and in the long term, their motivations sunk thanks to perceived job insecurity, fear and mistrust in management.

P1: I have in the wake of the reduction in our staff strength, noticed a marked latent apathy and masked loss of zeal on the part of the lucky surviving ones not only in my area(sales and marketing) but also in the workings of the company in its entirety.

This was the response of a marketing manager interviewed in one of the insurance companies.
**Attitudes of survivors**

Responses on Survivors’ job satisfactions, specifically related to job security, loyalty, commitment to targets, stress and motivation received from respondents are summarized in the figure 2a.
Figure 2a- Survivors’ Attitudes

Figure 2b- Survivors’ Attitudes
From figure 2a one gathers that employees’ perceptions of job security dwindled from 90% before downsizing to 50% in the immediate aftermath of the exercise and then to 10% indicating a perception of the breach of the psychological contract and as such affecting adversely their attitude to work. Morale of survivors and their loyalty to the organization also sunk systematically from the pre-downsizing period through the immediate post downsizing to the distal period resulting in a worsening work attitude. Not surprisingly, stress levels of surviving employees also increased astronomically from a low of 10% before downsizing to 43% immediately thereafter and to 87% long after the exercise. Apparently, employees have been under constant strain and tension after downsizing fearing for their job security as they were kept in the dark as to what was under management’s sleeves regarding future downsizing. This must have impacted on their work attitudes.

Figure 2b provides a gloomy picture of atrophy of trust in management and the company to an eventual ebb of 5%. Contrary to management’s expectations and confirming the Noer’s(1993) ‘motivational paradox’, creativity levels of survivors dropped to a low of 23% eventually after experiencing a momentary jump from 57% to 67% immediately after downsizing.

Also, the responses show reducing survivors’ perception of career opportunities in the companies (to 5% eventually). Survivors indicated that their negative work attitudes were attributed to (among other things) perceived lack of opportunities in the new and changing organizations since they were apprehensive of what the ‘next day’ promised to bring. They are at a loss as to how long they will be able to hold onto their jobs, and are disturbed that jobs are difficult to find in Ghana should one lose it. They no longer perceive themselves as belonging to the organization’s future and find no reasons to be concerned with the organization and cooperate with their bosses. This has affected adversely their relationship with their bosses characterized by pent-up anger, ambivalence and a predisposition to belligerence. Their work behaviour and attitudes are thus affected continually. Most of the employees felt that the downsizing was done without regard to their emotions and interests, and expressed their dissatisfactions, disgusts and anger at management.

P2: Before this downsizing thing, we used to work our hearts out not even minding whether it was time to close for the day and were then under the joyous sense of job security and assurance from our managers that we could retire here. Now, are stay with this company hangs in the balance as management can do anything with our career prospects tomorrow. Quite frankly, some of us are looking elsewhere for other jobs. One leg in, one leg out.

This was the response of one of the survivors interviewed in one of the insurance companies quoted verbatim and which speaks volumes of his perceptions and actions and potential action in the aftermath of downsizing.
Survivors’ expectations

Union representatives and survivors expressed their expectations in their relations with management on the basis of four attributes of psychological contracts covering the old and new namely long term employment relationship, paternalistic management, loyalty and lifetime employment offered by management.

Key outcomes pertaining to the old and new psychological contracts indicated that most surviving employees cherished expectations of long term employment (73%) and indicated that lifetime employment should be a critical part of the employment contract (65.7%) as in the Japanese approach to management.

DISCUSSIONS

On the whole, the responses demonstrate that downsizing engenders a novel crop of surviving workers who are expected to work in a new and belligerent environment and as such creates what Noer (1993) terms ‘motivational paradox’: employees are expected to perform a series of new tasks, be more creative, flexible and innovative but at the same time work in an alien environment with work overload and with augmented job insecurity. Employees’ performance will certainly have a nose-dive under this circumstance by virtue of survivors’ anger, distrust, fear, depression and hurt. Torrington et al. (2005:18) note in literature a change in employment relations caused by a shift from the old psychological contract to the new. This shift from old to new impacts deleteriously on job security, morale, career opportunities, and trust in management as indicated in literature review. The latent mark of surviving employees’ morale after downsizing characterized by mistrust, job insecurity dissatisfaction culminates in long-term decline in productivity and morale.

In the short term, the management-employee relation may be a healthy, with survivors demonstrating appreciation for not having been laid off and reciprocating this with short-lived boosts in morale and preparedness to go the extra mile in the interest of the organization. This will obviously be the case in Ghana where jobs are currently difficult to find and no employee would wish to lose their jobs. In the short term, employees demonstrate insincere boosted psychological contract and a willingness to ‘die for the firm’ borne of burning desires to keep their jobs only. It takes a savvy manager to unearth this.

In the long-term, however, the dawn on employees of job insecurity from looming downsizing exercise dwindles their interests in both job and company, causes a stick or reversion to the terms of the legalistic contract of employment and willingness to exit or find jobs elsewhere. This is patent in the findings of this research and rhymes with Torrington et al. (2005) assertion of the shift in employment relations involving reciprocity of employers’ less job security for employees’ less loyalty.

Human resources management in their responses indicated that they would have expected surviving employee to have exhibited increased creativity, imagination and innovation at work but it was rather the contrary. This defeated the raison d’être of downsizing which is aimed at
improving the creativity, effectiveness and efficiency of surviving employees through inter alia, multi-skilling, economic targets. Additional the study unravels that for success, good communication is critical to downsizing as it prepares the minds of employees for the ‘new’ business reality and affords surviving employees a sense of belonging to the new and progressive organization. Employees need to be informed frequently, consistently and honestly of the downsizing process. Again, the implementation of downsizing must be done incrementally and not suddenly and drastically. This will ensure the sustainability if long-term benefits of the exercise were to accrue, thereby using downsizing as a human resource intervention of right-sizing. Similar attention and support need be provided to both survivors and those exiting; survivors need to be trained and re-trained ahead of the downsizing in preparedness for responsibilities in the new organization.

Moreover the responded indicated that managers downplay the deleterious effects of workforce pruning and are often unmindful of the morale of survivors who may be emotionally wrenched on seeing their workmates lose their jobs. A responded thus concluded that our “bosses fail to recognize that job security is a matter of life and death to the average employee, and that downsizing is very agonizing for survivors”. Savvy human resource executives who downsize are cognizant of the fact that they need to approach it cautiously since both practice and research have amply demonstrated that there are several adverse consequences in downsizing (Gandofi, 2008). A good number of firms that have downsized have ignored the potentially adverse consequences of the exercise on morale of surviving employees, erroneously assuming that survivors will be contented and enthused to give of their best(Leaner,1995).

CONCLUSIONS
In conclusion, the study found that firms that downsize often experience initial short-lived increases in productivity simply because employees in the immediate aftermath of downsizing work harder and competitively to ensure job security. However after a consider period of time the action reduces employee morale. Managers thus make the erroneous assumption that surviving employees will be content and grateful for staying and as such will exhibit highness of morale and organizational citizenship behavior. This is mistaken. The contrary happens, with supposed lucky survivors being de-motivated, disloyal, angry and distrustful of management and fearing that their turns will soon come since one downsizing exercise begets another. If the actions of management are perceived by employees as bereft of strategic direction with an exclusive concern for future cash flows, the exercise will have limited chances of success as it may not receive the support of surviving employees. Indeed, Cascio (2009) has noted in corroboration that employment downsizing is never a cost-cutting cure all, neither does it guarantee that short-term savings will exceed long-term costs; and that business leaders need to be mindful of short-term and long-term costs of layoffs. Before making a decision to downsize, managers must consider the variety of effective alternatives available, ensuring that the process is humanely undertaken and with dignity in dealing with the reactions and needs of surviving workers, says Cascio (2009).
The ‘people factor’ has to be considered throughout the downsizing process in connection with surviving employees since these suffer deleterious effects in the aftermath of downsizing, compounded by bitterness, anger and disgust that their colleagues were sacked and feelings of job insecurities. Managers are often oblivious of the feelings of survivors (who are supposed to be the hinges of profitability) before, during and after downsizing. Survivors experience emotionally wrenching and disgruntled situations in parallel with their colleagues who exit. Indeed, a critical determinant of the impact of downsizing on surviving employees’ productivity levels and organizational commitments is their assessment of the fairness of the intervention and how it was handled. If employees realize that performance and commitment are no indices for job retention, they will have no motivations to perform, neither will they be committed to the organization and their jobs. The study thus observed that if downsizing is not well implemented. Instead of being grateful to management for keeping their jobs, employee can be demoralized, cynical, more angry, less loyal and unfaithful not only to the organization and its senior management but also to their own jobs.

RECOMMENDATIONS
In reference to the discussion and findings, the study recommends that trust of survivors in management must not be trifled with before, during and after downsizing. Managers must make themselves approachable and must endeavor to explain the rationale for downsizing and the criteria used in deciding who was made to exit clearly articulated. The study has implications for the practice human resource management and management in general. In their attempts to restructure their organizations to achieve efficiency and profitability, management of organizations need to be mindful of the impacts of this intervention on the motivation, morale and work attitudes of surviving employees.

As with all studies, undoubtedly, the findings ought to be adverted to circumspectly. The study focused on only ten companies in the insurance industry that had downsized in the last twenty-four months; these may not fully be reflective of the entire industry. Again, the interviews were over a relatively short span of time. Perhaps a longer longitudinal study based on ethnographic principles will unearth differing findings. Again, changing leadership styles in pre and post downsizing periods can have controlling effects on findings. Further research may be necessary in this connection.
REFERENCE

DETERMINANTS OF CAPITAL ADEQUACY IN GHANAIAN BANKS

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ABSTRACT
The aim of this study is to investigate the determinants capital adequacy ratio across banks in Ghana. The research employed annual bank-level data and macroeconomic data spanning from 2000 – 2012. Employing a static panel model, the result showed that capital adequacy ratio in Ghanaian banks is determined by the level of credit risk, bank performance, and bank deposit ratio and bank size. The results however showed that macroeconomic indicators did not have an impact on the capital adequacy ratio. The study therefore recommended that banking authorities should pay particular attention to bank specific indicators in capital adequacy regulations.

INTRODUCTION
The strength of a bank is determined by several factors of which capital is prime. The importance of capital to banks cannot be overstressed. Apart from the fact that it serves as a bulwark against losses that are likely to be incurred which impede the operation of banks and result in bank failures, it also provides an important function of protecting depositors against losses. Loss of deposits held at banks can lead to lack of trust and confidence in the banking system and have a negative impact on financial development and ultimately economic growth. Around the 1980’s the banking sector of most economies encountered challenges, thus, emphasizing on the role of capital. For a number of years, the Basel Committee on Banking Regulations and Supervisory Practices has been working to achieve a strengthening of the capital resources of banks, realizing the importance of capital adequacy in strengthening the stability of the international banking system. Basel I was set up in the late 1988’s with focus on mandatory capital requirements in relation to portfolio risk faced by banks. The capital adequacy ratio it proposed was 8% and was based on the credit and market risk exposure of banks. Bokhari & Ali, (2013) posits that measuring the exposure to credit risk is based on the classes of risk-weighted assets of the banking institutions.
Basel II is the second of the Basel Committee on Bank Supervision's recommendations, and unlike the first accord, Basel I, where focus was mainly on credit risk, the purpose of Basel II was to create standards and regulations on how much capital financial institutions must have put aside. Basel II attempts to integrate Basel capital standards with national regulations, by setting the minimum capital requirements of financial institutions with the goal of ensuring institution liquidity. In addition the Basel III which came into effect after the financial crisis mainly focuses on bank capital adequacy and liquidity saw endorsement by the G20 leaders. These reforms are aimed to strengthen global capital and liquidity regulations with the goal of promoting a more resilient banking sector.

Thus, banks need to put aside capital to reduce the risks associated with its investing and lending practices. Adhikary (1998) believes that if a bank operates in a flourishing economy and its assets are of excellent quality, it possesses adequate liquidity in relation to deposit volatility and its management is sound, then, a small amount of capital would be adequate for the maintenance of solvency. However, an adverse change in any of these factors is likely to increase the possibility of insolvency and thus, necessitate additional capital.

The central bank of Ghana usually referred to as Bank of Ghana is the primary regulatory authority of the banking sector in Ghana. It is an autonomous body and is responsible for ensuring the soundness, stability and efficiency of the financial system of the economy. The Bank of Ghana creates and implements policies in that line. From the Bank of Ghana 2007 report, the banking industry of Ghana was populated by a cluster of banks with relatively low capital base. This implied that significant amounts of lending on both the local and international levels could not be supported. Thus, during the early part of 2008, the Bank of Ghana issued some directives. First, that all domestic money banks were to increase their minimum paid-up capital from approximately GHC7million at the time of announcement to GHC25 million by the end of 2010, then GHC60million by the end of 2012 and secondly that all foreign owned deposit money banks were to increase their minimum paid-up capital from GHC7million to between GHC50 and GHC60 million by the end of 2009 (Bank of Ghana, 2008)

Even though the central bank sets the minimum capital adequacy requirement for banks, this is somehow distorted by increases in the provision for bad debt arising from non-performing loans and potential risks that banks are likely to face. Thus, different banks even with similar balance sheet totals are likely to have significant differences in their risk profiles. Hence, the importance of the Basel II accord which states that each bank should hold capital in relation to their risk profiles. As a result, capital adequacy ratio is not limited only to the regulatory obligation but differs from bank to bank. Therefore, the subject of capital adequacy is not a simple one.
However, the solution to banks being efficient does not lie with banks maintaining more capital, but rather, concerns as to how much capital should be held at what time and for what purposes? There is, nonetheless, paucity of research done in the area of capital structure of financial sector especially in developing countries. Moreover, only few of them focus on the determinants of capital adequacy in the banking sector. Also, the few that focus on capital adequacy mainly focused on bank specific variables determining the level of capital that banks set aside to cater for their risk (see Abusharba, et al, 2013; Büyüksalvarc & Abdioğlu, 2011). Thus, this study seeks to fill this research gap and from this angle that this research seeks to examine the factors that influence capital adequacy ratio beyond the regulatory requirements across Ghanaian banks to ascertain the effect of bank risk on capital adequacy ratio in Ghana and further ascertain if both bank specific and macroeconomic variables are important determinants of capital adequacy of banks in Ghana.

The remainder of the paper is structured as follows: Section two covers the review of both theoretical and empirical literature. Section three presents the methodology in detail explaining the research design, sources and analysis of data. Section four presents the results, discussion and findings of the study. Section five presents the summary, conclusion and provides recommendation for policy direction.

1.0 Literature Review

2.1 What constitutes Adequate Capital?
Attempts to accurately define capital adequacy or what constitutes adequate capital has received differing views from banking and finance experts. That is probably the reason why Nwankwo (1990) and Adegbite (2010) refer to it as being nearly as old as the actual business of banking. In the opinion of Ebhodaghe (1991), when the adjusted capital is enough to cushion all losses and cover fixed assets of the bank leaving a comfortable surplus for the current operation as well as future expansion, then capital is adequate.

It is also seen from Onuh (2002) that capital adequacy is considered to be that sum of capital that can efficiently absorb losses hence protecting bank operations from failure. Further he posits that it is imperative for the level of capital to be adjusted during times when total operational expenses and withdrawal demands are likely to rise.
2.2 Capital Structure and Financial Institutions
The concept of capital structure was initially introduced by Miller and Modigliani (hereafter referred to as M&M) in 1958. Subsequently, a number of researchers have expanded on the concept both theoretically and empirically especially in explaining the capital structure of financial and non-financial sectors. In a world of perfect financial markets, capital structure and hence capital regulation are irrelevant (Modigliani and Miller, 1958; Berger, Herring and Szegő, 1995).

According to Morrison and White (2000) prudent capital requirements in the banking sector is concerned largely with two effects: their role in preventing destructive bank runs (Diamond and Dybvig, 1983; Diamond and Rajan, 2000) and the ability of bankers to reduce risk-shifting whose assets are insured (Rochet, 1992). They emphasis that regulators in their bid to combat moral hazard problems in the banking sector will employ an adequate technology for auditing incompetent bankers employ the use of capital requirements whiles for other regulators, capital requirements can substitute for a poor auditing technology. The banking sector will show financial fragility as regulators must respond to depositor pessimism with tighter capital requirements.

Other related studies such as Gropp and Heider (2007) showed that banks that make more profit tend to have comparatively more equity. Notably, this finding follows prediction posited by the pecking order theory. The findings include Kleff and Weber (2008) who also confirms this. However, Ahmad et al (2009) with a contrary opinion emphasizes that earnings have a negative impact on capital ratio in Malaysian banks. It is observed in Asarkaya and Ozcan (2007) that banks hold more capital over the minimum capital ratios stipulated by capital regulations that are required to meet. This probably arises from the fact that banks function in a prudential manner against likely shocks.

Thus, the factors that influence capital adequacy ratio include not only legal liabilities but factors that are directly linked to banks operations. In the view of Alfon et al (2004) small banks maintain higher capital levels than larger banks. They believe that the ultimate reason is because small banks aim to finance their long run business strategy; as it is more expensive for them to adjust their capital base in cases of sudden capital requirement. From Alfon et al (2004), there are three main categories through which the determinants of Capital Adequacy ratio (CAR) are identified. These are internal banks policies and considerations, market forces and the regulatory requirement.

William, (2011) studied the determinants of capital adequacy in Nigeria during the1980 – 2008 period. This study was done within an error correction framework. The co-integration analysis showed that economic indicators such as inflation rate, real exchange rate, demand deposits, money supply, political unsteadiness, and return on investment influence capital adequacy significantly in Nigeria. Further, he affirms that political stability may reduce financial distress.
and bankruptcy. The study, nonetheless, reveals that there exist an inverse relationship
between inflation and banks capital base as inflation diminishes banks capital in many
developing countries.

distinguished between economy - wide factors and bank-specific on the probability of bank
failure. Their findings showed that factors determining the likelihood of failure differ from
those determining the timing of failure. In combination with aggregate banking sector factors,
bank specific variables help to explain the likelihood of bank failure, while macroeconomic
factors played an essential role in swaying the time of failure. High real interest rates,
exchange rate depreciation and an increase in the overall gearing of the economy triggered
bank failures in Mexico.

Asarkaya and Ozcan (2007) as well as Büyüksalvarc and Abdioğlu (2012) conducted similar
studies in Turkey. In a bid to identify the factors that explain why banks hold capital beyond
the limit required by regulation, Asarkaya and Ozcan employs a panel data set basically bank-
level data covering the period 2002 – 2006. They estimated their model using generalized
method of moments (GMM) and found that the lagged capital, portfolio risk, economic
growth, average capital of the sector and return on equity have a direct correlation with capital
adequacy ratio while share of deposits are inversely correlated with capital adequacy ratio.
Subsequently, Büyüksalvarc and Abdioğlu (2011) extended to study to cover the period from
2006 – 2010. Also, using panel data methodology, the results of the study indicated that loans,
return on equity and leverage impacted capital adequacy ratio negatively.

Moreover, loan loss reserve and return on assets had a positive effect on capital adequacy ratio,
while banks size, deposits, liquidity and net interest margin have not significant influence on
capital adequacy ratio. Bokhari and Ali (2013) investigated the determinants of capital
adequacy ratio in banking sector of Pakistan using weighted average least square on a bank-
level annual data extracted from financial statements of 12 banks from 2005 - 2009. The
variables they used included, return of equity (ROE), GDP growth rate, share of deposits, and
average capital adequacy ratio of sector, portfolio risk and return on equity to explain why
banks hold capital beyond the regulatory requirements. Their results showed that there is a
significant and negative relationship between both share of deposits and return on equity and
capital adequacy ratio at 5% significance level.

Abusharba et al (2013) in a similar study in Indonesia also adopted a multiple linear regression
analysis and pair-wise correlation matrix using profitability, assets earning quality, deposits
structure, liquidity and operational efficiency to explain capital adequacy ratio. Their study
revealed that profitability and liquidity move in the same direction with capital adequacy
requirements. Also, assets earning quality is significant but has an inverse relationship with
capital adequacy ratio. Meanwhile, depositor’s funds and operational efficiency did not have a
strong effect on capital adequacy of Islamic commercial banks in Indonesia. Thampy (2004) shows the impact of capital adequacy regulation on loan growth. He posits that a capital constrained bank would want to conserve its capital by allocating fewer assets to loans and it becomes more severe as the capital constraint becomes binding which is the case for banks with less than the required capital level. However, for banks with high capital adequacy ratios, there is little impact on loan growth. Thus, in a capital constrained environment banks will reduce the supply of loans. The impact of higher capital standards on the supply of bank credit in the economy would have a greater impact in economies which have a bank dependent or dominated financial system as opposed to a capital markets dominated system.

Thus in conclusion, it is seen in most empirical literature that the variables that have been identified to consistently determine the capital adequacy ratio include the risk level of banks, capital adequacy ratio of the previous period, the cost of alternative capital, share of deposits in non-equity liabilities, the average capital adequacy of the sector, capital adequacy regulatory pressure, economic growth among others. This will inform the selection of variables employed in the study.

2.0 Methodology

Data
This study examine the factors that influence capital adequacy of universal banks in Ghana. This study employs the use of secondary data collected from the financial statements of twenty (20) banks from Ghana. This bank-level annual data will span a period of thirteen (13) years, that is, from 2000 – 2012.

The explanatory variables that will be employed in this study as informed by literature includes previous capital adequacy ratio, portfolio risk level (PR), deposit to loan ratio (measure of bank’s liquidity (LIQ)), return on equity (measure of profitability (PROF)), non-performing loan (measure of bank’s credit risk), risk level, size and GDP growth rate. The dependent variable will be capital adequacy ratio (CAR).

Model
A static panel regression model was employed to analyze the relationship between capital adequacy ratio and the explanatory variables. Following the empirical literature, the model specification employed is of the form:

\[
CAR_{it} = \alpha + \beta_{it} \text{Size}_{it} + \gamma_{it} \text{Risk}_{it} + \sum \omega_{jt} \text{BS}_{jt} + \sum \theta_{kt} \text{Macro}_{kt} + \mu_{it}
\]  

(1)
The model has capital adequacy ratio (CAR) as the dependent variable with bank size (size) and bank risk (risk level and non-performing loans ratio), as key explanatory variables of interest and a set of controlled bank specific variables (BS), liquidity- asset ratio, deposit-asset ratio, performance, and bank loans asset ratio. Macroeconomic variables (Macro) include real GDP as a measure of economic activity, inflation and real effective exchange rate. $\alpha$ is the constant and $\beta$ is the coefficient of ownership variable while $\mu_{it} = \mu_i + \nu_{it}$ with $\mu_i$ as the bank specific effect and $\nu_{it}$ as a random term. Data from the Bank of Ghana on 20 out of 25 banks from 2000-2010 is employed in this study. Data on macroeconomic variables was taken from the Bank of Ghana.

Capital Adequacy Ratio (CAR) is measured as a ratio of capital to risk-weighted assets. The risk level of the banks is represented using mainly two risk measures, the Z-score ($ri$) and the Non-performing-loans (NPL). The Z-score measure of insolvency probability suggested by Hannah and Hanweck (1988) used by Laeven and Levine (2008), Brandao, Correa and Sapriza (2013), Sinkey, (2002), Marco and Fenandez (2008), and Odonkor et al (2011). To capture the overall risk of the banks to be used in this study, the variability of ROA provides a comprehensive measure that reflects not only credit risk but also interest rate risk, liquidity risk, operating risk, and any other risk that is realized in bank earnings. The standard deviation of ROA is a good measure of the variability of ROA. Combining ROA, inverse of the Equity Multiplier (EM), and the standard deviation of ROA provides the risk index. The empirical form of this index is:

$$\left[ \frac{\sigma_i(ROA_{it})}{E_i(ROA) + CAP_{it}} \right]$$


$CAP = EM^{-1}$ The inverse of the Equity Multiplier or Capital to Asset ratio

$\sigma_{ROA} = \text{The Standard Deviation of ROA}$

According to Brandao, Correa and Sapriza (2013), the z-score, is a broader measure of risk since it encompasses both credit risk and market risk and summarizes some of the measures used by Gropp, Hakenes, and Schnabel (2011). A lower Z-score indicates that the bank is less risky and a higher Z-score implies the bank is more risky. Another measure of risk used in this study is the non-performing loans (NPL) ratio which has been used in most studies as a measure of credit risk. According to Bessis (2002) credit risk is the first and most important risk that can bankrupt a financial institution and the other forms of risk then sets in. Thus, NPL
is captured as impaired loans/ Gross Advances. NPL provisions are regarded as a controlling mechanism over expected loan losses.

**Justification and Measurement of Variables**

**Bank size** is measured as the natural log of the total assets and is included to capture the effect of size on capital adequacy ratio. Athanasoglou (2011) notes that one of the most important questions underlying bank policy is which size optimizes bank capital. Larger banks can diversify their asset portfolios. However, for larger banks, the effect of size could be negative due to diseconomies of scale. Büyükşalvarcı and Abdioğlu (2011) found a negative relationship between size and capital adequacy ratio. However, Jackson et al. (2002) noted that the large banks tend keep considerable market-determined excess capital reserves in order to keep their good ratings.

**Performance** for this study is proxied by return of equity (ROE). Profitable banks are expected to have huge capital to meet their capital requirements and as such this study hypothesizes a positive relationship between capital adequacy and performance.

**Loans** as a share of assets is also hypothesized to have a positive effect on the capital adequacy ratio of banks. Loans may represent the bank’s diversification and investment opportunities available.

**Deposits**, which is measured by total deposits of the bank as against total asset is employed in the study. When deposits increase, banks should be more regulated and controlled to guarantee the depositors rights, and to protect a bank from insolvency. According to Büyükşalvarcı & Abdioğlu, (2011) banks will maintain lower than optimal capital ratios if depositors cannot assess financial soundness of their banks. Optimal capital ratios are said to be those that banks would have detected if depositors could have assessed their financial positions properly. When depositors can assess a bank’s capital strength, a bank will maintain a relatively strong capital positions because greater capital induces depositors to accept lower interest rates on their deposits.

**Net Interest Margin** is measured as the ratio of net interest income and total bank earning assets. According to Claeyts and Vander Vennet, (2008), the net interest income is measured as the difference between the interest earned and interest paid. It is usually influenced by the management of the bank as well as the conditions existing in the market and the country as a whole. When interest margins are high, it implies that efficiency in the banking system is low as a result of inefficiency. It may also be as a result of high risk premia emanating from inappropriate regulation of the banking sector or information asymmetry (Claeyts & Vander Vennet, 2008). On the contrary, a lower net interest margins may be as a result of developed financial markets which supports investment and promotes economic growth. Dumicic and Ridzzk, (2012) argues that the relationship between net interest margin and capital adequacy
ratio can be either negative or positive. Saunders and Schumacher (2000) note that banking systems with lower capital requirements are likely to have narrower margins.

**Liquidity ratio** is assumed to have a positive effect on capital. Jokipii and Milne (2010) were of the view that higher liquidity can decrease the capital adequacy requirement of banks. On the other hand, banks may shore up liquidity as insurance against liquidity shocks. In most cases, banks, mostly small ones, with high levels of liquidity are highly exposed to risk taking which leads to increases in capital so as to control the risk (Allen & Gale, 2003).

With respect to macroeconomic variables, the real GDP is used as a measure of economic activity. Athanasoglou, (2011) argues that capital is pro-cyclical and depends on the up and downs of economic activity. Thus, in periods of downturns, capital adequacy rises while it falls in upturns. Thus, it is expected that there will be a negative effect of GDP on capital adequacy ratio. Inflation and exchange rate are known to affect the activities of the bank and may affect the capital adequacy of banks. Banks may face exchange rate and inflation risks which will cause it to increase its capital adequacy as a stock to be able to cope with such risk.

### 4.0 Discussion of Results

This section presents and discusses the results. Table 4.1 presents the summary of major statistics of the variables used in the study. Capital adequacy ratio has a mean of 0.21 with a standard deviation of 0.198. Loans and liquidity shares have means of 0.39 and 1.93 respectively. Both of them had a minimum of 0 and a maximum of 0.7 and 8.03 respectively. Economic growth proxied by the RGDP has averaged 5.8% over study period with maximum GDP of 8.4 being achieved in 2008.

**Table 4.1 Summary Statistics of Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>car</td>
<td>0.2122</td>
<td>0.198526</td>
<td>-0.3029</td>
<td>1.2782</td>
</tr>
<tr>
<td>roe</td>
<td>0.305858</td>
<td>0.707258</td>
<td>-4.525</td>
<td>4.147307</td>
</tr>
<tr>
<td>npl</td>
<td>3.884824</td>
<td>5.635807</td>
<td>-0.89494</td>
<td>63.62538</td>
</tr>
<tr>
<td>ri</td>
<td>0.348997</td>
<td>0.147784</td>
<td>0.199534</td>
<td>0.929042</td>
</tr>
<tr>
<td>nim</td>
<td>9.479048</td>
<td>6.594531</td>
<td>0.36</td>
<td>67.39</td>
</tr>
<tr>
<td>size</td>
<td>5.186386</td>
<td>1.974459</td>
<td>-3.39114</td>
<td>13.7</td>
</tr>
<tr>
<td>deposit</td>
<td>0.653663</td>
<td>0.155586</td>
<td>0.065714</td>
<td>0.9651</td>
</tr>
<tr>
<td>loans</td>
<td>0.39083</td>
<td>0.138979</td>
<td>0</td>
<td>0.700745</td>
</tr>
<tr>
<td>liquidity</td>
<td>1.934975</td>
<td>1.068712</td>
<td>0</td>
<td>8.026744</td>
</tr>
<tr>
<td>rgdp</td>
<td>5.758424</td>
<td>1.538159</td>
<td>3.7</td>
<td>8.431</td>
</tr>
<tr>
<td>reex</td>
<td>96.7138</td>
<td>5.098814</td>
<td>91.486</td>
<td>105.252</td>
</tr>
<tr>
<td>infl</td>
<td>17.33189</td>
<td>6.942724</td>
<td>10.708</td>
<td>32.905</td>
</tr>
</tbody>
</table>

**Source:** Author’s Calculation based on Data from Bank of Ghana, 2013
The results from the static panel are presented in table 4.2. This was undertaken after a correlation of the dependent and independent variables was undertaken to ascertain if their levels of correlation will pose a multicollinearity problem (see Appendix A). None of the relationships was high so static panel estimation was undertaken. The table presents the results from the fixed effects model which was shown to have consistent estimates from the Hausman test conducted. The table shows four (4) set of results presented all with the capital adequacy ratio as the dependent variable. Model 1 and 2 estimate the determinants of capital adequacy ratio with only bank specific variables. However, since different measures of risk (risk Index (ri) and non-performing loans (npl)) were used in the study, each model captures the use of a different measure of each of these variables together with other bank specific measures. Models 3 and 4 introduces the macroeconomic variables and estimate how together with the bank specific variables, they influence the capital adequacy ratio.

For the bank specific variables, the results from the models indicate that performance [return on equity (ROE)], non-performing loans ratio (NPL), net interest margins (NIM), DEPOSIT and size of the bank (SIZE) had significant effect on the capital adequacy ratio. The results indicate that NPL has a positive effect on capital adequacy ratio. In all the models that included this variable, it was statistically significant at 5% and also positive signifying that an increase in credit risk increases the capital adequacy ratio of banks. Thus, as the credit risk faced by the bank increases, the bank is forced to put in measures in the form of shoring up capital to be able to provide any immediate or pressing demand. However, the Risk Index (RI) which is a far more comprehensive measure of the level of risk faced by a bank, has a negative effect on the capital adequacy ratio. Nonetheless, this is statistically insignificant.

Net interest margin (NIM) has a positive significant effect in all four (models) showing its strength in influencing the CAR. This is in contrast to Büyükşalvarcı & Abdioğlu (2011) who found a negative but statistically insignificant effect on NIM on CAR. Our study confirms Epure and Lafuente (2012), who reveals that capital adequacy ratio positively affects the net interest margin. They argued that incurring monitoring costs and having higher levels of capitalization may enhance performance. In addition, Claey and Vander Vennet (2008) assert that, higher Net Interest Margin might also reflect a high risk premia due to inappropriate regulation of the banking sector or a significant information asymmetry. The researchers believe will reflect in the increasing capital adequacy level of the bank to reflect the appropriate risk level that the bank is faced with. In addition, Saunders and Schumacher (2000) posit that it is expected that banking systems with lower regulatory costs (such as reserve and capital requirements) have narrower margins confirming the positive relationship between capital requirements and NIM.
Table 4.2 Determinants of Capital Adequacy Ratio

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Npl</td>
<td>0.0056**</td>
<td>0.0053**</td>
<td>0.0046**</td>
<td>0.0061**</td>
</tr>
<tr>
<td></td>
<td>(2.30)</td>
<td>(2.52)</td>
<td>(2.18)</td>
<td>(2.47)</td>
</tr>
<tr>
<td>Nm</td>
<td>0.0056***</td>
<td>0.0053**</td>
<td>0.0046**</td>
<td>0.0050**</td>
</tr>
<tr>
<td></td>
<td>(2.77)</td>
<td>(2.52)</td>
<td>(2.18)</td>
<td>(2.46)</td>
</tr>
<tr>
<td>Size</td>
<td>-0.0134*</td>
<td>-0.0128*</td>
<td>-0.0130</td>
<td>-0.0139</td>
</tr>
<tr>
<td></td>
<td>(-1.79)</td>
<td>(-1.66)</td>
<td>(-1.46)</td>
<td>(-1.60)</td>
</tr>
<tr>
<td>Deposit</td>
<td>-0.2311*</td>
<td>-0.2632***</td>
<td>-0.2082</td>
<td>-0.1747</td>
</tr>
<tr>
<td></td>
<td>(-1.95)</td>
<td>(-2.12)</td>
<td>(-1.63)</td>
<td>(-1.44)</td>
</tr>
<tr>
<td>Loans</td>
<td>-0.1099</td>
<td>-0.0953</td>
<td>-0.0122</td>
<td>-0.0394</td>
</tr>
<tr>
<td></td>
<td>(-0.72)</td>
<td>(-0.60)</td>
<td>(-0.07)</td>
<td>(-0.24)</td>
</tr>
<tr>
<td>Liquidity</td>
<td>0.0189</td>
<td>0.0260</td>
<td>0.0197</td>
<td>0.0114</td>
</tr>
<tr>
<td></td>
<td>(0.93)</td>
<td>(1.27)</td>
<td>(0.95)</td>
<td>(0.55)</td>
</tr>
<tr>
<td>Roe</td>
<td>-0.0889***</td>
<td>-0.0954***</td>
<td>-0.1012***</td>
<td>-0.0945***</td>
</tr>
<tr>
<td></td>
<td>(-4.67)</td>
<td>(-4.90)</td>
<td>(-5.00)</td>
<td>(-4.79)</td>
</tr>
<tr>
<td>Ri</td>
<td>-0.0308</td>
<td>-0.0504</td>
<td>-0.0504</td>
<td>-0.044</td>
</tr>
<tr>
<td></td>
<td>(-0.29)</td>
<td>(-0.44)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rgdp</td>
<td>-0.0112</td>
<td>-0.0127</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-0.86)</td>
<td>(-1.00)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infl</td>
<td>0.0021</td>
<td>0.0026</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.80)</td>
<td>(1.04)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reex</td>
<td>-0.0002</td>
<td>0.0008</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-0.04)</td>
<td>(0.24)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>_cons</td>
<td>0.3910***</td>
<td>0.4274***</td>
<td>0.4316</td>
<td>0.2982</td>
</tr>
<tr>
<td></td>
<td>(3.68)</td>
<td>(3.87)</td>
<td>(1.20)</td>
<td>(0.92)</td>
</tr>
</tbody>
</table>

N: 208  adj. R²: 0.330  F-Statistic: 48.564

The primary goal of bank management is long term profit maximization achievable through high leverage even though bank regulators are more interested in the risk of bank failures in general. Hence, bank regulators desire higher capital standards that promote bank safety. The study found that bank performance has a negative and significant effect on the capital adequacy ratio. Implying banks in Ghana, rather than increasing the capital adequacy in times of higher profits will invest the profits in different forms of assets. Thus, increases in bank profitability leads to a reduction in the capital adequacy. Nonetheless, the researchers believe that the more profitable a bank may be, the greater the probability of taking on higher risk thereby reducing the capital adequacy to engage in more profitable ventures. This finding is
consistent with the findings of Barnor and Odonkor (2012) who observed a negative but significant relationship between CAR and ROE. The negative relationship implies that as more capital is put aside as a buffer for banks safety it affects the performance of Ghanaian banks. This may be due to the fact that bankers generally prefer to operate with less capital (Umoh, 1991).

Size of the bank is found to have a negative relationship with CAR. As the bank becomes bigger, the amount of capital adequacy ratio falls. Smaller banks tend to have more CAR than bigger banks. This may be as a result of diseconomies of scale as a result of the bank’s numerous activities. This finding is similar to Büyükşalvarcı & Abdioğlu (2011). Moreover, Gropp and Heider (2007) found out that larger banks have lower capital adequacy ratio when the firm size serves as a proxy for the bank’s asset diversification which reduces their risk exposure.

Bank deposit also had a negative relationship with bank CAR. This implies that as banks enjoy an increase in customer deposits it does not result in increases in the capital adequacy ratios. This finding contradicts Büyükşalvarcı & Abdioğlu, (2011) who explained that when deposits increase, banks should be more regulated and controlled to guarantee the depositors rights in order to protect banks from insolvency. If depositors cannot assess financial soundness of their banks, banks will maintain lower than optimal capital ratios (Büyükşalvarcı & Abdioğlu, 2011). Optimal capital ratios are those that banks would have observed if depositors could have assessed their financial positions properly. But if depositors can assess a bank's capital strength, a bank will maintain a relatively strong capital positions because greater capital induces depositors to accept lower interest rates on their deposits.

With regards to all the macroeconomic variables, none of the variables were statistically significant at the conventional levels. Thus, capital adequacy ratio in Ghanaian banks is has been found by this study to be determined by bank specific variables.

**5.0 Conclusions and Policy Recommendations**

This study investigated the determinants of capital adequacy ratio among Ghanaian banks employing bank-level annual data spanning a period of thirteen (13) years from 2000 – 2012. The static panel regression model shows that only bank specific variables are significant in explaining capital adequacy ratio. The variables are bank performance proxied by return on equity (ROE), non-performing loans ratio (NPL), net interest margins (NIM), bank deposits and size of the bank (SIZE). This study recommends that the central bank in reviewing the Capital Adequacy levels of the various banks should pay particular attention to the bank specific variables as have been found to influence the decision on the level of capital adequacy individual banks maintain in order to cushion themselves from the potential risk they are likely to face.
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It is the maiden edition of the journal and based on the sources of these contributions, it can be said that JMIR is in the process of aligning it systems to become the top journal in Africa and beyond. It shall start by becoming part of the African Journals Online (AJOL) which would provide us with the leverage to gain wide readership and recognition in Africa and beyond. We also look forward in subsequent editions to receiving publishable papers from authors from Europe, Asia and North America. We express our profound appreciation to the authors who repose confidence and trust in the journal by submitting their papers for publication in the first edition.

The University College, the first accredited Open University in Ghana shall continue to make strides in both academic and professional business community in Ghana, Africa and beyond. We are committed to exploring management issues in both developed and developing economies and shall positioned the Journal of Management and Information Research as the best Journal in Africa and beyond. In achieving this vision, the JMIR shall benchmark continually, the best practices and ideas in publishing that can impact the body of knowledge in managing sustainable economies.

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4. **Downsizing and The Psychological Contract: A Study Of The Ghanaian Insurance Industry.**  
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5. **Determinants Of Capital Adequacy In Ghanaian Banks**  
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