INVESTIGATING THE RELATIONSHIP BETWEEN INTERNAL AUDIT QUALITY AND ORGANISATIONAL PERFORMANCE OF PUBLIC UNIVERSITIES IN NIGERIA

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ABSTRACT: This study examines relationship between internal audit quality (IAQ) and organizational performance with moderating variable of top management support in the federal universities in Nigeria. The independent variables consist of internal audit competence (IAC) and internal audit independence (IAI) with organizational performance as the dependent variable. A total of 400 samples of senior internal auditors’ level were drawn from 40 Nigerian federal universities. Data was collected via questionnaires and distributed to internal auditors. 400 questionnaires were distributed, 342 were returned, 29 were rejected and 313 were retained. The data was analysed using both descriptive and inferential statistics for testing hypotheses. The results of the study after testing the direct relationship of the independent variables with the dependent variable reveals that there are significant positive relationships between the variables of the study, except IAI with organizational performance. However, the result of moderating effect of top management support in the relationship between the independent variables and organizational performance, turns out to reveals that IAI, have positive and significant relationship with organizational performance. The result shows strong correlation between the dimensions of IAQ and organizational performance and optimum performance in Nigerian federal universities is attainable when internal audit quality dimensions are functional. The study has contributed greatly in determining the effect of the moderating variable in the study which add value to the existing literature not only in the Nigerian federal universities but also the internal auditing practice in the Nigerian public sector. It is therefore recommended that the dimensions of internal audit quality should always be given attention a better service delivery and efficiency.

KEYWORDS: Internal Audit Quality, Top Management Support, Organizational Performance, Nigerian Federal Universities

INTRODUCTION

Internal auditing (IA) is an aged function and considered as an effective instrument of management in almost all organizations. It is considered as an important element of organization in both public and private sector. Internal auditing is seen as an overall monitoring and evaluation function with responsibilities to the entire management for the assignment of effective and efficient control mechanism (Kiabel, 2012). The goal of internal auditing is to contribute to organizations for the execution of their responsibilities (Okezie, 2004). A quality internal audit is recognized as a means of assisting board and other management in an organization to focus on its obligation to ensure proper and efficient internal controls are put in place.
Internal audit is for both public and private institutions for their corporate governance. These roles were highlighted by the Institute of Internal Auditors (IIA) Practice Advisory, 2130 - 1 on the role of internal audit (IA) in shaping the values and ethical culture of an organization which emphasized that IA should part – take an active role in supporting organizational objectives (IIA, 2004). The present study seeks to examine relationships between Internal Audit Competency, Internal Audit Independence and organisational performance in Nigerian universities.

LITERATURE REVIEW AND HYPOTHESES

Internal Audit Quality and Organizational Performance

Internal audit quality (IAQ) is one of the most critical parts of effective internal audit process (IIA, 2002) for effective organizational performance. The International Organization for Standardization (ISO, 90001) established a standard for internal audit practices which comprise the implementation of quality assurance and improvement programme for internal audit operations globally. It is this technique required by ISO 9001 standards for the purpose of conducting internal audit quality to examine the compliance requirement and report non-conformity identified in the audit process (ISO 9001, 2000).

Internal audit quality is characterized by competency and independence. The ability to communicate audit reports and other findings and recommendations in time and at the same time to have prompt response from decision makers is quite important in achieving organizational performance (Enofe et al, 2013). Therefore, internal audit is a function of highly experienced, knowledgeable and expertized staff; reasonable size of audit staff; independence and objectivity in the audit process and ability to communicate audit findings and recommendations through the regular and acceptable reporting pattern (Enofe et al, 2013). Various studies have made an effort towards the studies of internal audit functions considering the role the functions are playing in organizational performance. The need to investigate such response from both public sector organization and would be important in justifying the paradigm shift from traditional focus of Internal Audit Function (IAF) to newly defined internal audit function (IUF). To effectively focus on internal audit function, factors such internal audit competence, independence, size, timeliness and reporting line in internal audit are of fundamental importance.

Al–Matari et al, (2014) examined internal audit functions and firm performance based on a framework as successful determination and application of IAF must contain the key elements of internal audit quality, such as competency, objectivity and independence of internal audit. The findings suggests for more expansion and in-depth study on the role of Internal Audit quality. The finding further indicated that performance measurement mechanism of IA have not yet been fully operational. Although the method facilitates an in-depth insight and evaluation of IAF, however other model such as Balance score cards and Input – process – output could be used to enhance the performance measures. Their study suggested for further research on different regulatory contexts like on public sector organization because of differences in regulatory requirements. Hutchinson and Zain, (2009) examined relationships of internal audit quality, audit committee independence, growth opportunities and firm performance. The result analyzed from 60 Malaysian firms shows that there is significant and
positive relationship between IAQ and performance of the firms for the firms. However, most of these studies were conducted on private firms, neglecting public institutions.

Piskar, (2004) on quality audit and their value added, found significant relationship between IAQ and organizational performance which emphasized that IAQ should be utilized as management technique for organizational improvement. Similarly, Pirka and Mulej, (2004) stated that IAQ have strong influence in the firms objectives. In the recent studies Mahzan and Hassan, (2015) on internal audit quality in 5s environment: perception on critical factors, effectiveness and impact on organizational performance, where they measured elements of IAQ such as number of resources, internal audit competencies and audit reporting relationship as well as examining how these element impacted on organizational performance. After administering questionnaire to heads of internal audit and auditors in Malaysian private organizations, the results of their studies shows a significant positive relationship between the elements analyzed and organizational performance.

However, studies involving internal audit quality and organisation in educational institutions have been carried out in a number of places. Fareedmastan, et al, (2015) examined the effectiveness of (IA) in improving organizational performance: Case of Wolof University, Ethiopia. The study indicated that there was no audit Committee in the University and the internal auditors have no required audit competency to achieve the desired objectives of the organization. The unit lacks enough resources and do not have audit charter in place. The study shows that internal audit do not have prerequisite for its quality. In addition, Kiabal, (2012) assessed internal audit and performance of Government Enterprises in Nigeria after analyzing data collected from 65 state owned companies in Rivers State, Nigeria, found internal audit practice and firm performance of government owned companies is not significant. The study further identified that lack of this relation is attributed to poor or inadequate establishment of internal audit function and insignificant support from the management.

Enofe, et al, (2013) on the role of IA in effective management in public institutions, by applying Z-test statistical tool indicated that effective management can be achieved in Edo State; local governments in Nigeria, however internal audit does not play any significant role in ensuring effective organizational performance in public sector. The finding also discovered that IA is insignificant in the entire management control, apparently not significant enough to influence organizational performance in public institutions. This paper investigating the relationship between internal audit quality and organisational performance of public universities Nigeria.

Internal Audit Competency and Organizational Performance

Internal audit competency apparently consist the development of specialized expertise that improve the (IAQ). It comprises IA experience, skills, knowledge and professional proficiency (Mahzan and Hassan, 2015). Internal audit competency represents one of the most essential elements in determining internal audit quality which improve the auditors’ role towards organizational performance. The IIA, as prominent standards setters of IA highlights the importance of having essential knowledge, skills, experience and professional qualification by internal auditors to operate more effectively (ISPPIA).

Hutchinson and Zain, (2009) in their study on internal audit experience and qualification; and firm performance from Malaysia indicated significant relationship between qualification of IA and firm performance after employing multiple regression analysis to test the data obtained from 60 listed firms in Malaysia. Prawitt et al, (2009) conducted studies to examine the
association on earning management. The finding of the study after using ordinary least square (OLS) regression to test the data obtained from 218 companies shows a significant association between the two constructs.

In an empirical examination of determinant of internal audit effectiveness – internal audit qualification, experience and professional proficiency, Cohen and Sayag, (2010) conducted their studies in Israel organizations to examine data collected from 108 Israel organizations. The result of the study using correlation and regression analysis indicated significant relationship of IA competency with organizational performance. Although, the model used in their analysis combined both private and public organization, the regression analysis shows that the positive relationship is more on private organization because of their sensitivity in implementing internal auditing standards. Studies in internal audit competency and organizational performance are limited and generally concentrate on private firms (Al-Matari et al, 2014).

In similar studies (Chi, et al, 2010; Gaballa and Ning, 2011) indicated that IA competency has strong relationship with firm performance. To this effect, IA competency will be employ to examine its relationship with organizational performance in public institutions with particular reference to Nigerian federal universities. Ali et al, (2007), examined the relationships and suggested a need to focus on internal audit competency because lack of it creates obstacles towards organizational performance especially in developing countries. This is supported from the result of the findings of Brierley et al, (2001 & 2003) who conducted studies in the southern Sudanese public institutions and that of Mihret & Yesmaw, (2007) and Muluqeta & Gebrehiwot (2008) where they indicated that lack of qualified, experience and professional audit staff as one of the factors hindering IA effectiveness. They suggested that internal audit should have sufficient educational qualification and adequate continuous professional development programme to enable them upgrade their skills and knowledge to meet organizational expectations.

Alzeban and Gwilliams, (2014) conducted a survey study in Saudi Arabian public sector. In the study, competency of internal audit with four variables of educational qualification, professional certificates, work experience in the field of internal IA job and continuous training and other staff developmental programmes were considered. The result of their finding indicated competency and IA effectiveness have positive relationship, which in turn leads to organizational performance. Mihret et al, (2010); and Alzeban &Sawan, (2013) have found that competency of IA have a significant and positive relationship with IAQ which in turn have significant impact on organizational performance. That means, the need to ensure internal auditor possessed required qualification, skills and adequate knowledge to execute their responsibilities more effectively is quite imperative. Based on the above empirical and theoretical findings, the following hypothesis is proposed:

\[ H1: \text{There is significant relationship between internal audit competency and organizational performance.} \]

**Internal Audit Independence and Organizational Performance**

Internal audit independence is one of the most critical factors for achieving IAQ. It is seen as a key driver of the IAF (Alzeban and Gwilliams, 2014). Internal audit independence, IIA practice advisory board is an instrument that allows IA department to function and conduct its responsibilities without interference. IA departments required organizational structure that will...
allow them to operate effectively on strategic organizational operations. That is, if internal audit is strategically positioned and has necessary managerial support, can deal with issues that can improve the organizational performance. However, against this arrangement can raise serious concern about the overall independence of internal audit functions for organizational effectiveness. This is supported by Ahmad and Tylor, (2009) were they stated that the fundamental positioning of internal auditor’s role results to a challenges in their effort to function independently. Internal auditor’s responsibilities were seen as oversight activities which involved monitoring and evaluation of organizational operations. It is considered to be instrumental in guiding and evaluating the performance of an organization (Christopher, 2015).

The internal auditor’s ability to exercise their responsibilities with a certain degree of independence was very critical to the profession and this challenge is typically the requirement by the corporate governance codes which indicated that IA should channel their report functionally to the audit committee (AC) of the board or council and administratively to the chief executive officer (CEO) (Ahmad and Tylor, 2009). This unique role of assurance services to organization and consultancy services to top management placed IA in a conflict situation (Stewart and Subramaniam, 2010).

However, Cohen and Sayag, (2010) stated that IA independence reduces misunderstanding and conflict of interest in the managerial operations. Even though internal auditors are part of the management and equally expected to evaluate the activities of entire management, the required organizational independence allow them to function efficiently to the overall performance of the organization. Chie and Karlsson, (2010) on the other hand opines that threats to auditor’s independence undermine the auditors’ effectives in executing their responsibilities.

In an empirical examination conducted by Mihret, et al, (2010) on “the antecedent and organizational performance implication of internal audit effectiveness: some proposition and research agenda” found that internal auditor’s independence and organizational performance has significant relationship. Abu–Azza, (2012) equally indicated a positive relationship between IA independence and organizational performance in the study conducted on perceived effectiveness of IA in Liberian public institutions. Qualitative approach through the use of institutional and matrix theories were employed. Faruk & Hassan, (2014) study on impact of IAQ and financial performance of quoted cement companies by Nigerian stock exchange, shows a significant relationship between IA independence and financial performance after applying multiple regression analysis. Studies on IA independence and organization performance are more glaring in private sectors and which the results of their findings are generally positive and significant, however, public sector are not receiving much attention from researches. Based on the above empirical and theoretical findings, the following hypothesis is proposed:

H2: There is significant relationship between internal audit independence and organizational performance.

Top Management Support and Internal Audit Competency

Internal auditing profession has long been gaining an increasing prominence in the governance processes considering its role in achieving the organizational structure, (Cohen & Sayag, 2010). On the other hand, top management support represent a key factor for the success of almost all programmes and process within organizations including internal audit. Management acceptance of and support for IAF is considered as a critical success factor to internal audit
quality (Cohen & Sayag, 2010). For efficient and effective internal auditing, there should be a strong management support which will ensure internal auditors possess appropriate skills, knowledge and experience (Al-Zeban and Gwilliams, 2014). The level of training, education and experience as well as the level of professional qualification influences the internal audit quality (Al-Twaijry et al, 2004). These attributes are accorded with the support of top management for maintaining appropriate responsibilities and service delivery capabilities. A competent internal auditor could be an asset for ensuring public confidence in the entire organization (Omar and Abu Bakar, 2012; Radu, 2012; Badara & Swaidin, 2013). This study will attempt to examine the relationship that exist between top management support and internal audit competency and see how both would influence organizational performance.

Several studies were conducted to examine the relationship of top management support and IA effectiveness (Cohen and Sayag, 2010; Unegbu and Kida, 2011; Ussahawaritchakit and Intakhan, 2011). On the study conducted by Alzeban and Sawan, (2013) on the role of IAF in the public sector context in Saudi Arabia, stated that management support for IA departments, can secure efficient staff and provide them with training and development to meet the required competency needed by the organization. And the findings of the study indicated a positive and significant relationship with top management support and IA competency. From the above studies, management support is highly needed for achieving internal audit quality which complements organizational performance.

However, Enofe et al, (2013) argued that elements of internal audit quality such as competency, size of internal audit and quality of work performed by internal auditors does not have positive significant influence on management control in Edo State (Nigeria). Lack of efficient training and in conducive environment for internal auditor to exercise their responsibilities are major setback faced by internal auditors. They suggested that training of internal audit personnel and the unit should be allow to attending top management meeting in order to be aware of policies affecting the organization. This study indicates that internal auditors’ competency typically involve the development of specialist expertise (Mahzan & Hassan, 2015), while support from top management has a direct link to the realization of IA competency (Cohen & Sayag, 2010). The study conducted by Enofe et al, (2013), should have employed the variable of top management support in their model of study.Based on the above empirical and theoretical findings, the following hypothesis is proposed:

**H3: Top management support moderates the relationship between internal audit competency and organizational performance.**

**Top Management Support and Internal Audit Independence**

The evolving and expanding role of internal auditing in organizations represent a key organizational governance mechanism and consulting services. This unique role of risk management and consultancy services to management has placed internal auditor in a conflict situation which their ability to exercise true independent and objectivity raised a lot of questions (Christopher, 2014). In addition, internal audit is also expected to assist management to achieve accountability and integrity and to improve on the implementation of organizational operations. It is also expected to develop confidence among the stakeholder. To achieve these fundamental attributes, internal audit must be independent from all decisions factors involved in the organization (Christopher, 2014).
Previous studies were conducted to examine this relationship (Mihret & Yismaw, 2007; Ahmad et al, 2009; Cohen & Sayag, 2010; Alzeban & Gwilliams, 2014; Alzeban & Sawan, 2013; Badara & Saidin, 2013; and Baharud-din et al, 2014). In the study conducted by Alzeban & Gwilliams, (2014) indicated that top management support is very vital determinant of IAQ and has a great and positive impact to IA independence. Independence is very essential for any professional who provides professional services and professional judgement. Without independent of mind and appearance, the internal audit loses its value and credibility and their opinion becomes meaningless (Endayah & Hanefah, 2013). This suggests that from support top management to IAF provides signal of the role and value of internal auditing in the organization. Managerial support empowers IA department to discharge its responsibilities efficiently (Alzeban & Gwilliams, 2014).

In the recent study conducted by Baharud-din et al, (2014) on the factors that contribute to the effectiveness of IA in public sector, after employing cross-sectional survey to analyze the variables of internal audit competency, internal audit independence and management support shows a positive and significant relationship. They indicates that successful IA department generally depends on management support strength. Management style and organizational structure determine the independent internal audit which provides the assurance services and consultations to the organization for effective and efficient utilization of organizational resources (Baharud-din et al, (2014). Thus management set out the overall policy setting that enable internal audit to gain authority and independence in the organization and at the same time gain auditees’ acceptability (Mihret, 2010).

However, in the study conducted by Fareedmastan, et al, (2015) on the effectiveness of IA in improving organizational performance: case study of Wollo university, Ethiopia, both quantitative and qualitative methods were employed to analyze the variables of internal audit competency, organizational independence, audit committee, internal audit resourcing and management support to examine the level of their contribution towards organizational performance. The result of the study reveals that internal audit department of Wollo university, Ethiopia is in effective and the level of its contribution to the performance of the university is low. This is attributed to lack of audit committee, poor resourcing and no independence of internal audit. The study suggests improving organizational performance through ensuring of internal audit independence, sufficient resources, competent audit personnel and establishment of audit committee. Top management support is the common problem among internal audit departments in developing countries. That is why their contributions towards organizational performance is generally in effective. The need to conduct in-depth research in this area is quite important.

This paper is guided by the stewardship theory. Stewardship theory therefore provides one framework for characterizing the motivational behavior in various types of organizations. Stewardship theory is of the view that stakeholders are being integrated in decision making processes pertaining the activities of the organization for effective governance structure (Mulili & Wong, 2011). Stewardship theory posits that some organizational members are more likely to consider organizational interest even if such interest would be in conflict with their own interest (Donaldson et al, 1991). According to Devis et al, (1997), stewards are the executives employed by the principal whereby their interest tends to aligned with that of the principals. They are originally centered chief executives who identified themselves more closely with the organization they served and they derived their satisfaction from behaviors that improve the performance of the organization. They put the interest of the organization first where conflict
of interest arises in the organization (Tosi, et al, 2003). Based on the above empirical and theoretical findings, the following hypothesis are proposed:

**H4: Top management support moderates the relationship between internal audit independence and organizational performance.**

![Figure 1: Research Framework](image)

**METHODOLOGY**

**Population**

The population of the study comprises of senior staff in the audit departments of forty (40) Federal universities across the thirty-six (36) states and Abuja in Nigeria having satisfied the NUC (2014) requirement. The population covers ten (10) most senior internal auditors with salary scale ranges from consolidated salary structure of 07-15 selected from each of the university as respondents making a total of four hundred (400) respondents. The sample for the study was purposively selected as they are in the capacity to respond to questionnaire.

**Instrument of the study**

The instrument used in the study was self-developed and the items were generated from various sources. The instrument has two sections covering the sociodemographic variables of the respondents consisting of gender, age, number of years in service, designation, qualification, qualification and membership of professional bodies. However, the other section covers seven dimensions that consists of organizational performance, internal audit quality, internal audit competency, independence, size, timeliness of reporting and reporting line.
The instrument has a total of 47 items on 5 Likert scale that ranges from strongly disagree as 1 to strongly agree as 5. Construct validity was established through exploratory factor analysis (EFA). Items correlated on at least .3 with Kaiser-Meyer-Olkin measure of sampling adequacy. .407, .698, .581, .332, .503, 393 and .503 for organization performance, Internal audit quality, competency of internal audit, reporting line of IA, Internal audit independence, Internal audit size and Top management support respectively above the recommended value of .5 (Hair 2010). The Bartlett’s test of sphericity were also significant. Further to this, the communalities and anti-image diagonals correlation matrixes were all over .5. Also, confirming that most of the items shared some common variance with other items. Based on the overall indicators, factor analysis was carried out with no item deleted.

Principle components analysis was used in the process with a primary purpose of identifying and computes composite involvement scores for the underlying factors. The initial Eigen values demonstrates that the seven factors explained 2.044%, 2.842%, 2.487%, 2.342%, 3.385%, 3.452 and 3.195% respectively. In addition, varimax rotations were used in examining the factor solution of the factor loading matrix with 78.0% variance explained.

Analysis and Result

Table 1: shows the mean values of independent variable of internal audit competence (IAC) with 3 items. Item one IAC1 has the highest mean value (M = 4.10; SD= .861) followed IAC2 (M = 3.52; SD = .103) and IAC3 (M =3.26; SD =1.03). The findings show that the mean values ranges from 3.26 to 4.10, indicating that the mean values are satisfactory.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Item(s)</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IAC1</td>
<td>4.10</td>
<td>.848</td>
</tr>
<tr>
<td>2</td>
<td>IAC2</td>
<td>3.52</td>
<td>1.03</td>
</tr>
<tr>
<td>3</td>
<td>IAC3</td>
<td>3.26</td>
<td>1.03</td>
</tr>
</tbody>
</table>

Table 2: indicates the mean and standard deviation of the internal audit independence. The construct has five number of items with IAI7 with highest value (M = 4.07; SD=.813 followed by IAI6 (M =3.93; SD =.813), IAI2 (M =3.65; SD =1.07), IAI1 (M =3.37; SD =1.06) and the least is the IAI with (M =3.20; SD =1.10). The findings demonstrate that the mean values ranges from 3.20 to 4.07, indicating satisfactory level of mean loadings.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Item(s)</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IAI1</td>
<td>3.37</td>
<td>1.06</td>
</tr>
<tr>
<td>2</td>
<td>IAI2</td>
<td>3.65</td>
<td>1.07</td>
</tr>
<tr>
<td>3</td>
<td>IAI6</td>
<td>3.93</td>
<td>.813</td>
</tr>
<tr>
<td>4</td>
<td>IAI7</td>
<td>4.07</td>
<td>.861</td>
</tr>
<tr>
<td>5</td>
<td>IAI10</td>
<td>3.20</td>
<td>1.10</td>
</tr>
</tbody>
</table>

Table 3: presents the mean values for top management support with 2 variable. The results reveal that IAC have the mean values (M =3.25 and SD =1.03) and IAI have the mean values...
(M =3.54 and SD =.970). The mean values ranges from 3.25 to 3.54 indicating that all the mean values have met satisfactory level.

Table 3: Top Management Support

<table>
<thead>
<tr>
<th>SN</th>
<th>Item(s)</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>IAC</td>
<td>TMS6</td>
<td>3.25</td>
<td>1.03</td>
</tr>
<tr>
<td>IAI</td>
<td>TMS7</td>
<td>3.54</td>
<td>.970</td>
</tr>
</tbody>
</table>

Table 4: demonstrates the results for organizational performance. The results show that IAI has the highest mean value compared to IAC mean values. The findings demonstrate that the mean values ranges from 3.53 to 4.04, indicating that all the mean values have met satisfactory level of means.

Table 4. Organizational Performance

<table>
<thead>
<tr>
<th>S/N</th>
<th>Item(s)</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IAC</td>
<td>3.53</td>
<td>.880</td>
</tr>
<tr>
<td>2</td>
<td>IAI</td>
<td>4.04</td>
<td>.668</td>
</tr>
</tbody>
</table>

Factor Loading

Table 5 shows the underlying factors with the corresponding communalities, factor loadings and Cronbach Alpha values.

<table>
<thead>
<tr>
<th>SN</th>
<th>Item Statement</th>
<th>Communalities</th>
<th>Factor Loadings</th>
<th>Cronbach Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>IAC1</td>
<td>Internal audit staff of the University possess appropriate knowledge, skills and professionalism in auditing profession to execute the task given to them</td>
<td>.736</td>
<td>.856</td>
<td>.784</td>
</tr>
<tr>
<td>IAC2</td>
<td>Recruitment process into internal audit department allow for recruitment standard that set out intellectual qualities and personal attributes</td>
<td>.727</td>
<td>.833</td>
<td></td>
</tr>
<tr>
<td>IAC3</td>
<td>The University has standing policies for training and career development plan for internal audit staff.</td>
<td>.586</td>
<td>.727</td>
<td></td>
</tr>
</tbody>
</table>
IAC 4 | Internal auditors in the university are allowed to participate in the annual continuous professional development programme organized by relevant professional groups. | .627 | .783 |

IAC 5 | Internal audit manual is readily available in your University to guide audit staff in executing their responsibilities | .630 | .709 |

IAC 6 | All new internal audit staff receives induction training | .559 | .634 |

IAC 7 | Internal audit is sufficiently resourced in terms of staff and budget and are deployed effectively to deliver the approved audit plan. | .727 | .766 |

IAI1 | Internal auditing is free from interference in discharging its mandate. | .739 | .849 | .751 |

IAI2 | Internal audit has direct access to top management. | .599 | .684 |

IAI6 | Internal auditors conduct audit function according to the assigned responsibilities. | .725 | .830 |

IAI9 | The University council or audit committee oversees employment or dismissal of chief Audit Executive. Internal audit performs its duties with greater degree of autonomy and independence from management. | .686 | .677 | .471 | .523 |

### Correlations

Table 6: indicates the correlations coefficients of the seven constructs. The results show that positive correlations were found among the variables. The findings for the relationship between IA competence and organizational performance indicates ($r = .362$, $p < .01$), IA independence and organizational performance ($r = .533$, $p < .01$), top management support and organizational performance ($r = .662$, $p < .01$), indicating significant relationships that internal audit competence, internal audit independence, internal audit size, internal audit reporting line, timeliness of internal reporting and top management support influence organizational performance. All the correlation coefficients are at 1% level of significance.
Table 6: Correlation

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td>1</td>
<td>347*</td>
<td></td>
</tr>
<tr>
<td>Independence</td>
<td>.347*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Organizational Performance</td>
<td>.362*</td>
<td>.533*</td>
<td>1</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Multiple Regression and Hypotheses Testing

The avenue that neutrally assesses the degree and character of the relationship between independent variables and the dependent variable is the multiple regression analysis (Sekaran & Bougie, 2010). The regression coefficient uses to show the relative significance of each of the independent variable in explaining the variability of the dependent variable. Sekaran and Bougie, (2010) and Zikmund, et al, (2010), asserted that when independent variables are jointly regressed in an attempt to explain the variance in the dependent variable, the size of each (individual) regression coefficient will show how much an increase in one unit in the individual independent variable affects the dependent variable, taking into consideration of all the other individual variables and dependent variable cave in to multiple correlation coefficient.

This study used the regression analysis to test the research hypotheses. The analysis intends to examine the relationship between the predicting variables and the criterion variable. Hair et al, (2010), asserted that for the conduct of regression analysis, large number of sample is required and considered appropriate, and that the underlying assumptions of multiple regression analysis were fulfilled. The assumption includes among others, normality, linearity, multicollinearity, homoscedasticity which are normally investigated through the scatter plots and the normality probability plot in the regression standardized residuals.

Showing Regression result for Direct Relationship

Table 7: Regression Results for Direct Relationship

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t-stat</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coefficient</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>1.729</td>
<td>0.150</td>
<td>11.549</td>
<td>0.00</td>
</tr>
<tr>
<td>Competence</td>
<td>0.065</td>
<td>0.030</td>
<td>0.096</td>
<td>2.159</td>
</tr>
<tr>
<td>Independence</td>
<td>0.055</td>
<td>0.046</td>
<td>0.070</td>
<td>1.203</td>
</tr>
<tr>
<td>Mgt Support</td>
<td>0.319</td>
<td>0.043</td>
<td>0.461</td>
<td>7.388</td>
</tr>
</tbody>
</table>

Adj. R² 0.496  R² 0.487
Prob. 0.000
F-Stats 50.29
Obs 313

* indicates statistical significance at 1%
* *indicates statistical significance at 5%
Dependent Variable: Organizational Performance.
The result for individual regression analysis indicates internal audit competence is positively and significantly impact on organizational performance ($\beta = 0.096$, $p = 0.03$). While, the result for individual regression analysis indicates internal audit independence does not positively and significantly related to organizational performance ($\beta = 0.070$, $p = 0.23$).

**Model Two: Showing the Regression Result for Moderating Relationship**

Table 8: shows multiple regression analysis was computed for the impact of the independent variables of internal audit competence and top management support, internal audit independence on the dependent variable(organizational performance). The results show that a significant regression model was found ($F = 33.73$, $p = .000$). The results also as indicated in table 8 with predictors that were significant, $R^2 =0.55$ and Adjusted $R^2= 0.54$, indicating that internal audit competence and top management support, internal audit independence and top management support have significant impact on organizational performance. The result of the model demonstrated that the interaction of the variables with top management support have positive impact on organizational performance in such a way that the regression equation predicted almost (36 %) contribution of internal audit competence and top management support, internal audit independence and top management support to organizational performance.

The result for individual regression analysis indicates that interaction of internal audit competence and top management support has significantly makes impact on organizational performance ($\beta = 1.246$, $p =0.00$), hence the hypothesis which states that there is significant relationship between interaction of competence and top management support and organizational performance is supported. While the result for individual regression analysis indicates that interaction of internal audit independence and top management support is
positively and significantly makes impact on organizational performance ($\beta = 1.310, p = .000$), hence the hypothesis which states that there is significant relationship between interaction of top management support and independence and organizational performance is supported.

DISCUSSIONS

The finding involving relationship between internal audit competency and organizational performance show a significant impact of the internal audit competence on organizational performance, indicating with knowledgeable and skilful audit staff the financial performance of the Nigerian Universities will improved. The findings demonstrate that autonomy of internal audit unit will certainly help organization to meet the financial objectives. The finding of the study is consistent to agency theory and resource dependence theory and their proponents, who provide that qualified persons help to improve firm performance because they have a clear insight about how to deal with operation and achieve their work with high quality. The finding of the study is also similar to that of Hutchinson and Zain (2009) who explored the association between internal (audit experience and accounting qualification) audit and firm performance (ROA) with growth opportunities and audit committee independence in Malaysia.

The significant relationship is clear manifestation that determinants of internal audit department quality in relation to the performance have been duly cater for and are interwoven. Determinants such as competence which cover knowledge and skills enable internal audit department’s staff to prepare and report audit outcome to relevant authorities with adequate professionalism. Therefore, competence of internal audit staff in the university significantly influences the outcome of the relationship between timeliness and organizational performance in Nigerian universities.

CONCLUSION

The correlations between competence, independence, size, reporting line and timeliness have ranged from weak to moderate correlations signifying that the independent variables influence the dependent variable (organisational performance). The study provides strong evidence of the relationship between competence, independence and organizational performance in the Nigerian University. The internal audit department is very important inside a university as it is regarded as the key element in the application of accounting systems and this in turn, helps in evaluating the work of the department as well as the university as a whole. The internal audit remains fundamental in organizational accounting as it is the department that ensures financial regularity in the university. The efficiency of internal audit helps develop the work of the university because the quality of financial transactions reflects quality of the internal audit department in Nigerian universities. Internal audit department is a significant part of the structure in the in the university as it covers the activities of oversight by the managements and audit committees to ensure credible financial reporting process (Public Oversight Board, 1994).

The study provides evidence of the relationship between internal quality factors and organisational performance and based on that the study recommended that universities in Nigeria should ensure functionality of internal audit quality factors being fundamental ingredients in attaining organisational performance.
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