

Developing a model for effective response to internal audit findings in Ugandan government departments

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DECLARATION

I Jemimah Ninsiima declare that this thesis submitted for the fulfilment of Doctor of Philosophy at the Northwest University is wholly my own work unless otherwise referenced or acknowledged and has never been submitted in any other academic institution.



SIGNATURE

August 5th 2019

DATE

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Glory to the most high God.

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DEDICATION

This thesis is dedicated to my mother for setting the pace in education. I love you mum.

ABSTRACT

The study aimed at examining the response to internal audit findings and recommendations among Uganda Government Ministries with a view of suggesting remedial measures aimed at ensuring effective response to the findings and recommendations. Globally, internal audit has been adopted as a tool to add value and improve an organization's operations in the public and private sector. The government of Uganda put in place the IAF in the different agencies to improve their performance. Audit recommendations are considered vital but they are in most cases ignored, not implemented and neither is guidance on how to implement them provided. The main objective of the study was to examine the response to internal audit findings and make recommendations to Government on how best to improve performance in Agencies. The study was guided by Principal Agency and Institutional theories. The study adopted a mixed methods approach using exploratory design. The study population was 93 government officials for quantitative part of the study and 23 for qualitative part of the study. A sample size of 73 study participants for quantitative study using simple random sampling, and 23 for qualitative study using purposive sampling, was selected. Quantitative data was collected using questionnaires and qualitative data was collected using both interviewing and documents review. Quantitative data was analyzed using descriptive and inferential statistics with the aid of SPSS version 25 and qualitative data was analyzed thematically using narratives. The study findings revealed that there is partial and untimely response to internal audit findings and recommendations due to inadequate response mechanisms. Also, organizational factors of systems and structures, personal factor of competence and environmental factor of technocrats from other agencies were found to be the main factors for effective response to internal audit findings and recommendations in Uganda government ministries. Finally, based on SEM an integrative IA model was developed to ensure effective response to internal audit findings and recommendations. It was concluded that due to inadequacy of response mechanisms, internal audit recommendations are untimely and partially responded to. The study recommends that Uganda government ministries, agencies and departments need to strengthen organizational structures,

commit financial and human resources to IA and take into consideration factors affecting internal audit effectiveness.

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LIST OF ACRONYMS

AC	Audit Committe
ISPPA	International Standards for the Professional Practice of Internal Auditing
MDALGs	Ministries Departments Agencies and Local Government
PFMA	Public Finance Management Act
IIA	Institute of Internal Auditors
INTOSAI	International Organization of Supreme Audit Institutions
IFAC	International Federation of Accountants(IFAC)
OIA	Office of Internal Auditor General
AO	Accounting Officer
UNRA	Uganda National Roads Authority
OAG	Office of the Auditor General
IAF	Internal Audit Function
APB	Audit Practices Board
CCAB	Consultative Committee of Accountancy Bodies
BOD	Board of Directors
COSO	Committee of Sponsoring Organizations
IAASB	According to the International Auditing and Assurance Standards Board

CHAPTER 1: INTRODUCTION TO THE STUDY

1.1 Background to the Study

Globally, governments exist to promote the wellbeing of citizens. In essence, governments act as custodians of countries' natural resources. The executive, legislature and judiciary as arms of governments are legally mandated to plan and use the resources in ways that benefit the citizens and societies at large. This includes providing public goods and services such as education, health, transport, security, law and order among others. It is also the responsibility of governments to ensure that as much is feasible, the provision of these goods and services follows the principles of equity, economy, efficiency and effectiveness (Norman, 2011:233-252).

For governments to function effectively, they ought to be well governed. According to the International Federation of Accountants (IFAC, 2013), good governance in the public-sector agencies encourages better decision making and the efficient use of resources and strengthens accountability for the stewardship of those resources. In addition, effective governance tends to be characterized by robust scrutiny; as a result, government agencies are compelled to perform optimally through minimizing corruption practices (IIA, 2012). It is argued that by instituting good governance frameworks such as implementing audit recommendations governments can enhance accountability, and improve service delivery outcomes. This is likely to result into improved livelihoods and wellbeing of citizens (Heath & Norman, 2004:247-265). Also, proper governance that ensures effective participation, rule of law, transparency and accountability offers the means to help a public institution/organization attain its goals and objectives mainly better service delivery (Braiotta, 1999; Burke & Guy, 2001).

In spite of the well-known benefits of good public-sector governance, governments the world over remain riddled with poor governance systems and practices that affect their willingness and capacity to function successfully. While governance systems are deemed to be more robust in the developed world, it is argued that in developing countries, such systems are weak (Bekele, Bizunehe & Tafesse 2014). It is further argued that governance

in developing countries are characterized by systems that exhibit inadequate parliament, patronage, bribery, lack of independence of institutions such as the Judiciary, abuse of political rights, nepotism, low levels of respect to laws that governance society, embezzlement, breach of human rights, corruption and bureaucratic bottlenecks. (Bekele *et al.*, 2014).

This state of governance has prompted debates across divides of stakeholders from theorists, researchers to policy makers in the public-sector governance. The world has been witnessing widespread public-sector reforms aimed at strengthening governance and functionality of government agencies. Various governance measures and practices are increasingly being adopted to mitigate the widespread governance problems associated with public sector agencies. One of such popular measures and practices is internal auditing. According to Almqvist, Grossi, van Helden, and Reichard (2013:479-487) internal auditing as a construct of public accountability has been part of the wider and popular public-sector governance reforms.

As a concept internal audit has been conceptualized with diversity. However, the growth of the need to standardize theory and practice of the concept has resulted into closer definition of internal audit. According to the International Auditing and Assurance Standards Board (IAASB,2013) internal audit is defined as a “function of an entity that performs assurance and consulting activities designed to evaluate and improve the effectiveness of the entity’s governance, risk management and internal control processes”. On the other hand, internal audit is viewed as an accountability role performed by internal auditors. In performance of such role, internal auditors are argued to be involved in assessing and reviewing the effectiveness and efficiency of existing internal activities of an organization (Badara & Saidin, 2012:38-46).It is further argued that in performance of its role, internal audit plays a compliance role by ensuring that activities performed by the organization are in conformity with existing, legal, regulatory ,policy, instructions procedural frameworks approved by the Board or Acts of Parliament (Badara & Saidin, 2012:38-46; Soh & Martinov-Bennie, 2015:80-111). On the other hand, internal audit seeks to ensure that all revenue collected by the organization is used for the purpose it is meant to be used for and that accountability of

such revenue is made (INTOSAI, 2001). The function is also concerned with ensuring that inventory procured is received, stored appropriately, issued in line with existing procedures and balances are accounted for. (INTOSAI, 2001). It is further argued that for internal audit to achieve its purpose, the function must operate with independence, objectivity and provide opinions that are necessary for adding value to an organization's operations. It is further argued that effective internal audit should provide recommendations that address areas of risks, efficient and effective governance aimed at enabling organizations improve their value propositions to stakeholders (Gay & Simnett, 2000; Van Gansberghe, 2005).

On the other hand, internal audit is viewed to be impactful if recommendations in internal audit reports are implemented by stakeholders (IIA, 2015:12; Sawyer, 1995).

While in practice this is ideal, laxity exists in implementing audit recommendations. In this context therefore, management as an agent of government, customer of audit services (Van Gansberghe, 2005) and disciplinarian ought to support the post audit process. This can be achieved by ensuring that internal audit recommendations are implemented by respective stakeholders in the organization (Van Gansberghe, 2005; Sawyer, 1995).

Consistent in this view, IIA (2012:5) asserts that by implementing internal audit recommendations public sector entities are able to detect and prevent fraud and corruption, assess performance of programs, existing internal controls such as policies, identify trends, threats and opportunities(Sawyer,1995). This enables organizations to devise strategies necessary to continue serving its stakeholders without turbulence.

From the thread of literature and events it is clear that globally, internal audit has been adopted as a tool to add value and improve an organization's operations in the public and private sector. In the public sector, IAF has been adopted to achieve accountability and integrity, improve operations and lastly instil confidence among citizens and stakeholders. Internal audit is considered to be one of the key functions across public administration setups in the world. It is not until recently that public sector institutions are starting to see the importance of the IAF as compared to their counterparts in business who adopted the practice earlier. Existing literature acknowledges that IAF has been widely welcomed in Uganda and other parts of the world with the hope that they would support improvements

in aspects such as accountability, integrity and risk management across the public sector. Internal audit departments have been instituted across all Uganda government ministries, departments and agencies since 2000. Internal auditing furnishes staff and management with analysis, appraisals, recommendations, counsel, and information concerning the activities reviewed. The objective is to do it at reasonable cost. This points to the practicality and reasonableness that should be attached to audit recommendations. In spite of internal audit departments being present in Uganda ministries, agencies and departments there is still evidence of corruption, fraud and unreliable financial reporting. This questions the effectiveness of internal audit departments as well as adherence to internal audit findings and recommendations.

1.2 Problem Statement

Over the last few decades, there has been intensive reforms in the public sector (Katsamunska, 2012:74-81). Among the areas of reform have included financial management, public procurement, human resources, asset management, education, energy (Nyamita, Dorasamy & Garbharran , 2019:24-37; Andrews, 2018:159-182; Lwanga,Munyambonera & Guloba, 2018:677; Alkaraan, 2018:585-609; Agaba & Shipman, 2007:373-391).

At the mantle of such reforms has been and continues to exist the need for enhanced accountability of public administration (Alkaraan, 2018: 585-609). To institute accountability frameworks, governments have implemented various approaches. In line with these reforms, government introduced the internal audit function as part of its administrative control structures across Ministries, Departments, Agencies and Local Governments (PFMA, 2000 & 2015 amended). Section 48 of the Public Finance Act (2015) requires that every vote holder in the national planning and budgeting framework to have in place an internal audit department. The function is required to provide internal audit obligations that include; appraising robustness of accounting practices, evaluating existing risk management frameworks, compliance and improvement actions and advice on value for money of activities implemented by MDALGs. On a quarterly basis, the internal audit function is required to submit a report to the Accounting Officer, AC and Office of the

Internal Auditor General (OIA) detailing an assessment of integrity, robustness of internal controls and financial management practices (PFMA, 2015).

In this context, the AC is responsible for review, consideration of the report and provide recommendations for implementation by the respective Accounting Officer (AO). With an internal audit system in place and an environment where internal audit stakeholders know their roles, it is expected that recommendations arising from internal audit reports would enable entities to minimize the extent of vulnerability of public assets to fraud.

While recommendations are considered vital and are provided, they are in most cases ignored, not implemented and neither is guidance on how to implement recommendations provided (OAG Reports, 2012; 2013; 2014; 2015: Kasigwa, Munene, Ntayi & Nkote 2013:25; Kasigwa, 2014: 21).

Specifically, OAG (2015) notes that failure to implement recommendations by Internal Audit has exposed public entities such as the Prime Minister's office (OPM), Ministries of Public Service, Local Government and Uganda National Authority (UNRA) to fraud.

Underlying this trend, this study is motivated. The study seeks therefore to examine the response to internal audit findings and make recommendations to Uganda Government Ministries by suggesting remedial measures that aim at ensuring effective response to internal audit findings and recommendations

1.3 Research Objectives

The study was guided by one overarching primary objective and two sets of objectives; theoretical and empirical objectives. These objectives are highlighted below;

1.3.1 Primary Objective

The primary objective of this study was to examine the response to internal audit findings and make recommendations to Uganda Government Ministries by suggesting remedial measures that aim at ensuring effective response to internal audit findings and recommendations

1.3.2 Theoretical Objectives

To achieve the primary objective, the study investigated the following theoretical objectives:

- (i) The level of response to internal audit findings and recommendations,
- (ii) Mechanisms that ensure effective response to internal audit findings and recommendations in institutions,
- (iii) Factors influencing effective response to internal audit findings and recommendations in institutions.

1.3.3 Empirical Objectives

Specifically, the empirical objectives were to:

- (i) Determine the level of response to internal audit findings and recommendations among government ministries in Uganda.
- (ii) Analyze organizational factors as a basis for assessing the adequacy of response mechanisms to internal audit findings and recommendations among ministries in Uganda.
- (iii) Examine enabling and constraining factors for effective responses to internal audit findings and recommendations among government ministries in Uganda.
- (iv) Develop an appropriate model highlighting the process and factors for effective response to internal audit findings and recommendations among government ministries in Uganda.

1.4 Research Questions

The study was guided by research questions. These included;

- (i) What is the level of response to internal audit findings and recommendations among government ministries in Uganda?
- (ii) What are the organizational factors that provide the basis for assessing the adequacy of response mechanisms to internal audit findings and recommendations among Uganda government ministries?
- (iii) What are the enabling and constraining personal and environmental factors affecting response to internal audit findings and recommendations among government ministries in Uganda?
- (iv) What appropriate model could highlight the process and factors for effective response to internal audit findings and recommendations

1.5 Research Hypothesis

The study was framed around the following hypothesis;

- (i) There is a positive relationship between organizational factors and response to internal audit findings and recommendations,
- (ii) There is a positive relationship between enabling and constraining personal factors and response to internal audit findings and recommendations,
- (iii) There is a positive relationship between enabling and constraining environmental factors and response to internal audit findings and recommendations.

The hypothesis are explained in chapter 3 and later tested in chapter 5.

1.6 Demarcation of the Study

The study concentrated on the response to internal audit findings and recommendations particularly among Uganda government ministries. The study involved formulation of both theoretical and empirical objectives. Theoretical objectives focused on: conducting a literature review on the measurement, mechanisms and factors influencing effective response to internal audit findings and recommendations in institutions. On the other hand, empirical objectives focused on: determining the level of response, adequacy of response mechanisms, factors, enablers and obstacles to response to internal audit findings and recommendations among government ministries in Uganda. A model was developed highlighting the process and the factors for effective response to internal audit findings and recommendations among government ministries in Uganda.

1.7 Significance of the Study

It is widely accepted that internal auditing enhances the governance and performance of institutions. In this line of thought, it is known that by providing professional assessment of how public resources are managed, internal audit helps public administrators as agents of the broader public to responsibly and effectively manage resources. In turn, this trend can lead to achievement of better service delivery outcomes.

The study concludes with derivation of a framework that can be adopted to implement internal audit findings and recommendations.

This framework provides a positive contribution to the body of knowledge and could unlock great potential in Uganda government ministries specifically with regard to the thinking and practice associated with internal auditing.

The research framework should emerge as one of the key additions to the internal audit body of knowledge. Findings from this study seek to provide guidance necessary in the journey of developing a model for effective implementation of internal audit recommendations among government ministries. Ultimately, this would lead to better governance and performance of the agencies, and ultimately boosting the economic development of the country.

The framework provides a useful resource for researchers and those interested in examining further matters associated with the implementation of internal audit recommendations.

The findings and conclusions drawn from this study may act as part of the reference materials for the purpose of stimulating debates on how to successfully implement internal audit recommendations in government agencies.

1.8 Ethical Issues

In any research process, ethical dilemma is likely to arise. Eaton (2019:15) argues that ethical dilemma is likely to arise when professional standards are met with situations of conflict of direction (Reamer, 2013: 4). Ethical choices therefore have to be made to avoid misuse of power imbalances, unmanaged confidentiality, and retrieval of data from respondents by force, the critique for credibility by users of findings. This is because the credibility of the scientific community and the perception of the public to judge and accept research results depends on the authenticity of the results that have been generated and/or published (Sekaran, 2003). The following code of ethics was adhered to during the research: seeking permission from interviewees for their participation, informing participants on the rationale of study, anonymity was maintained when analyzing and reporting data. This was done in line with the need to protect confidentiality of respondents.

1.9 Research Methodology

Methodology denotes a process and product aimed at facilitating the construction of sound arguments. It details how population and sample size will be determined, type of data to be collected, instruments or methods that will be adopted in collecting data, data capture, recording and analysis, an approach to testing validity of data and procedure on how ethics will be considered in undertaking the research.

This study adopted a mixture of quantitative and qualitative techniques, in which both quantitative and qualitative data were collected and analyzed using quantitative and qualitative techniques in order to achieve the objectives of the study. A survey design was adopted for this study. The target population was officials in Uganda Government ministries entrusted with implementation of internal audit recommendations. A simple random sampling and purposive sampling were used in determining the sample size. Both primary and secondary data were collected. Questionnaires and interview guides were used to collect primary data. The instruments were tested for validity and reliability. Collected data was analyzed using qualitative and quantitative techniques.

The research methodology is discussed in detail in chapter 4.

1.10 Chapter Classification

Chapter 1 provides a preamble to the study, chapter 2 provides an elaboration of the theories that guided the study and the concept of internal auditing and public-sector governance and the linkage between the two focusing on both global and national perspectives. Chapter 3 presents literature review experiences associated with internal audit and implementation of its recommendations. Chapter 4 provides an in depth explanation of the research methodology. Chapter 5 reports the results of the empirical study. Chapter 6 sets out the process used in analyzing data, interpreting and evaluating the research findings, and an assessment of the reliability and validity of the research instrument. Chapter 7 provides conclusions against which recommendations of this study are developed.

1.11 Chapter Summary

This chapter provided the background to the study, outlining the problem, objectives and an introduction to the methodology. In the next chapter the study provides a review of theories guiding this study and an elaboration of the key concepts in the study.

CHAPTER 2: THEORIES AND CONCEPTS: LITERATURE REVIEW

2.1 Introduction

This study sought to examine the response to implementation of internal audit findings and recommendations among government departments in Uganda. However, before exploring the topic in detail, it is necessary to first examine the theories which explain the relationship between variables of the study, and how they will be implanted in the development of the research conceptual framework. It is also of importance that the concepts of internal auditing and public-sector governance, and the linkage between them both at the global and national level are explored. Therefore, this chapter presents a description of the theories and issues of internal auditing focusing on the definition, history, importance, and practice. It also presents explanations to the concept of public-sector governance, and how the two are linked.

2.2 Theoretical Perspectives

To gain a deeper understanding of the concept of response levels to internal audit recommendations, the study was guided by two theories namely; agency and institutional theory. The theories are adopted in providing a framework for gaining deeper insights in studying internal audit response level, adequacy of response, obstacles and enabling factors for implementation of internal audit recommendations and public sector performance. It is envisaged that insights from review of such theories may guide policy makers, managers, auditors and organizations. To achieve these aims, agency and institution theories were found to be suitable theoretical lenses as the study focuses on implementing internal audit recommendations in the organizational context where governance institutional arrangements exist.

2.2.1 Agency Theory

The Agency theory presupposes that to achieve objectives, owners of capital (principal) delegate their operational roles to a third party known as an agent (Jensen & Meckling, 1976:308; Adams, 1994).

Agency theory is used to understand relationships between principal and agent. The agent represents the principal in business transactions and it is expected without self-interest. The different interests of principals and agents may become a source of conflict, as some agents may not perfectly act in the principal's best interests. The resulting miscommunication and disagreement may result in various problems and discord within organisations. Incompatible desires may drive a wedge between each stakeholder and cause inefficiencies and financial losses. This leads to the principal-agent problem.

Agency relationship might be defined as a contract among the organization owner(s) and its top management (Endaya & Hanefa, 2013:92-100). Managers work with the organization as agents to perform some service on behalf of owners who delegate some decision making authorities to managers. These authorities could be misused by managers to meet their own personal interests. Therefore, the existence of internal auditors will help the organization in increasing their performance, and will also ensure that the management carries out its plans according to procedures (Adams, 1994:8-12).

The principal-agent relationship, as depicted in agency theory, is important in understanding how the audit has developed. Principals appoint agents and delegate some decision-making authority to them. Agency theory is a useful economic theory of accountability, which helps to explain the development of the audit. Corporate governance can be used to change the rules under which the agent operates and restore the principal's interests. The principal, by employing the agent to represent the principal's interests, must overcome a lack of information about the agent's performance of the task. Agents must have incentives encouraging them to act in unison with the principal's interests. Agency theory may be used to design these incentives appropriately by considering what interests motivate the agent to act. Incentives encouraging the wrong behavior must be removed, and rules discouraging moral hazard must be in place. Understanding the mechanisms that create problems helps organizations develop better organizational policies.

Applied to this study, managers of public resources (agents) employ internal auditing as an internal control mechanism. This is in order to satisfy the principals (government) stresses for accountability and confidence. As stewards, managers of public resources are required to respond to internal audit recommendations.

As an internal monitoring mechanism, internal audit seeks to evaluate the effectiveness of risk management, control and governance. In addition, internal audit makes recommendations on the improvement of risk management, control and governance systems. Internal audit does not stop on only making recommendations but also monitoring whether management is effectively responding to their recommendations. The response could be either implementation or management accepting responsibility for not adhering to their advice. Agency theory in this context provides the basis to explaining the role and rationale of internal audit function.

According to Bosse and Phillips (2016:276-297) and Mitnick (2015:1- 6) the principal - agent relationship is characterized by information asymmetry and opportunism.

In practice information asymmetry exists since the agent is involved in the day to day running of the entity which results into having more information than the principal. When this occurs, opportunistic behavior may arise and the principals' interests may not be served by agents resulting into none implementing of audit recommendations by public administrators. This view is consistent with views of Kasigwa et al. (2013:25) and Kasigwa (2014:21).

Agency theory in this area of study, assists in explaining if the monitoring mechanism that is internal audit is an obstacle or enabling factor to implementation of internal audit recommendations. Agency theory can as well explain the governance mechanisms of internal audit function. Delmon (2010:10) highlights agency theory lays a foundation for practices that can minimize risks associated with ineffective response to internal audit recommendations. Agency theory is deemed appropriate for this study as previous studies on internal audit and assurance have adopted the agency theory in gaining deeper insights on internal audit cycle processes (Haji & Anifowose, 2016:915-948; Yee Sujun & Leung., 2017: 147-174; Alzeban & Sawan, 2015: 61-71; Endaya & Hanefah, 2016: 160-176). By adopting this theory, the study was able to gain a deeper understanding of internal audit and matters that surround implementation of its recommendations.

2.2.2 Institutional Theory

To gain an extended understanding of the context associated with the implementation of internal audit findings and recommendations, the study chose to adopt the Institutional

Theory. According to DiMaggio and Powell (1983) defines an institution as a system. In line with this view a system is defined as rules that guide the working of stakeholders in a given context. Within such systems, are values and norms that define how things are carried out? Applied to this study, the theory is relevant as internal audit recommendations are implemented in government entities which are set up as institutions by Acts of Parliament. The theory further asserts that organizational management and control structures tend to adapt to social expectations (Di Maggio & Powell, 1983; Meyer & Rowan, 1977).

Consistent in such view, Suddaby (2015:93-95) argues that any intervention in organizations needs to view institutions as a more or less a cage of shared historical perceptions. According to Mihret, James and Mula, (2010:224-252) the theory clarifies how organizational practices and structures are shaped through changes brought about by pressures, including both internal and external sources such as regulations and laws, or by the professions. However a limitation of this theory is it assumes that organisations are rational but it is not always the case. Another limitation it assumes organisations may be coerced due to outside pressures. Organisations could comply with regulations to say get funding but as soon as the funding comes they no longer succumb to the pressures.

Government agencies change, striving for similarity – coercive, mimetic and normative. With regards to the establishment of effective response to internal audit recommendations coercive isomorphism refers to pressures exerted in implementing the recommendations.

Mimetic isomorphism will come about when organizations model themselves to similar institutions in the same field. The institutions that they seek to model with are considered successful. By mimicking other institutions through adopting the recommendations, the organization's performance is improved. (Mihret et al., 2010: 224-252; Massini *et al.*, 2005: 1550-1569; Haveman, 1993: 593-627; Burns & Wholey, 1993: 106-138; Benders et al., 2005: 1713-1723; Al-Twajiry *et al.*, 2003: 507-531).

Normative isomorphism occurs with increased proficiency (Al Twawijry *et al.*, 2003: 507-531). With this perceived isomorphism, effective response increases the prominence of the organization and this would encourage other organizations to embrace and also act professionally.

By understanding existing norms, values, power structures that shape the character of government entities factors influencing the implementation of internal audit recommendations can be understood and shaped to ensure that recommendations are

implemented. This implies that as recommendations are being formulated and followed up by internal audit, organizations should be viewed as systems.

2.3 Internal Auditing and Public-Sector Governance Literature

2.3.1 Internal Auditing

In order to explore whether there is effective response to internal audit recommendations there is need to review theory, origin, importance and practice of internal auditing from a global and a national perspective. We also need to understand the linkage between internal auditing and public sector governance. This chapter therefore explores literature on each of the mentioned concepts.

2.3.1.1 Defining Internal Auditing

The theory and practice of internal auditing has existed for a long time now. However, it is important to understand the meaning of internal audit.

According to Sawyer (1995) a majority of existing definitions of internal audit trace origin of internal audit to the 1947 Statement of Responsibilities of internal Auditing. These statements were recognized and accepted IIA Inc in 1946, as a formal definition of internal auditing (Sawyer, 1995) namely: "Internal auditing is an independent appraisal function established within an organization to examine and evaluate its activities as a service to the organization". Meaning is derived more from this statement if focus is put on the key terms. According to Krogstad and Rittenberg, (1999) the practice of internal auditing is extensive. It is asserted that "internal audit includes the total range of levels of service, from detailed checking of accounting balances to higher-level operational appraisal".

The Auditing Practices Board (APB) and Institute of Internal Auditors (IIA, 1991) offer the following definition for internal auditing: "an independent appraisal function established by management for the review of internal control system as a service to the organization. It is a control that functions by examining and evaluating the adequacy and effectiveness of other controls". It is asserted that this definition highlights the basic principles of internal audit (Pickett, 1997:4). This definition tends to be adopted by Consultative Committee of Accountancy Bodies (CCAB) accountants and includes the three E's (economy, efficiency,

and effectiveness). It was under revision in 1996 as a Practice Note with more convergence towards the IIA (1991) definition and emphasis on corporate governance.

From this definition, it can be depicted that internal auditing aims at assisting members of the organization and on the board, to discharge their responsibilities. In this end internal audit provides analysis, appraisals, and recommendations for implementation to management. It is also deemed to provide counsel, and information concerning the activities reviewed.

This definition basically relates to internal auditor's role and purpose. It identifies opportunities and responsibilities. It demands a management-oriented approach, since it deals with effectiveness of operations and assistance to management and the board while providing advice and information that is necessary in supporting management to discharge their responsibilities.

The 1994 definition of internal auditing from the IIA statement of responsibilities reads: "Internal auditing is an independent appraisal function established within an organization to examine and evaluate its activities as a service to the organization". The objective of internal auditing is to assist members of the organization, including those in management and on the board, in the effective discharge of their responsibilities. To this end internal auditing furnishes them with analysis, appraisals, recommendations, counsel, and information concerning the activities reviewed. The objective includes promoting effective control at reasonable cost. The additional last sentence is taken from the 1988 definition of internal audit. This brings back into play the practicality and reasonableness that should be attached to audit recommendations.

All organizations now have to be cost conscious since most controls impact on resources (Pickett, 1997:6). It is argued that in the 1990s the business environment and internal processes became sophisticated and complex. New complexities created demand for refining the meaning and mandate of internal audit. Through the use of a task force comprising of various professionals from practice, consulting and scholarly sphere (IIA, 1999:1). The outcome of such stakeholder engagement was the yet another more robust definition of internal audit. According to Krogstad and Rittenberg, (1999:27), the IIA Inc Board of Directors approved on 26 June 1999 the following new definition of internal auditing is used. The revised definition adopted henceforth defines internal audit as; "an

independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes." (IIA, 1999 and 2011).

This definition squares with the objective of this research. This definition suggests that internal audit has shifted from financial and compliance audits to a far reaching and value-adding role that embraces both assurance and consulting activities, focusing on performance improvement and efficacy (Goodwin, 2004; Nagy & Cenker, 2002; Bou-Raad, 2000: 182-186; Krogstad & Rittenberg, 1999).

While this revised definition of internal audit was widely welcomed by stakeholders in internal audit practice and environment, recent developments argue a new internal function with specialist skills, professionalism and increased expectations. Such new developments are argued to have improved the ability of internal audit to offer a wide range of services whilst still retaining a formal methodology steeped in professionalism is the feature of the new internal audit department (IIA, 2016).

The new definition also brings about other questions like; do internal audit departments have sufficient resources and skills to carry out the consulting work, were AC and external auditors as corporate governance parties enacted in regard to their changing role and where does the newly defined role of internal audit function fit in the organizational structure.

Nagy and Cenker (2002) in their study, interviewed eleven internal audit directors of large traded public traded companies and established that internal audit departments have sufficient skills and resources to carry out consulting work. They also found out that there is coordination between ACs and internal audit Departments. However they noted that coordination between external auditors and internal auditors is not there because of lack of resources by the internal auditors have to look at all the assurance areas. From this therefore one can posit that if the internal auditor's role is to be realized in institutions then it requires a change in the institutional environment and governance arrangements.

Internal Auditing, according to Coyle (2010), “is an appraisal system established within an organization which helps the organization to achieve its objectives”. This function is put in place by management to assist them in effective discharge of their duties and responsibilities.

Lately, however, the Institute of Internal Auditors (2015) defined Internal Audit as “an independent, objective assurance and consulting activity designed to add value and improve an organization’s operations”. This new definition stresses that if internal audit is to achieve its objectives then it needs to be independent of management. From the new definition then it is implied that for IAF to be effective then it must be seen to be independent of management.

2.3.1.2 History of Internal Auditing

Record-keeping, systems of checks and counterchecks go as far back as the period around Anno Domini, in the Near East and Zhao dynasty and the old Greek and Roman empires (Ramamoorti, 2003: 1-23). During the Middle Age, rulers demanded for proof of receipt of revenues which expanded the systems for financial control. As a result the double entry bookkeeping system was developed which enabled control over business transactions. At this point auditing became more important, though it dates back to the industrial revolution when organizations demanded audit verification to include inspection of records and comparison of bookkeeping entries with documentary evidence.

During the 19th century, United States also introduced internal auditing since British investors demanded for independent checks on their investments (Sawyer, Dittenhoffer & Scheiner, 2005). With business activities becoming broad and complex, for managers to make decisions they sought for verification of information. This need validated the creation of a separate internal assurance function, that is the IAF, “as eyes and ears” of management which required reviewing and interpreting business activities (Ramamoorti, 2003: 1-23). In 1941 the IAF’s actual importance was confirmed when the IIA was founded in the United States.

Historically internal auditing focused on providing assurance on the reliability of financial statements. At the end of the 1980s internal audit moved towards broadening its scope to

operational audit which involved assessing business processes to gauge the effectiveness of internal controls (Ramamoorti, 2003). As the years went by, in the 1990s as needs of organizations evolved internal audit also broadened their scope to include compliance audits, management audits, forensic audits and operational audits.

In the past decade internal auditing in addition to auditing and assurance services they have also extended to consulting services (Rittenberg & Anderson, 2002). With these changing roles then internal audit aims to add value to the organization and management by developing the organization's control, risk management, and governance systems but without assuming management responsibility (Ramamoorti, 2003: 1-23). With these noted developments, the internal auditor is able to provide pro-active, objective assurance and consulting services that are customer focused. Ramamoorti (2003) assert that the IAF has become an important and valued function in most organization because of their value adding role, independence, objectivity, knowledge and experience.

2.3.1.3 The Rationale of Internal Auditing

Historically, the need for performance of audits can be traced to a desire to exercise stewardship and control (Ramamoorti, 2003; Salehi, 2008; O'Reilly, McDonnell, Gerson & Jaenicker, 1998).

In Europe, as observed by Ramamoorti (2003:1-23), internal auditing was justified as a way of exercising more control over managers at the time. This was motivated by fraud trends witnessed in the 18th century such as the Tulip scandal and South Sea bubble.

In economic history, accounting and auditing were created with the desire to contain and prevent theft and misrepresentation of especially state and church finances.

Therefore auditing was created to detect and prevent fraud as fraud dates far back in early history where men used deceit to acquire assets such as land and others or trust, with the aim of making profit (Petrascu & Tleanu, 2014; 489-497).

Around the turn of the 20th century, the internal audit function evolved. In this period due to high volume transactions, internal audit role extended to include collection and provision of interpretative reports of business facts to enable tracking of significant business trends (Mautz, 1964; Lin, Pizzini, Vargus & Bardhan, 2011; Soh & Martinov-Bennie, 2011).

Table 2.1: Rationale for setting up IAD

Author	Rationale for creation of internal audit department
Agoglia, Hatfield and Lambert, 2015; Reeve, 1990	<ul style="list-style-type: none">• Voluminous and complex transactions• Remoteness by owners from source of transactions• Potential bias of reporting parties
Rahman, 2014	<ul style="list-style-type: none">• Need for technical expertise to review and summarize business transactions and performance
Burgstahler, Hail and Leuz, 2006	<ul style="list-style-type: none">• Organization status to ensure independence and objectivity,• Being the “eyes and ears” of management
IIA, 2003	<ul style="list-style-type: none">• Fraud prevention
Barlow, Helberg and Leroux, 1995	<ul style="list-style-type: none">• Agency problem
Whittington and Pany, 2008	<ul style="list-style-type: none">• Increased complexity in larger organizations

Source: Review of Literature by Principal Investigator (2019)

Based on table 2.1 above, it is advanced that the reasons that motivated setting up of internal audit departments pointed to matters associated with the need to shed off high workload volumes by the principals. This was heightened by activity proximity challenges (Agoglia, Hatfield and Lambert, 2015), lack of technical expertise to provide internal oversight role of transactions and performance of internal operations. The high work load volumes are likely to lead to errors and fraud as asserted by IIA, 2003. On the other hand, it is argued by Burgstahler, Hail and Leuz (2006) that the wave that resulted into the introduction of internal audit departments was largely due to the need to promote good governance by setting up internal audit as a listener and overseer of internal operations of an organization. This view is consistent with other authors on internal audit practice such as Whittington and Pany, (2008).

While these views are popular, to some extent other authors point to other reasons. Barlow et al. (1995: 22) argues that commencement of internal audit function has been motivated by the need for internal audit to support the Boards oversight role of the organization.

On the large, fraud due to voluminous and complex transactions plus need for stewardship and control are popular reasons in literature for the rationale of IAF.

2.3.1.4 Role of Internal Audit Function

Previously the internal audit function has not been considered as a strategic function in organizations (Humphrey & Moizer, 1990; Gramling et al., 2004:23-194; Lin *et al.*, 2011; Soh & Martinov-Bennie, 2011). However, the period spanning from the 1990s to date has witnessed increased popularity of the concept of internal audit. Organizations have now come to consider internal audit as a vital function in organizations. From its inception in organizations, the internal audit function has played several roles. Based on a review of literature, a summary of the roles of internal audit are detailed in table 2.2 below.

Table 2.2: Roles of internal audit function

Author	Roles of internal audit function
Asiedu and Deffor (2017:82-99), Gustavson and Sundström (2018;1508-1532), Berle and Means(1932), Salehi and Shiri (2012), Berle and Means (1932)	<ul style="list-style-type: none"> • Assurance
Christopher (2018), Asaolu & Adedokun (2016; 196-204), Pickett (2000), Jensen and Meckling (1976)	<ul style="list-style-type: none"> • Corporate governance, control and risk management
Adams (1994)	<ul style="list-style-type: none"> • Assessment and assurance of controls
Pickett (2000:50)	<ul style="list-style-type: none"> • Assurance • Corporate governance, risk management, and control
Weber (2013)	<ul style="list-style-type: none"> • provide management the necessary tools to steer the affairs of the entity hence establishing a strong audit function
IIA (2012)	<ul style="list-style-type: none"> • provide input to good governance

IIA(1999)	<ul style="list-style-type: none"> • Objective assessment of operations • Value addition
Goodwin (2004), Goodwin and Kent, (2006)	<ul style="list-style-type: none"> • Corporate governance mechanism
Bishop et al., (2000)	<ul style="list-style-type: none"> • Support ACs to meet their financial reporting mandate
Naiker and Sharma, (2009)	<ul style="list-style-type: none"> • Reliable and accurate financial reporting
Weber (2013)	<ul style="list-style-type: none"> • Assist management with necessary tools to steer the affairs of the entity
Akins(2011; 306-337)	<ul style="list-style-type: none"> • improving public financial management
Ramamoorti (2003: 1-23)	<ul style="list-style-type: none"> • “Act as eyes and ears of management”

Source: Review of Literature by Principal Investigator (2019)

Based on a review of literature, the study finds diverse opinions on the role of internal audit in organizations. The review also notes that the role of internal audit function has also evolved over time. From checks and balances as asserted by Pickett (2000:50), to provision of assurance, risk management, oversight roles and advisory role to management. According to Berle and Means (1932) the internal audit function was required to provide assurance about internal operations of an entity in line with policy and procedural frameworks, and statutory requirements. While this may be viewed as a traditional role of internal audit, assurance is maintained as a vital role of the function as per studies of Weber (2013), Kravet, McVay and Weber (2018) and Boland, Bronson & Hogan (2015: 551-575).

On the other hand, IIA (2012) and IIA (1999), Jensen and Meckling (1976) argue that the most important role of internal auditors is associated with an organizations corporate governance agenda. In line with the COSO framework (2013), the IAF scans the control environment, assesses risk, designs control activities, provides information and communication and monitors and evaluates the control activities to assess their adequacy. This view is consistent with viewpoints of Goodwin (2004), Pickett (2000:50), Asaolu and Adedokun (2016; 196-204), Christopher (2014) Christopher (2018).

On the other hand, internal audit is deemed to play the role of supporting ACs to meet their financial reporting mandate. On the contrary, it is also argued that the department's role is to battle corruption and fraud (Asiedu et al., 2017: 82-99; Gustavson & Sundstrom., 2018: 1508-1532., Asaolu et al., 2016: 196-204).

To a great extent, popular views point to corporate governance, advisory service, risk management and supporting management in providing an oversight role over internal operations of organizations as key roles of internal audit from a scholarly perspective. While this trend is popular in literature, it is consistent with the voices in practice. According to a survey undertaken by IIA (2015) roles of the IAF were confirmed as assurance, oversight and advisory as they were rated highly.

2.3.1.5 Practice of Internal Auditing

According to Cascarino and Esch (2005) internal audit is performed in environments that are diverse in regards to culture and regulation. Every organization has its own intricacies, arrangements and purpose that will determine how internal auditing is practiced. Whereas differences are likely to affect the practice of internal auditing in each environment, compliance with the international standards for the Professional Practice of Internal Auditing is key if the responsibilities of the function are to be met.

IIA Standard 2130 on governance states that "The internal audit activity should contribute to the organization's governance process by evaluating and improving the process through (i) value and goals are established and communicated, (ii) the accomplishment of goals is monitored, (iii) accountability is ensured, and (iv) values are preserved."

It is not until recently that public sector institutions are starting to see the importance of the IAF as compared to their counterparts in business who adopted the practice earlier. Heath and Norman (2004:247-265) assert that corporate governance only received attention from the public and regulators after the corporate scandals and the global financial crisis. Examples of regulations are; the Sarbanes Oxley Act, The Cadbury Report and Corporate Governance Codes in different countries. The regulations' focus is mainly corporate governance disclosure requirements. As a result demand for assurance on corporate

governance processes, risk management and internal control has increased as well as awareness. IIA report (2012) posits that “given its unique position within the organization, the internal audit function (IAF) is well placed to provide this assurance and is an integral component of the corporate governance mosaic”.

Some authors argue that key differences exist between internal audit in the public sector and its counterpart in the private sector. Carhill and Kincaid (1989:50-55), highlight that public sector agencies are rigid in their operations because their activities have to be authorized by legislation. They also do not prioritize profit and cost dynamics since they are service oriented. In line with this therefore, it can be argued that public sector internal audit activities could be much more extensive as compared to the private sector.

Malan (1991:90-96) asserts that financial and performance audits are relevant in the public sector. “Financial-related audits examine the degree to which public resources are used by the organization to achieve its objectives. Performance or value-for-money audits focus on whether public resources are being used efficiently and effectively, with an objective of identifying and reducing wastage”. If the Internal Audit Function is to perform its roles efficiently and effectively then it must be characterized by the following:

Competence of internal audit

In the dawn of the corporate governance era, the IAF is increasingly being appreciated in organizations. In order to perform the function adequately it is crucial that the staff of the function possess the required competence. According to IIA (2006) one of the key components of an effective internal audit activity is competence of all staff involved in internal audit.

Internal auditors must be suitably qualified, knowledgeable and skilled to perform their audit responsibilities (ISPPA).

Generally internal auditors’ experience in the field of finance is likely to improve corporate governance and internal control. When internal audit staff are competent and professional, they offer objective risk management and quality reports.

Previous academic studies have clearly provided evidence on the need for audit staff to be appropriately qualified if the IAF is to be effective (Alzeban & William, 2012; Unegbu & Kida, 2011:304-309; Ahmad, Othman & Jusouf, 2009:53-62). Internal audit quality is highly dependent on competence of auditors' qualifications and experience (Gramling & Hermanson, 2006:37; Zain, Subramariam & Stewart, 2006:1-18). Coupland (1993) argues also that internal auditors in the public sector are required to have broad skills to deal with value for money audits. Due to the specialty of audits required now internal audit functions should be adequately staffed and trained. It is clear from theory and practice that one of the key success factors of IAF is skilled and professional staff.

Independence and Objectivity

According to Pickett (2000:265 - 268), the term "independence" features in all definitions of internal audit which points to its importance and therefore the IAF should play it at all times. It can be assumed that because of IAF's location in the organization independence might not be observed. However literature suggests that if internal audit is to be useful it must be fully independent. No matter the setting independence should never be compromised.

Auditors' independence significantly impacts on internal control effectiveness as previously stated by Frankel, Johnson & Nelson, (2002:71-105) and Krishnamurthy, Zhou & Zhou, (2006:465-490). Cohen and Sayang (2010) argued that if internal audit's judgments are to be perceived as objective its independence must be preserved and protected. Internal audit effectiveness depends on the function's independence from the activities it audits. Independence ensures objectivity in performance of tasks. This argument is in line with other authors such as Cohen and Sayag, (2010); Van Peurse, (2005); Boa-Read, (2000). IIA Practice Advisory 1110 indicated that independence can be achieved by: "appropriate reporting mechanisms, unrestricted access to all employees and departments, placing strict conditions on the appointment and removal of the head of internal audit and not offering non-audit services".

Section 2.3.1.6 elaborates more on Internal Auditor independence.

Management Support for Internal Audit

According to Alzeban and Sawan (2013:443-454) regardless of internal audit's access to AC they must interact with senior management on a close and regular basis as they are

the providers of resources to the function. It can be deduced that IAF needs management support in form of resources to operate effectively. Sarens and Beedle (2006:219-241) assertion is in line with the above as management's support is demonstrated by offering the function more consulting activities.

Management and BOD must accept and support the IAF to carry out their roles successfully. When this is done the entire organization will respect and support the function. Also as leaders accept and acknowledge they are assisted by the function in achieving their objectives. A review of the Standards and Practice Advisories (IIA, 2004) clearly shows that existence and day to day functioning of internal auditing relies heavily on organisational support. According to Eisenberger and Huntington (1986), organisational support can be "described as the extent to which the organisation values employees' contributions and cares about their welfare".

Sarens and Beedle (2006:219-241) came up with five ideas to measure organizational support towards the internal audit function. They were asserted to be the function's irreplaceability, strategic importance, resource distribution, collaboration with management, and acceptance and appreciation of internal audit opinions and recommendations.

Practice Advisory 1110-1 also clearly suggests that "internal auditors should have the support of senior management and the board, so that they can gain the cooperation of engagement clients and perform their work free from interference". Nagy and Cenker (2002) also concur with this opinion by highlighting that management determines internal audit's orientation.

Ridley and Chambers (1998:111) stated that internal auditing is like a product or service. Its' success depends on promotion, servicing and sales. This implies that internal audit must be sold, promoted and given resources by management for it to thrive. Sawyer (1973) also observed this by asserting that the auditor sells their product (internal audit) to executive management and the product should be of quality to keep management interested. It can be deduced that management's continued interest is demonstrated by supporting the function.

Cooperation between Internal and External Auditors

Several authors agree that cooperation between the internal and external auditor adds value to an organization (Utami, 2016; Munro & Stewart, 2008; Desai, Roberts &

Srivastava, 2010: 537-575). This cooperation is likely to be an important aspect in internal audit effectiveness. Using Badara and Saidin, (2013: 340-351) definition according to the English dictionary “cooperation is the act of working or acting together in order to achieve common goals”. Internal and external auditors have common objectives of ensuring effectiveness of internal controls and financial reporting (Al-Twaijry & William, 2003: 507-531; Wagonner & Ricketts, 1989:57-65). Therefore it would be of benefit to the organization if they cooperated. The cooperation can be demonstrated by the external auditors relying on the internal auditor’s reports of the evaluation of the internal control system (Munro and Stewart, 2008; Wagonner & Ricketts, 1989:57-65). It can also be through merging the internal and external audit plans as suggested by Messier and Schneider (1988:425-445). Studies have shown that a cooperation between the two results into; external audit fee reduction (Messier & Schneider, 1988:425-445; Wagonner & Ricketts, 1989:57-65; Wallace & White, 1984:40-42) and an overall improvement in the audit process (Sawyer et al., 2003).

Effective AC

Several authors assert that direct reporting of IAF to AC determines internal audit effectiveness (Cohen et al, 2008:181-198; Owolabi & Dada, 2011:174-183). ACs as a corporate governance requirement have recently received a lot of attention in regards to its constitution. It is argued that the committee should constitute of people who are skilled in terms of qualification, experience and knowledge as well independent (Endaya & Hanefah, 2016:160-176; Owolabi & Dada, 2011:174-183; Quigley 2012:36-37. Owolabi and Dada, 2011:174-183 posit that corporate governance is enhanced by effective ACs. According to Badara and Saidin (2013:340-351), Davies (2009:41-73) ACs’ responsibilities are; appointment, dismissal and performance measurement of heads of internal audit and external auditors. They also make sure that the IAF is objective and independent (Alzeban & Sawan, 2013:443-454). Al-Twaijry et al. (2002:288-297) established that ACs in the Saudi Arabian corporate sector in Saudi Arabia are faced with challenges which are: unqualified members, lack of independence, and poor relationships with internal auditors.

Clients of internal audit

Roth (2002) stresses that in order for internal auditors to identify the practices that are value adding they need to know their stakeholders or clients. Furthermore internal auditors need to do stakeholder management if the function is to be valued. Additionally, Hermanson and Rittenberg (2003:25-71) recognize internal auditing activities are influenced by internal auditor's clients.

IIA (2015) clarifies that internal auditors need to understand what both internal and external stakeholders consider to be value if expectations are to be met. Value needs to be added for both of these stakeholders if internal audit function is to be as effective (Erasmus & Coetze, 2018:90-114). Thus the IAF needs to understand the value drivers of each stakeholder. Therefore primary stakeholders should be able to determine how the desired value will be delivered by the IAF. The Institute of Internal Auditors (2015) outlines these value drivers as follows:

- I. Assessment of the adequacy and effectiveness of the internal control system
- II. Risk management and control assurance
- III. Regulatory and corporate compliance assurance
- IV. Organization's governance process assurance
- V. Business improvement recommendations
- VI. Identifying emerging risks
- VII. Informing and advising management
- VIII. Investigating or deterring fraud
- IX. Informing and advising the AC

Status of the internal control system

The most recent definition of the IIA (1999) clearly states that internal auditing "evaluates and improves the effectiveness of risk management, control, and governance processes". According to the COSO 1992 framework, internal control consists of five interrelated components. The control environment which is the basis for the other components is the atmosphere in which people operate. Management assesses risks that could negatively impact on the achievement of goals within the environment. To manage the identified risks control activities are implemented. Meanwhile Information about risk and control activities

is captured and communicated all over the organization. Lastly the process is monitored and evaluated (Sarens & Beelde, 2006:219-241).

Performance Standard 2120 (IIA, 2004) states that “the internal audit activity should assist the organisation in maintaining effective controls by evaluating their effectiveness and efficiency and by promoting continuous improvement”.

Since internal audit’s role as earlier stated is to assess the internal control system their primary focus will be development and improvement of the controls by providing advice and recommendations they will give and advise and recommendations (Sarens & Beelde, 2006: 219-241).

Internal auditors are likely skilled to provide sound advice to management on improvement of controls (Bou-Raad & Capitanio, 1999: 36-41; Bou-Raad, 2000: 182-186).

In summary from the thread of literature it be concluded that Internal Audit Function’s effectiveness depends on independence, competence, management support, cooperation with external auditors and effective ACs. Furthermore the IAF can also depend on internal control systems as well as stakeholders.

2.3.1.6 Internal auditor’s independence

“Independence is the freedom from conditions that threaten objectivity or the appearance of objectivity” (IIA, 2009a). Independence of internal auditors is also defined as freedom from dependence on, or influence or control by another person, entity or state (Christopher, Sarens & Leung, 2009:200-220; Kwanbo, 2009; Appah, 2008:66-71).

The IIA (2009b) “Code of ethics” “requires internal auditors to be objective in forming judgments”.

Standard 1100 states that “the internal audit activity must be independent and internal auditors must be objective in performing their work.”

Attribute Standard 1120 requires internal auditors to be impartial, unbiased and avoid conflicts of interest.

Practice Advisory 1120-1 emphasizes that internal auditors ought to avoid bias and conflicts at individual level and recommend rotation of staff assignments periodically.

Attribute Standard 1130 requires internal auditors to disclose adequately to an appropriate party in case their objectivity and independence is impaired.

Standard 1100 states that “the internal audit activity must be independent, and internal auditors must be objective in performing their work”. The related Practice Advisory 1110-1 stresses that the Chief Audit Executive should ideally report functionally to the board and administratively to the Chief Executive Officer (CEO).

The IIA’s attribute standards opines the importance of organizational independence of the internal audit function. To achieve organizational independence, ‘the chief internal auditor should report to a level within the organization that allows the internal audit activity to full fill its responsibilities’ (IIA, 2001, Para. 1110).

Mutchler (2003) suggests a framework of threats to internal audit independence on an individual level as below:

1. Self-review resulting from review of own work.
2. Social pressure originating from auditee or any one on the team.
3. Economic interest as a result of rewards.
4. Personal relationship from relatives and friends.
5. Familiarity due to previous working relationships.
6. Cultural, racial, and gender biases due to lack of knowledge.
7. Cognitive biases resulting from perceptions.

It is very clear from the Institute of Internal Auditors that the profession takes a strong stand on independence and objectivity. However, since internal auditors are employees in institutions that they audit it is argued that the concept of independence is not well defined and it is relative in nature (Appah, 2008:66-71; Paape (2007) also further alludes that independence is a subjective concept that promotes a willingness to bring a high degree of rigor and skeptical objectivity to the evaluation of an entity’s management and its plans and proposals.

Badara and Saidin (2012:38-46) suggested that independence should be conceptually defined in terms of domain and application. Zulkifli, Alagan and Mohd (2014) in their study found out that absence of sufficient qualified, skilled and competent human capital; lack of independence and objectivity hinders the effective internal audit practices in the public sectors thus resulting into poor accountability and transparent reports. Salawu and Agbeja

(2007) revealed that the audit section of public services needs to be independent if transparency and accountability is to be realized.

A study by Modibbo (2015:140-156) on selected local governments of Adamawa state also suggested that internal audit department should be established as an independent body for it to be independent and objective. Transparency and accountability are enhanced when the IAF is independent.

This can be achieved by ensuring that internal audit has a direct reporting relationship with the AC (Pickett, 2000). The AC acts as an independent forum for internal auditors to raise any significant matters, especially those affecting management (Braiotta, 1999).

Christopher et al. (2009) while studying the independence of the Internal Audit function using evidence from Australia based on Chief Audit Executives responses to a questionnaire however concludes that independence needs to be judged taking into account the relationship of the Internal Audit Function with management and the AC in combination rather than only the AC. The same study suggests that the Internal Audit function's relationship with the AC is a stronger guarantee of independence than the relationship with management.

Chambers (2008:47-63) notes internal auditors must have independence from management if the board is to rely on professional work of internal audits. Zinyama (2013:267-28) notes that the current public audit function does not have independence from its operations yet Independence and objectivity are the fountains of the audit function. This view has been prevalent in other existing studies. Previous studies note that the independence of the audit function can be achieved by rotation of auditors, this has been however been a major challenge for public auditing in public institutions due to the acute shortage of competent and qualified personnel.

It is further noted that independence has seen audit teams auditing for many years the same client without rotating. Further still, it is argued that recruitment and funding of the public audit function are wholly controlled by Government (Zinyama (2013:267-28).

In their earlier studies, Zhou and Zinyama (2012:218-237) also note that government departments and Ministries were ignoring audit recommendations and observations but not

paying adequate attention to them. This notion is very relevant to the Civil Service Commission, where both internal auditors and external auditors, report their findings to lower management levels. In Uganda each ministry does not have an AC but rather the ACs are per sector.

The Internal Audit Framework gives examples of how the Internal Auditors' objectivity could be increased like organizational position and policy statements which increase the status of internal auditors in the organization, a strong and supportive governance environment, appropriate incentive schemes which reward objectivity, the use of teams, and adequate supervision of staff.

On the other hand Alzeban and Sawan (2013:443-454), Price water house Coopers, 2000; Sawyer, 1995) argue that the AC must be vested with the authority to appoint, remove and assess the performance of the audit manager as such involvement further enhances the independence of the internal auditing function (Scarborough, Rama & Raghunandan, 1998). However, other suggestions have been put forward where ACs are not possible to be established auditors can be directly protected by Internal Audit laws like the Internal Audit charter and civil service laws, which regulate their rights and obligations (EU, 2012).

For audit reports to be credible they must be independent as they are relied on by users to make informed decisions. It can be inferred that public's confidence in audit reports depends on internal auditors' independence is (Messie et al., 2011:2131-2154).

Therefore, it implies that if Internal Audits are to be seen to add value and improve operations they must be seen to be independent. One can also infer that if they are seen to be independent then their recommendations and findings will be effectively responded to.

In conclusion The IIA stresses that the internal audit function should be given the appropriate status in the organization to enable the function to exercise organizational independence and Individual objectivity by Internal Auditors. This is key because internal auditors act as both employees as well as advisers to management (Sarens & de Beelde, 2006a).

2.3.2 Internal Auditing and Public-Sector Governance

Generally, auditing is mentioned as the foundation stone of good public-sector governance. It provides an objective assessment of whether public resources are managed loyally and efficiently to achieve intended outcomes. According to Heath and Norman (2004:247-265) auditors help “public sector organizations achieve accountability and integrity, improve operations, and instill confidence among citizens and stakeholders”.

2.3.2.1 Organization of Internal Audit within Public Sector Governance Structure

Internal audit is considered to be one of the key functions across public administration setups in the world (World Bank, 2012:1-64; Gray & Jenkins, 1993).

The public-sector auditor’s role supports the governance responsibilities of oversight, insight, and foresight. It is argued that oversight discourses on whether public organizations are undertaking what they are thought to do and helps to sense and prevent public corruption (Gray & Jenkins, 1993).

Insight assists makers of public decisions by providing an independent assessment of public sector programs, policies, operations, and results. On the hand, foresight recognizes trends and emerging challenges (Gray & Jenkins, 1993).

To perform their mandate, internal auditors use tools such as financial audits, performance audits, and investigations. They also provide advisory services to fulfill each of these roles (IIA January 2012).

Auditors can provide a direct link between transparency and the credibility of the public-sector entity. Lawmakers and the public look up to audits for assurance. In essence they seek to ensure that public entity actions are ethical, legal and that financial reporting accurately reflects the true measure of operations (IIA, 2012).

2.3.2.2 International experiences of Internal Audit in Public Sector Entities

Internal Audit in selected Sub-Saharan Africa Countries

In Uganda, there exists a Directorate headed by Internal Auditor General (IOG) and is housed at the Ministry of Finance, Planning and Economic Development. The Directorate is under Ministry of Finance, Planning and Economic Development and its responsibility is to formulate, implement and carry out inspection and audit of Public resources.

The Office of the Internal Auditor also referred to as Directorate of Internal Audit and Advisory Services receives periodic internal audit reports from MDALGs. These reports are discussed by ACs of each sector. This discussion results into the production of a national internal audit report with recommendations that is submitted to the Permanent Secretary to Treasury for onward submission to the Minister of Finance Planning and Economic Development.

In Ethiopia, the Directorate of Internal Audit has been elevated to high status compared to her peers like Uganda, Kenya, Tanzania and Rwanda. The Directorate of Internal Audit is housed under the Office of the president (Mihret & Yismaw, 2007:470-484).

The highest internal audit structure is referred to as the Directorate of Internal Audit. This structure provides independence for internal auditors .While this structure as argued by authors provides independence, it may comprise the same independence when the same structure is performing the role of internal audit in the Office of the Presidents as an auditee. It is also argued that the implementation of internal audit findings in Ethiopia has been faced with several challenges. These have included; limited implementation of internal audit recommendations. This has been largely attributed to absence of a formal procedure for following up on implementation of internal audit findings (Parker, 1996), lack of budget vote to access resources for internal audit with ease (Mihret et al., 2007:470-484; Mihret et al, .2012:1206-1233)

Internal Audit in Middle East and North Africa (MENA) region

The MENA region consists of countries in the Middle East and North African with 19 countries spanning including Sudan that neighbors East African countries. Internal audit has been part of the major public financial management reforms in the MENA region (World Bank, 2012:2).It is argued that the region's internal audit practices have been with lengthy bureaucracy and inconsistency of professional practice of internal audit standards where those involved in the internal audit function are part of the control system. This has been cited in instances where internal auditors are part of the payment clearance process. The internal audit role has been majority risk assurance. The epitome of governance of internal audit has lied in most cases variably with Ministry of Finance, Ministry of Planning

while other countries are asserted to have in place supreme internal audit agencies (World Bank, 2012:25).

Internal Audit in USA

In the United States of America (USA), internal audit reports to Inspectorate of Government (Inspector General Act of 1978:3) that reports to Secretary to Treasury but appointed by the President (Section 3a of the Inspectorate General Act Of 1978). The Inspectorate General of Internal office is located in each public institution and has a mandate to provide assurance, risk assessment and reporting. The Inspectorate general is mandated to appoint the Assistant Inspector General for Auditing who is responsible for supervision and performance of auditing activities relating to programs and operations of the establishment (Inspector General Act of 1978:3). The Inspectorate General is appointed at each organization and reports to the head of government institution. The Act requires that the President appoints Inspectorate General of Internal office based on technical grounds upon vetting by the Senate. The President is also the Inspectorate General and relinquishes duty of service from the Inspectorate General. By involving the president in hiring and firing the Inspectorate General it is like in Ethiopia, independence of the internal audit function appears to be strong but one can argue that there could be political influence. This trend is similar to that of Ethiopia where the Director General of Internal Audit for the country serves under the Office of President (Mihret et al., 2007:470-484: Mihret et al, .2012:1206-1233).

2.3.2.3 International Experiences on Challenges faced in implementing Internal Audit mandate

According to Curristine (2005:127-151), internal auditing acts as a vital share of governance and it can be of value to public sector organizations. In this line of view it is argued that despite the value that internal auditing can offer the state and citizens, the function is faced with challenges. Among such challenges limited resources to carry out the mandate of internal audit remains dire (Curristine, 2005:127-151).

In Uganda and other African countries the challenges faced by internal audit have included; service delivery. This is argued to have been caused by several reasons. From lack of

commitment by public officials, through to inadequate response to citizen needs, internal audit impact is argued to have been decimally felt.

On the other hand, inadequate coordination amongst the three spheres of government; judiciary, executive and legislature has failed efforts to provide adequate budget commitment for internal audit. Other causes of limits of internal audit in delivering its role have included; fraud, corruption and unethical leadership, ineffective and inefficient utilization of state resources and insufficient resources). There have also been compliance challenges (high percentage of qualified/adverse external audit opinions and non-compliance with legislation and guidelines. Furthermore human resource challenges that is characterized by inadequate human resource performance and plans , skills shortage and ineffective public sector accountability systems and gender and disability human resource representation targets not achieved) (Curristine, 2005:127-151; Aikins, 2011:334; Schepers, 2012:336-338; Kellis & Ran, 2012:130-141; Ferguson et al., 2013:130-141).

In light of the above challenges, it can be deduced that internal Auditing can aid management in minimizing risks associated with each challenge. This is based on the view that if we know the change, then we can manage it. By designing strategies to manage the challenges cited in literature, public sector Internal Audit function can deliver value to stakeholders with limited constraints the public sector by addressing their challenges (Van Resburg & Coetze, 2015: 181-191).

In other studies, a review of challenges associated with internal audit practice in the public sector point to that view that that public sector audit is very important although audit recommendations are not dealt with seriously by the responsible management. The question can be raised if management within the public sector is effectively responding to Internal Audit findings and Gideon and Tawanda, 2012).

2.4 Summary

This chapter has deduced at the definition, history, rationale and practice of internal auditing in the public sector. It has depicted the origins of internal auditing and how it is practiced, and structured in the public sector. Internal audit has to prove its relevance to the organization if it is to earn a reputation in the organization (Sawyer, 1995: 46-56).

Value can only be realized if Internal Audit provides useful recommendations to management and management implements these recommendations that have been agreed with the internal Audit Department. Understanding the theory, origin, importance and practice of internal auditing helps to know if there is effective response to internal audit recommendations. The chapter also looked at theories which were helpful in developing the conceptual framework for effective response to internal audit findings and recommendations. Agency and institution theories were discussed and it was established that internal audit recommendations are implemented in organizations where institutional arrangements exist. Therefore these organizations could have obstacles and enabling factors for implementation of internal audit recommendations.

CHAPTER 3: INTERNAL AUDIT FINDINGS AND RECOMMENDATIONS

3.1 Introduction

This chapter provides a discussion of Measurement of Response to Internal Audit findings and recommendations. The chapter further provides a review of literature on the obstacles to effective response to internal audit findings and recommendations effective response mechanisms to internal audit findings and recommendations .The chapter concludes by providing varying view points from literature on determinants of response to internal audit findings and recommendations covering both the theoretical and empirical perspectives. Tis chapter concludes with a discussion of literature on lessons learned, knowledge gaps, which provide the basis for undertaking this study.

3.2 Measurement of Response to Internal Audit Findings and Recommendations

Arena and Azzone (2009:43-60) defines effectiveness as the ability to achieve targets results consistently. Dittenhofer (2001:443-450) views it as the ability to achieve desired goals and objectives. In both definitions, it can be deduced that the measurement of audit response levels is associated with two key issues; consistency and achievement of audit goals and objectives.

Therefore, to determine whether there is effective response or not several factors need to be considered which include; identification of the basic objective of internal audit findings and internal audit recommendations; definition of goals to be accomplished by the internal audit recommendations and establish measures that will assist toward the achievement of those goals (Dittenhofer, 2001:443-450).

At a conclusion of an audit, Dittenhofer (2001:443-450) offers the following steps for an effective internal audit;

- i. The major issues in the audit are noted and listed in descending order of significance. Each finding is followed by a recommendation for steps to address the issue, and by

- ii. Response to the auditor's comments. A management response should state whether management agrees with the finding and whether management will implement corrective action suggested in IA's recommendation, or else describe alternative steps that will be taken to address issues that led to the finding.
- iii. Estimate of the date when corrective action will be complete.

In line with this view it is asserted that internal audit findings and associated recommendations are discussed with management as a way of inducing management action plans alongside approaches that address how agreed recommendations will be implemented (IIA 2016).

In Australia, it is advised that audit recommendations identify risks to the successful delivery of outcomes. Such recommendations should be consistent with policy and legislative requirements. It is further noted that actions should aim at addressing risks and opportunities for improving public administration (Australian National Audit Office, 2009).

It is further noted that the auditees should be responsible for the implementation of audit recommendations to which they have agreed. In performing such actions, it is required that audit recommendations are executed in a timely manner if public entities are to realize the full benefit of audit activity (Australia National Audit Office, 2009).

From a banking perspective on implementation of responses to audit findings, Abu-Musa (2004:28-41) in examining the existence and adequacy of implemented security controls in the banking sector in Egypt, it was concluded that technical department such as ICT have paid more attention in implementing responses to internal audit findings. These are argued to have focused on strengthening ICT related security controls.

On the other hand, Khanna and Kaveri (2008:23-47) examined the implementation of risk-based internal audit in Indian Banks. To accomplish the goals of the survey, a structured questionnaire was mailed to 43 banks in India, both in the public and private sectors.

A total of 25 banks, all public-sector banks and six private sector banks, responded to the questionnaire mailed. The findings of the paper point out that the banks have made sufficient progress in introducing RBIA (risk-based internal audit). This refers to their understanding of methodology for assessment of risk, audit procedures and implementation of audit report.

Abu-Musa (2010:226-276) investigates the existence and adequacy of implemented security controls of computerized accounting information systems in the Saudi banking sector. The results of study reveal that the vast majority of Saudi banks have adequate security controls in place. The results also enable bank managers and practitioners to better secure their computerized accounting information systems and to champion the security of information technology for the success of their banks.

Mihret and Yismaw (2007:470-484) in their study of internal audit effectiveness: on Ethiopian public sector case study found out that management’s response to internal findings and recommendations is generally not adequate. The results from the study of a University highlight that management does not give internal audit recommendations greater attention and thus the response is not adequate or timely.

Using the above studies as a guideline, the level of response will be measured in terms of adequacy and timeliness.

Table 3.1: Measures of implementation of responses to internal audit recommendations

Category of implementation	Measures of implementation
Adequate implementation	<ul style="list-style-type: none"> Action taken meets the intent of the recommendation, and sufficient evidence is provided to demonstrate action
Partial implementation	<ul style="list-style-type: none"> Action taken is less extensive than recommended There is a process or procedure to address the issue; however, action taken is not complete at time of assessment
No adequate implementation	<ul style="list-style-type: none"> No supporting evidence that action has been taken Action taken does not address recommendation

Source: Principal Investigator (2019)

3.3 Effective Response Mechanisms to Internal Audit Findings and Recommendations

The primary responsibility for implementing agreed audit recommendations generally lies with senior managers in the program or sector area of the entity that was subject to the audit (Australian National Audit Office, 2015). Successful implementation of audit recommendations requires “strong senior management oversight and implementation planning to set clear responsibilities and timeframes for addressing the required action”. Stakeholders including the IAF should be involved in implementation planning.

At the moment, there is limited information one can identify indicating a detailed process of how internal audit recommendations should be implemented within government agencies. Professional internal audit bodies all over the world and researchers highlight the importance of implementation of audit recommendations but do not give guidance on how the implementation should be done. This implies that internal auditors diagnose but offer no treatment plan for the diagnosis. This therefore creates a gap theoretically on an effective implementation process of internal audit recommendations as each entity is given liberty. Due to this gap, for the purpose of this research, the Better Practice Checklist (2009) of the New South Wales Audit Office is adopted as a standard against which one can assess whether government ministries in Uganda and other countries have effective processes in place for monitoring and implementing internal audit recommendations. The checklist provides for the following systematic steps for ensuring successful implementation of internal audit findings in an entity.

- i. Assigning responsibility for the implementation of recommendations to a single person or branch. Nominating a person or unit to coordinate implementation may facilitate more timely and focused follow-up of actions.
- ii. Developing an action plan which includes a timetable for implementation and clearly outlines roles and responsibilities for the implementation of each recommendation accepted.
- iii. Include in the plan mechanisms to monitor and report on results against key indicators where they have been identified in the audit, and review proposed actions to ensure they remain appropriate.

- iv. Allocating sufficient resources to implement the plan and set realistic and achievable time frames and targets.
- v. Having the plan endorsed by the CEO and where appropriate, the Board and the minister. Endorsement from senior management is essential for effective implementation because it provides the authority to allocate resources and take action.
- vi. Incorporating the plan in other planning documents such as the corporate plan, business plans or performance agreements. Incorporating the implementation of recommendations into an agency's business planning should increase the likelihood that they will be acted upon.
- vii. Providing regular reports on the progress of implementation of the recommendations to the CEO and where appropriate, the Board and the minister.
- viii. Raising staff awareness of the outcomes of the performance audit and invite feedback on how best to implement the recommendations.
- ix. Regularly reviewing and monitoring the plan and making amendments, where necessary, to maintain relevance and appropriateness. Regular review during implementation is necessary to ensure that proposed actions remain current.
- x. Report progress and actions taken to address issues raised in the audit in the annual report, reporting progress each year until implementation is complete.

From the above checklist the mechanisms that will be used to check whether a process is effective are: an accountable person, action plan in place, sufficient budget, regular reporting, information and communication channels and monitoring and evaluation of plan.

3.4 Determinants of Response to Internal Audit Findings and Recommendations

Any audit work's objective is to save tax money, improve programs and operations, and provide better service to the public (GOA 1991). These objectives are ideally achieved through recommendations. (Sprakman, 1997), applying the theory of transaction cost economics, demonstrated how internal audit recommendations are important to the management of government organizations.

The value of audit work does not lie in recommendations but rather on the action and follow up. Auditors have to recommend key guidelines on how to improve the appropriation of funds after a through scrutiny of ministries, an analysis of gaps between what was expected and what has been done (Institute of Internal Auditors, 2006). They also need to follow up ministries to evaluate how much their recommendations have been considered (Masood & Lodhi, 2016). When internal audit findings and recommendations are made to an organization, it is management that is basically responsible for implementing them. There are numerous factors that influence management's response to the internal audit findings and recommendations as explained below.

3.4.1 Quality of recommendations

According to General Auditing Guidelines (GAO) (1991) internal audit must aim at accomplishing desired benefits. It is further enlisted that internal audit recommendations do not direct what must be done but seek to convince others of what needs to be done.

In line with this guidance GAO (1991) notes that recommendations should be action-centric, convincing, well-supported, and effective. When appropriately implemented, they should get the desired beneficial results.

The GAO guidelines as cited in Mihret (2007:470) further state that to achieve the desired action, recommendations must have the following characteristics: properly directed, hard hitting, specific, convincing and significant.

- i. Properly directed: Recommendations should be directed to those who have responsible persons or offices with mandate to undertake the action required.
- ii. Hard-hitting: There should be no doubt that a recommendation has been made. They should be open, clear and concise or ease to understand mode.
- iii. Specific: Recommendations should state as specifically as possible the required actions to be taken. This is illustrated by an example in a recommendation to develop a system should be guided by ideas on how this can be done and the objectives underlying such recommendation.
- iv. Convincing: Recommendations should be backed by logical flow of facts

- v. Significant: The finding and the recommendation must clearly demonstrate that acting on the recommendation will improve operations, safeguard assets, or bring the situation in compliance with laws and regulations. This can be enhanced by some qualitatively and quantitative assessed benefits

3.4.2 Commitment of the Auditors and the Organizations

It is further argued that internal audit recommendations must aim at causing change that improves organizational performance. In this line of view, auditors and organizations must be committed to identifying gaps and issues necessary in identifying and bringing about needed change. To be objective, the auditor's commitment should be personal and professional while the organization should be supportive and should reinforce the commitment to its staff (GOA, 1991).

For audit work to be beneficial, there must be commitment to results however intangible it might seem. This commitment requires both the individual and organizational mind set. Both must emphasize and prioritize recommendation follow up if action is to be realized. Commitment can be achieved if Policy statements, supervisory communications, staff conversations, and day-to-day behavior emphasize the benefits from audit work. Audit staff need to consider that action on recommendation is the fundamental objective of their work. The organization should display its commitment through systems and behavior. This can be done by having job management systems to ensure planned results are achieved, management systems to track accomplishments, resource allocation and staff, training programs to motivate and equip staff with professional skills, and performance reward systems to reward individual contributions, (GOA, 1991).

To achieve desired goals, cooperation is required between auditors and management. Auditors and management should work together, the management and auditors are able protect the organization from incidents such as fraud. Auditors are not employed to look for faults but to assist management in effective execution of their duties. Birkett et al. (1999) in their study found out that management's lack of awareness of the role of internal audit results in non-cooperation during the audits and non-implementation of recommendations.

GAO (1991), Sarens and Debeelde (2006:219-241), Cohen and Sayag (2010:296-307) argue that internal audit recommendations are at times not from a managerial point of view. They assert that because they are often considered to be challenging the management's authority or legitimacy, there is reluctance in implementing such recommendations. In essence to secure commitment for implementation of internal audit findings, there is need for not only cooperation between management and internal audit but need to guide management on how well such recommendations can be implemented.

Sarens and Debeelde. (2006:219-241) further note that cooperation is a catalyst to improve commitment and ownership to implementation of internal audit recommendations

Furthermore, there exists an assumption by management that internal auditors are responsible for implementing audit recommendations (European Union, 2012). In the current perception, such trend would expose internal audit to conflict of interest situation. If Internal Auditors were to be responsible for the implementation it would create a conflict of interest and threaten their independence and objectivity. This would also lead to weakened and compromised recommendations, whereas the really challenging recommendations would be put aside.

To avert this trend and secure commitment to implementation of audit recommendations by management, the internal audit charter should clearly stipulate the role of stakeholders in the entire internal audit cycle including the post audit stage requirements.

Sarens Debeedle. (2006:219-241) in their study of building a model for internal auditing concluded that stronger management support manifests itself in a relatively higher frequency of meetings with management (formal and informal) and a more meaningful dialogue with management, reflecting an active interest on their part in audit results and the follow-up of recommendations and action plans.

Sarens and Debeedle (2006) through an investigation of the relationship between Internal Audit and senior management by studying five Belgian cases conclude that acceptance and appreciation of Internal Audit depend on support from senior management. This support among others include approval of resources, input to Internal Audit planning, response to Internal Audit recommendations and provision of information to internal auditor at all times.

Audit findings and recommendations are only beneficial if management is committed to implementing them (Mihret & Yismaw, 2007). One measure of audit effectiveness is effective implementation of audit recommendations (Van Gansberghe, 2005) and the management of an organization is viewed as the customer receiving internal audit services. As a result, management's commitment to use audit recommendations and its support in strengthening internal audit is vital if audit is to be effective (Sawyer, 1995).

Sarens and Debeedle, 2006 in their study of the relationship between internal Auditors and Senior Management found that overall acceptance and appreciation of internal audit within an organization is strongly dependent upon support got from senior management.

Ahmed (2009) noted that management support is needed and that with such support, sufficient resources are usually allocated for the audit function and this will ensure that its audit recommendations will be implemented

Although the power of (re)appointment and dismissal of the Chief Internal Auditor is vested with the AC, Scarbrough, Rama and Raghunandan (1998) found that, especially in large companies, Chief Finance Officer often have the authority to hire (31% of the companies) and fire (29%) the Chief Internal Auditor. If the hiring/firing authority is vested with the AC, but senior management continues to have authority over the budget and evaluation of the internal audit department, internal audit remains highly 'dependent' upon senior management. Therefore it is important that management supports internal audit activities by effectively responding to their recommendations. "Furthermore, different levels of management, including senior management, should commit to providing prompt responses to recommendations from internal audit, to monitoring the implementation of action plans, and to keeping internal audit informed of plans of changes to the risk and internal control profile of the organisation, and of major changes to the organization's policies and procedures"(Sarens Beedle, 2006). Fernandez and Rainey (2006) based on a literature review argued that top management support and commitment to change play a crucial role in organizational renewal, as senior managers can mobilize the critical mass needed to follow through on efforts launched by one or two visionary thinkers.

Other academic studies support the critical importance of management support for example Cohen and Sayang (2010) while studying determinants of Internal audit effectiveness in Israel organizations. Hahn (2015) mention how decisions made by senior management like hiring proficient staff, developing career channels for staff and providing independence for Internal Audit work are important in determining Internal Audit Effectiveness which in turn affects management response to internal audit findings and recommendations.

Arena and Azzone (2009) emphasize how management (the auditees) will or will not implement recommendations made by the Internal Audit function if they do not perceive it to be of quality.

Geis (2010) in their study of potential benefits of Internal Audit in the German context while interviewing Chief Audit Executives found out that one of the measures for Internal Audit effectiveness is the ratio of recommendations being implemented. For recommendations to be implemented, management must appreciate internal audit by supporting them.

Atuhumuza (2016) in the study of the factors affecting successful implementation of the Auditor General's recommendations in Soroti District, confirmed that organizational factors like restrictive budgets affected implementation of the Auditor General's recommendations. It was also discovered that the majority of respondents strongly agreed that organizational factors (funding constraints, accounting and financial regulations, auditing processes and procedures) affected the implementation of the Auditor General's recommendations. This indicates that to effectively implement the Auditors recommendation the organization has to commit resources and support the auditing activities. A study of Internal Audit Practices and Public Financial Management in Rwanda and Nigeria noted that "adequate funding of internal audit functions and establishment of mandated rule for all public offices to make its stewardship reports publicly available would, no doubt, enhance effectiveness of internal audit function and boost good governance and transparency in public sector organizations. However for this to happen management must be committed to providing the funds and making sure that all stewardship reports are made public.

3.4.3 Rigorous Follow-up and Monitoring

An organization's acceptance of a recommendation does not ensure results; effective implementation does. Therefore continued attention is required until results are achieved

(GOA, 1999). Organizations should have a system that provides the structure of discipline needed to promote action on audit recommendations. It should ensure that recommendations are aggressively pursued until they have been resolved and successfully implemented. Auditors should assess whether the agencies they audit have a follow up system that adequately meets their basic responsibility for resolving and implementing audit recommendations. The follow up system should have the following elements as per GAO (1991). A firm basis for monitoring and follow up actions. Active status monitoring. • A determination of the results of actions taken on recommendations.

IS Audit and Assurance Guideline 2402 on Follow-up Activities requires that internal auditors develop with management an audit recommendation implementation plan or matrix. Good practice in the design of such matrix requires that it includes, processes for follow-up, actions, and timelines. In line with this view the guideline requires that areas managements' acceptance of risk should be documented, formally approved and communicated to those charged with governance.

In consistency with the proposition by IS Audit and Assurance Guideline 2402, a website www.anao.gov.au accessed on 15/01/2017, recommends a rigorous follow-up process if internal audit recommendations are to be implemented. The cost of implementing recommendations should be feasible .It is recommended that the process is cost efficient and effective (www.anao.gov.au).While the cost assessments of any recommendation is critical, internal auditors and management should explore the practicability of a range of interventions. This is aimed at increasing feasibility of proposed recommendations while being mindful about their cost implications.

A review of literature reveals that inadequate coordination of audit work and managerial support is evident in organization. This could be responsible for non-implementation of internal audit recommendations. For instance in a study conducted by Adeyemi (2011:7964-7971) on implementation of internal audit recommendations in a Civil Service Commission in Nigeria, it is opined that expectations gap between part of some staff and management may derail implementation of recommendations of internal audit exercise.

Closing the gap is considered vital if internal audit recommendations are to be implemented.

In another study by Korje (2016:21) among public sector organizations in Oromia Regional Government Public Institutions (2003-2006), it is revealed that insufficient follow up action by auditee, auditor general and permanent committee also known as 'Koree dhaabbii' are responsible for delays and non-implementation of internal audit recommendations. "Koree dhaabbii's" mandate in that study was to ensure implementation of internal audit recommendations.

3.4.4 Effective ACs

According to the Public Finance Management Act (2015) of Uganda, public entities are mandated to have ACs. Such committees have a mandate to review internal audit reports, receive and approval internal audit plans and recommend appropriate actions for implementation by management of public entities. By performing this mandate, the AC assists organizations in the evaluation of the effectiveness of the external and internal audit functions and oversight of the entity's risk management policies and programs. This view is consistent with the views promoted by Deloitte (2017).

According to the firm, as cited by the website, www.corpgov.deloitte.com, and accessed on 05/02/2017, the AC is established with the aim of enhancing confidence in the integrity of an organization. Its other roles are asserted as evaluating the effectiveness of the external and internal audit functions as well as oversight roles.

Regulators and others highlight how important it is that an Entity has an AC. This is because one of the roles of the AC is to review and monitor managerial response to the Internal Audit findings and recommendations as per the Financial and Reporting Council (FRC) (2012 a, b) Guidance on AC and Corporate Governance Code. As a result of this role having an AC in place ensures effective response to Internal Audit findings and recommendations. However it is not just having an AC but this AC needs to be effective so as to perform their duties. For the AC to be effective it must have certain characteristics.

On defining and attaching characteristic to what constitutes an effective AC, various studies have been undertaken. In one of such studies by Abdulaziz and Nedat (2015) based on data from a survey of chief internal auditors from UK-listed companies, and concluded, that an effective AC will always comprise of individuals with expertise in areas such as audit and accounting. The study also revealed that engagement plans that include meetings are vital for successful implementation of internal audit recommendations. Other findings from this study point to independence but engaging a skilled AC was popular in this study as a key determinant of an effective AC

Studies by Abdulaziz et al, (2015) are consistent with findings from a study by Barau et al, (2010) point to competence and diligence of the AC as determinants of effectiveness but require investment. Such findings are in mutuality with the study findings and recommendations of Zain et al, 2006:1-18. According to this study, it can be deduced that an effective AC is one that provides advisory service towards the improvement of audit of financial statements and recommendation arising from an internal audit.

To a large extent, it can be deduced from scholarly writings that knowledgeable AC Members with accounting and auditing expertise greatly support implementation of internal audit recommendations (Adel & Maissa, 2013:1-22; Zain et al., 2006:118; Naiker & Sharma, 2009:559-587; Krishnan & Visvanathan, 2008:827-858; Callahan and Soileau, 2010). An AC comprising of members with expertise, can ably liaise with an organization's internal audit function to ensure implementation of the internal audit recommendations. In essence this can also help to reduce the challenge of information asymmetry as envisaged by the principal agent theory as the challenge of information imbalances is neutralized.

3.4.5 Skilled and Competent Staff in the Internal Audit Department

The personality of staff employed in internal audit departments is viewed as an integral factor impacting on internal audit effectiveness. In line with this view, it is argued that the Chief Audit Executive should be a capable leader not only in providing leadership to the audit team but capable of executing technical assignments (Mihret et al., 2007:470-484; Monfardini & von Maravic, 2019; Yee et al., 2017:147-174).

This is supported by Albrecht, Chen and Nelson (2018). The internal audit context is characterized by complexity ranging from the need to comply with abstract and complex regulatory requirements and complex stakeholders with varying interests which at times are contrary to interests of the organization. Operating in such environment requires that staff deployed for internal audit assignments possess capabilities to handle complex matters while formulating findings and recommendations in simple and implementable ways (Hillison, Pacini & Sinason, 1999:351-363). This is considered important in establishing constructive dialogue with the management (EU, 2012).

Studies by Zhou and Zinyama (2012:218-237) attribute the non-implementation of internal audit recommendations to scarcity of internal audit talent. Based on their studies, they argue that such talent has been scarce in government Ministries.

Lenz and Hahn, 2015 (5-33) opines that the technical competencies of Chief Audit Executive matter. Through efforts such as mentoring the study tends to suggest that once the Chief Audit Executive possesses such competencies, the entire team may find ease in developing such competencies. By having this trait, the department is able to derive quality recommendations that are likely to be taken on at implementation level. This view is also championed by Mihret et al, (2007) that promotes that view that audit requires competencies to provide tough recommendations.

In another study Van Peurseem (2005:1-21) where interviews were held with six Internal Audit functions in New Zealand regarding communication skills and personal authority as indicators of internal auditors' skills, it is revealed that internal auditors are gate keepers and provide an advisory role as consultants. By virtue of such roles, the study concludes that internal auditors must be good influencers. By acquiring communication skills, this study confirms that this can help to enhance the implementation of internal audit recommendations. This study concurs with similar views promoted by Mihret et al (2010: 224-252) and Lenz et al (2015:5-33).

On the other hand, Soh and Martinov-Bennie (2011:605-622), highlight that "a good Chief Audit Executive is able to work with other stakeholders in the organization and is not afraid to voice his or her opinion even in controversial situations".

Rittenberg and Anderson (2006:51) suggest the ideal Chief Audit Executive should have strategic thinking, stature and presence, the ability to exercise sound judgment and the ability to provide clarity to audit issues.

3.4.6 Independence of the Public Audit Function

It is important that the IAF is independent if their recommendations are to be valued and later on implemented. The concept of independence and its value addition is explained in 2.3.1.5 and 2.3.1.6. For internal audit's findings and recommendations to be given appropriate consideration they must have a position in the organizational structure (Stewart & Subramaniam, 2010). In this direction the internal audit charter should clearly state the responsibilities of the auditor and management's obligation to prompt and responsive replies to audit reports.

It is important for IAF to have independent reporting lines and have ample access to the AC. Alzeban and Sawan (2013:443-454) argue that the AC should be responsible for the internal auditor's appointment, dismissal and performance evaluation.

3.4.7 Resource Availability

The success of an organization depends on the availability of resources (Boudreau, 1996). Availability of technology, human capital, financial resources, knowledge management and innovative abilities in an organization impact its effectiveness (Rainey & Stein Bauer, 1999; Nemati, Bhatti, Maqsal, Mansoor & Naveed, 2010;). If the organization is to effectively respond to internal audit findings and recommendations, it has to have the resources to implement recommendations suggested.

3.4.8 Culture/Beliefs

Culture denotes "the beliefs, values, knowledge and understanding shared by a group of people with a common purpose" (Institute of Internal Auditors, 2015). It is proposed by literature concerning culture and the audit process that the culture of the country influences its audit environment, which ultimately influences the audit process results (Wang & Hell, 2009). From this end it can be deduced that culture can influence response to internal audit findings and recommendations.

Studies by Alzeban (2015:539-559) investigated the effect of different culture dimensions on internal audit, results showed that culture positively relates to internal auditing quality. In a similar way, Badea (2013:31) asserts that organizational culture has an important role in influencing employees' behavior. The influence is argued to be contained in the way they in terms of communicate, team work and ultimately in the way they perform.

Furthermore, Testa and Sipe (2013:36) contends that improving organisational culture is important to match the trends of competition in the business environment. Sustaining competitive e advantage requires a culture of resilience, unlearning and relearning. Accordingly, it is argued that such should form the character of the internal auditors (Testa & Sipe, 2013:36).

Lastly, in a study undertaken by Kustinah (2013:118-125) and Salih and Hla (2016:121-124) it is concluded that organizational culture impacts on implementation of internal audit recommendations. The study concludes that to implement internal audit recommendations, the culture of the organization should be less stress free, healthy and with less internal competition.

3.4.9 Auditee's behavior

According to Masood and Lodhi (2016:99-119) auditee behavior has a significant contribution to the audit effectiveness. In West Australia, it was discovered that behavior of auditee with auditor affected audit effectiveness (Huselid & Becker, 1995). The characteristics of the auditee could include perception about the audit opinion, cooperativeness, and perception about auditor's competence, how much they understand the recommendations and how they perceive audit criteria (Masood & Lodhi, 2016). One of the measures from literature as already mentioned is number of recommendations implemented therefore auditee behavior could affect their implementation. If the auditee does not understand the recommendations, then they will not implement them or if they perceive that they are not quality recommendation they will be reluctant to respond to them.

3.4.10 Environment/External factors

For an audit of any kind to be successful in achieving its objectives, it needs to operate in an environment where transparency and public accountability are normal occurrences (Atuhumuza, 2016).

On the African context, studies show that failure to implement the Auditor General's recommendations is a result of political, economic and business environment, legal framework, education background, culture, and perceptions of audit, as put forward by ICAEW (2010:7).

According to Wamajji (2015:6) Uganda, like many countries in Sub-Saharan Africa, studies indicate that the Auditor General's recommendations continue not to be implemented as a result of corruption, inadequate laws, technical and financial support and poor financial management and governance challenges.

Internal auditors in Government as professionals work in a clearly political environment, where they are expected to be sensitive to political issues and at least somewhat responsive to the political rules of the game. The political salience of internal audit findings can thus be expected to influence their effective response (Schliemann & Twist, 2016).

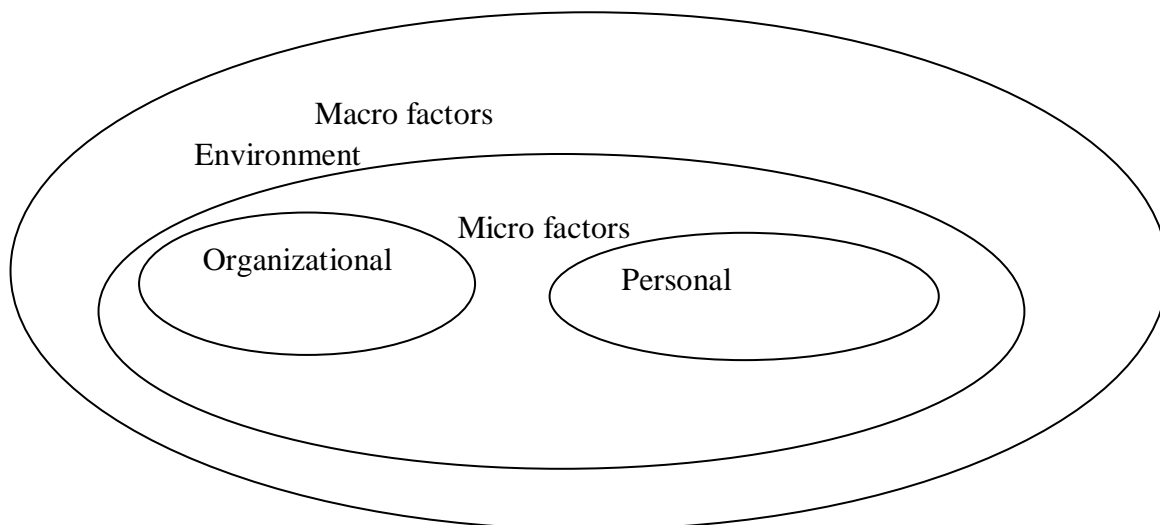
External factors such as political pressure can play a significant role to make work effective if it contributes positively to strengthen and support the work of government auditors (Masood & Lodhi, 2016:1-199).

Different researchers in Baluchistan, West Australia and UK highlight how there is political intervention to change audit reports (Mohammad, 2007; Hedger & Blick., 2008; Coghill, 2004). In Estonia, political interferences to change audit reports was reported to be high (Etverk, 2002). Political influence could originate from chief executives, legislative bodies, courts, interest groups, news media and citizens (Rainey 2003). Political influence from the above mentioned persons is a key factor in reducing management's role in effectively responding to internal audit recommendations (Wolf, 1993; Rainey & Steinbauer 1999; Wright, Gardener & Moynihan, 2005).

Internal auditors traditionally served as organizational police officers or watchdogs (Morgan, 1979:161). In recent years, however, auditing has evolved from a narrow control function focused on compliance to a broader role of adding value (Power, 1997; Walker,

2014). Where traditional audits focused on red flags, modern audits more and more aim to provide policy advice and to stimulate improvements in organizations. Combining control and added value is now the formal goal of internal auditing. Thus auditors need to find ways not only to signal issues and risks but to provide advice on quite divergent sets of governmental tasks which brings in different stakeholders. Some of the issues or risks may affect other ministries or development Agencies. Thus effective implementation of internal audit recommendations will depend on these different stakeholders.

Figure 3.1 Micro and macro factors influencing response to internal findings and recommendations



Source: Adopted from Lenz and Hahn, 2015

From Figure 3.1 response to internal audit findings and recommendations is multifaceted which requires distinguishing the micro and macro dimensions. That is the micro factors being organizational and personal and macro factors being the external environment in which internal audit operates. Implementation of internal audit recommendations tries to satisfy both internal and external stakeholders. Therefore, if effective response is to be realized both the internal and external environment have to be looked at.

The empirical papers presented in the prior section largely focus on micro factors that is organizational and personal. Among other things, academic research on effective response to internal audit findings and recommendations point out that support from top

management is essential. The board and AC are stakeholders however stakeholders are many and each has different expectations which are not necessarily the same. Skills and competence of the internal auditors are key factors but this would not serve much purpose if these qualities are not compatible with the culture of the organization or when the internal audit function is not wanted. If only micro factors were considered one would miss out important external drivers like political, economic, societal, technological, legal and environmental trends. These trends shape organizational structures, functions, values, beliefs, competencies and their interaction. Thus it is expected that micro factors and macro factors determine behavior or response.

From this, the following hypotheses were developed.

H_{1a}: There is a positive relationship between Environmental factors (EF) and response to internal findings and recommendations

H_{2a}: There is a positive relationship between Personal factors (PF) and response to internal findings and recommendations

H_{3a}: There is a positive relationship between Organization Factors (OF) and response to internal findings and recommendations

These hypotheses are tested in chapter 5 where they are either accepted or rejected.

3.5 Chapter Summary

For internal audit response to be effective it should be timely and adequate. Management should give great attention to audit recommendations (Mihret & Yismaw, 2007). For management to achieve this they need to appoint a person in charge of implementation as well as putting in place an implementation plan which should be monitored and evaluated regularly. Management should also support the plan and get it endorsed in other planning documents. Staff should also be informed about the whole implementation process and encouraged to advise where necessary (*Better Practice Checklist*, 2009 of the Australian National Audit Office).

The benefit from any audit work is not in the recommendation but in the action on the recommendation. The recommendations must be quality and be easily understood by the auditee. The internal audit staff should be skilled and competent if they are to give convincing and well supported recommendations. Auditors and management should be committed to rigorous follow up of the implementation process. Management should

support and embrace the internal audit function by allocating them sufficient resources and assuring them of independence. The organization can enhance this independence by instituting ACs that are independent, competent, interactive, have accounting expertise and meet frequently. However all this would be in vain if organizational culture is not aligned. An entity does not exist to only satisfy internal stakeholders but also external stakeholders. For this purpose it then has to consider the political, economic, business and legal environment in which it operates as it affects the action on the recommendations.

In conclusion most of the current literature discussed above do not provide studies about factors that influence effective response to internal audit recommendations and how effective response can be created or enhanced. There is therefore a gap that requires further research. The factors that influence effective response to internal audit findings and recommendations and how effective response can be created and enhanced need to be explored.

This chapter provided the background literature that was necessary for the development of the conceptual framework that is based on to develop the model the research.

CHAPTER 4: RESEARCH METHODOLOGY

4.1 Introduction

This chapter presents the methods and procedures that are used in conducting this research. It describes systematically the steps that were used in addressing the objectives and the research questions of the study, explaining and justifying the chosen research design and methods. The study employed a scientific approach that follows a step-by step logical, organized and rigorous sequence of events usually involving: identifying problems, gathering data, analyzing the data and drawing valid conclusions. The research purpose, research approach and research strategy are clearly explained. The chapter also describes the chosen sampling procedure, the way data was collected, the research instrument, administration of the instrument and also the techniques that were used in analyzing data. In addition, the issues of reliability and validity of data presented in this study are appropriately discussed.

4.2 Research Design and Approach

The research design is a plan that explains the purpose of the study, the approach of the study, and the strategy adopted for the study (Saunders, Lewis & Thornhill, 2000). Based on the literature, three types of research designs have been identified: (1) exploratory, (2) descriptive, and (3) explanatory design. The exploratory research was employed in this study in the first stage to obtain the background information about the research problem and to generate hypotheses through investigation of the literature. As a result, constructs and formulated hypotheses based on the literature and previous empirical studies, as reported in Chapter 3 were identified. The research problem was crystallized and the purpose of the research clearly stated, this research study focused on testing an integrated model; highlighting the process and the factors for effective response to internal audit findings and recommendations among government ministries in Uganda. The next stage used a descriptive research design in order to describe the characteristics of the respondents and to determine frequencies, percentages, mean and standard deviation of the constructs used. However, descriptive research could not explain the relationship among the variables (Zikmund, 2000); therefore, explanatory research was used in order to

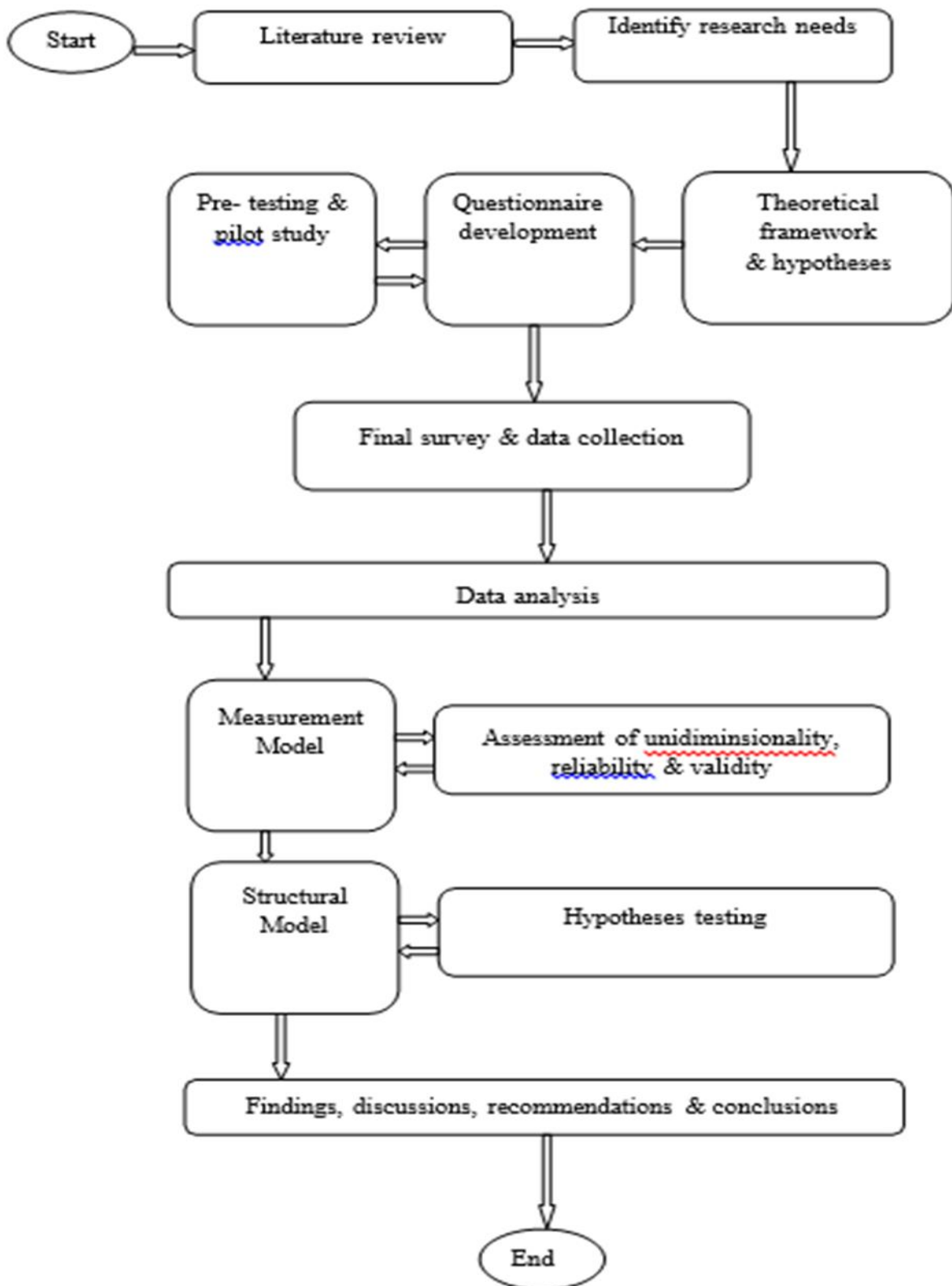
explain the relationship and association between variables of the model. According to Sekeran (2003), descriptive research design is a type of design used to obtain information concerning the current status of the phenomena to describe "what exists" with respect to variables or conditions in a situation. Kothari (2003) describes descriptive research as including surveys and fact-finding enquiries adding that the major purpose of descriptive research is description of the state of affairs as it exists.

In research, approaches to a study may be quantitative, qualitative, or a mixture of quantitative and qualitative techniques. In this study, the researcher adopted a mixed methods design that began with quantitative data collection and analysis followed by the qualitative data collection and analysis. The data, themes and results from the second qualitative phase of the study explained, confirmed and consolidated the findings and emerging issues realised from the first quantitative phase of the study. The quantitative findings were a result of questionnaire survey used, research questions asked, type of data collected and the nature of analysis of the quantitative data of the first phase. While the qualitative findings were a result of the interview guide used, type of data collected and the nature of analysis of qualitative data of the second phase.

Integration of two methods was done in the interpretation stage in which qualitative results built on the quantitative ones (Creswell & Plano Clark, 2011:8). Contextually, the reason for use of mixed methods design was to assess adequacy of response to internal audit findings and recommendations.

In research, a strategy for a study may include a survey, a case study, or an experiment. This study employed a survey design. The design involves collecting data on various variables at a given point in time from a sample of people and making inferences about a population of interest (Sekaran, 2003). The design was chosen because it allows collecting data from the entire population of interest even with time and other resource constraints as supported by Sekaran (2003).

Figure 4.1: Research design



Source: Author's compilation

4.3 Sampling Design Procedure

The research adopted a sampling procedure. The authors suggest that the sampling design of any scientific research should systematically provide for the following components and/or steps: target population, the sampling frame, sample size and sampling method. A detailed explanation of the above steps and their application in this study follows in the next sub-sections.

4.3.1 Target Population

Population is the entire set of units for which the study data are to be used to make inferences (Kothari 2003). Target population defines those units for which the findings of the study are meant to be generalized from (Dempsey 2003). The target population comprised of all government ministries in Uganda. According to the Uganda National Web Portal, there are 23 ministries that make up the government. The target population comprised of officials within the ministries under whose jurisdiction the issue of implementing internal audit recommendations falls. These included: Accounting Officers, Internal Auditor General, Internal Auditors, and members of the AC. Based on the PFM Act (2015), the Accounting Officer was included in the target population because among others, he/she is responsible for reporting to the AC the actions taken or planned in response to the recommendations of the AC. The Internal Auditor General was included because among others, he or she is charged with responsibility of developing the internal audit strategy and supervises its implementation; as well as developing internal audit policies, rules, standards, manuals, and guidelines. Besides generating internal audit reports, the Internal Auditor is supposed every quarter to submit a report on the execution of internal audit recommendations; so, he or she was also included in the target population. The AC was included in the target population as well because among others, it considers the reports submitted by the internal auditor to the accounting officer under section 48 and makes recommendations on the findings of the Internal Auditor. So, the Chairperson of the committee and a member were considered for inclusion in the target population. Together, the research targeted four individuals in every ministry; therefore, the total target population was 116 comprising of 93 individuals for quantitative part of the study and 23 individuals for

qualitative study from all the 23 government ministries. Following Creswell (2003: 131) guidance, the researcher maximized response rate by officially writing to the identified officials pre-informing them and requesting their participation in the survey.

4.3.2 Sample Size and Sampling Method

Leedy and Ormrod (2010:204) define a sample as a sub-section of the population that are engaged in data collection. De Vos, Strydom, Fouché and Delport (2011:10) define a sample as a small portion of the total set of object, events or persons who, together, comprise the focus of the study. In this study, the sample was made up of a total of 96 participants. This was divided into two groups, the first group had 73 participants in the survey group (Krejcie and Morgan, 1970), and the second group had 23 participants for the interviews. Simple random sampling techniques for the survey group and purposive sampling techniques for the interview group were used in selecting the sample size.

Owing to the nature of the target population for study, which was composed of various individuals from the 23 government ministries, for quantitative part of the study: the researcher used simple random sampling technique in which each individual from any category of a given target study population had an equal chance of being selected. This was appropriate for the study since the objective was to collect quantitative data to generalize findings from the survey sample of the population (Creswell, 2014:20). Simple random sampling was used to select accounting officers, internal auditor general, internal auditor, and members of the AC to participate in the study. This technique was chosen because the category of the individuals from the 23 government agencies had a large population size and as such warranted simple random sampling to minimize sampling bias (Mugenda & Mugenda, 2003:17).

Purposive sampling is defined as a process whereby individuals are chosen to be part of the study based on their ability to have vast information in answering research questions of the study (Teddlie & Yu, 2007:77). Under this sampling technique, 23 study participants of internal audit departments from different IADs were purposively selected due to their background, knowledge, skills, responsibility and stake in the internal audit findings and recommendation (Ritchie & Lewis, 2003:79). Each Stakeholder of internal audit was

purposely identified and interviewed. This strategy is supported by Creswell (2014:4-16) who holds that it helps the researcher understand better the study problem as well as targeting only participants with experience in the problem under investigation (Creswell, 2013:2).

4.4 Data Collection

The study used both primary and secondary data. According to Morris (2001), data collection procedure is the process of gathering pieces of information that are necessary for research process. Primary data present the actual information that was obtained for the purpose of the research study. Data collection instrument is a device used to collect data in an objective and a systematic manner for the purpose of the research. Data collection instruments can be questionnaires, interviews, schedules and available records. Questionnaires are a paper and a pencil data collection instruments filled in by respondents for the purpose of the research study (Morris 2001). The main instruments for collecting data include questionnaires containing open-ended and closed-ended questions with the quantitative section of the instrument utilizing an ordinal scale format. The ordinal format is selected because according to Kiess and Bloomquist (2009), this format yields equal-interval data, a fact that allows for the use of more powerful statistical tools to test research variables. Questionnaires are preferred because according to Dempsey (2003) they are effective data collection instruments that allow respondents to give much of their opinions pertaining to the researched problem.

According to Kothari (2003), the information obtained from questionnaires is free from bias and researcher's influence and thus accurate and valid data were gathered. Interview schedules were also used to compliment questionnaires data. The questions addressed by the questionnaires and interview guide sought to understand the extent to which internal audit recommendations are implemented in government ministries, the process of implementing internal audit recommendations in government ministries, and the factors affecting the implementation of internal audit recommendations in government ministries in Uganda. Primary data was gathered through the use of questioning method in form of a semi structured questionnaire (open and closed-ended questions). The questionnaires were self-administered to a total of 93 respondents and later picked for analysis.

Secondary data was obtained through reviewing both empirical and theoretical literature sourced from text books, journals and the internet among others.

The study further employed interviews to collect data. Interviews are face-to-face encounters with respondents to obtain information relevant to a study, and they are used to probe for more information than would be obtained using self-administered questionnaires (Mugenda & Mugenda, 1999). Interviews were conducted to get in-depth information on the issues raised in the self-administered questionnaire. The choice of the technique of direct interview is based on its ability to ensure that respondents seek clarity and purpose of particular questions which guarantees increased degree of accuracy of the information collected; and permit the researcher to follow up leads and thus obtain more data (Amin, 2005). The respondents included the Accounting Officer of the Ministries and the Internal Auditor within the same ministry.

The study also involved using secondary data. According to Amin (2005), secondary data is indispensable for organizational research and it specifically refers to information gathered from sources already existing. An extensive literature review of information in various secondary sources that were relevant to the study was done. These included: Ministry Quarterly and Annual Performance and Audit Reports, newspaper articles, textbooks, journal articles and periodicals. The researcher undertook an in-depth analysis of these documents and made efforts to secure any document deemed beneficial to the study from the relevant authorities.

4.5 Questionnaire Design

For data collection, the study used a structured questionnaire consisting of a series of questions that respondents answered (Cox, 1979:24). The questionnaire enabled the research to achieve specific functions, as suggested by Burns and Bush (2006:300) including:

- Standardizing questions and response categories so that every participant responds to identical stimuli.

- Fostering cooperation and keeping respondents motivated throughout the interviews by its careful wording, question flow and appearance.
- Questionnaires will serve as permanent records of the research
- Questionnaires are expected to speed up the process of data analysis.

4.5.1 Questionnaire Layout

The questionnaire contains five sections in line with the questionnaire construction. The questionnaire layout sections are as follows:

- (i) Section 1 covered questions on general information of respondents
- (ii) Section 2 covered questions soliciting respondents' answers on the adequacy and timeliness of implementation of internal audit recommendations in government ministries
- (iii) Section 3 dealt with questions on whether government ministries have adequate processes in place for monitoring and implementing internal audit recommendations
- (iv) Section 4 covered questions soliciting respondents' answers on the factors affecting successful implementation of internal audit recommendations in government ministries. Challenges of successful implementation of internal audit recommendations were covered as well in this section.
- (v) Section 5 dealt with questions on soliciting respondent's self-rating on obstacles to effective response to internal audit findings

4.6 Pre-testing the Questionnaire

Pre-testing is a useful technique for detecting and eliminating potential errors before the main survey (Martins et al., 1996:90). The questionnaire was pre-tested to identify and correct deficiencies and to ensure that the questionnaire met the researcher's expectations in terms of the required information (Aaker, Kumar & Day 2004:329). The items were tested for clarity and appropriateness in a pre-test. Respondents were requested to complete the questionnaire and indicate any ambiguity or difficulty that they experience in responding to the questions. Some items were eliminated and/or modified on the basis of

their feedback as was suggested by Diamantopoulos and Souchon (1999: 11). Consequently, before the main study, the researcher piloted testing the questionnaires, following the example of Andrew and Halcomb (2006:149). The primary purpose was to establish the validity and reliability of the instruments.

4.6.1 Validity of the instrument

Validity refers to the extent to which an instrument measures what is supposed to measure. Data need not only to be reliable but also true and accurate. If a measurement is valid, it is also reliable (Joppe, 2000). The content of validity of the data collection instrument was determined through discussing the research instrument with the research experts at the university. The valuable comments, corrections, suggestions given by the research experts were instrumental in validating the instrument. The research experts and subject specialists were expected to tick the items in the questionnaires if they helped to examine the implementation of internal audit recommendations in government ministries or not. The content of the responses given by the respondents were checked against the study objectives. Evidence of content relevance, representativeness and relevance to the research variables indicates that the research instruments are valid (Joppe, 2000).

4.6.2 Reliability of the instrument

Reliability refers to the consistence, stability, or dependability of the data. Whenever an investigator measures a variable, he or she wants to be sure that the measurement provides dependable and consistent results (Cooper & Schindler, 2003). A reliable measurement is one that if repeated a second time gives the same results as it did the first time. If the results are different, then the measurement is unreliable (Mugenda & Mugenda, 2005). To measure the reliability of the data collection instruments, an internal consistency technique using Cronbach's alpha was adopted. Cronbach's alpha is a coefficient of reliability that gives an unbiased estimate of data generalizability (Zinbarg, 2005). An alpha coefficient of 0.75 or higher indicates that the gathered data are reliable as they have a relatively high internal consistency and can be generalized to reflect opinions of all respondents in the target population (Zinbarg, 2005).

4.7 Data Preparation

This process involved checking the data for accuracy before being analyzed . The two major phases of data preparation which were employed in this study included coding and data editing. These were employed to ensure that the collected data was complete and ready for analyzing (Appiah-Adu, 1998:29). These methods are discussed in the sections that follow.

4.7.1 Editing of questionnaire

Editing is the process of checking the completeness, consistency, and legibility of data and making the data ready for coding and transfer to storage (Churchill & Iacobucci, 2005:407). The reviewed ~~the~~ questionnaires were reviewed after the completion of the fieldwork, checking for the completeness and accuracy of the received questionnaires and preparing them for data analysis. In the process, some questionnaires considered unsatisfactory completed were discarded (Malhotra, 2004:469). Completed questionnaires were checked once more prior to computer entry to find out if there are any problems of errors or omissions on the questionnaires. For example, in the case of questions left unanswered by respondents (item non-response), the data was adjusted to make it completely consistent, or readable (Zikmund, 2000:556). In such cases, where data was inserted, researcher some options, such as using a neutral value was used. To ensure consistency of treatment, the researcher considered handling the editing of all completed questionnaires (Trachtman, 1997:473).

4.7.2 Coding of data

Coding is the process of identifying and classifying each answer with a numerical score or other character symbol (Malhotra, 2004:85). Assigning numerical symbols permits the transfer of data from the questionnaire to the computer. Codes generally are considered to be numbered symbols; however, they are more broadly defined as rules for interpreting, classifying, and recording the data (Zikmund, 2000:560). Codes allow data to be processed in the computer. For this purpose, firstly, all the variables will be assigned names and coded for computer entry. Secondly, all the responses were coded to facilitate computer data input. Thirdly, once the data entry was completed, the negatively worded scale items were recoded and assigned new values. Fourthly, in order to obtain composite scores for

items on a scale, target variables were computed. Fifthly, data files were carefully screened in order to minimize data entry errors. In this connection, frequencies for each variable were checked in order to detect the out-of-range values, and values entered that were greater than five were rectified after reconciling with the questionnaires.

4.8 Data Analysis

All data was entered into an excel spreadsheet and then copied to the Statistical Package for Social Sciences (Version 25 for Windows) program, a statistical package used to code data and to run the statistical analysis. Since the research questions are largely seeking responses to questions involving “what”, the analysis was largely based on descriptive statistics. Descriptive statistics help provide the characteristics or appearance of sample data (Zikmund, 2000:296). Descriptive statistical analysis transforms raw data into a form that will make them easy to understand and interpret. This study used descriptive statistics to analyze the composition and normality of the data. Descriptive analysis determines the central tendency in the distribution of a variable, the spread of a distribution and the association among variables. It provides information about the central tendency, dispersion, skewness and kurtosis of data. This method was used in the exploratory data analysis as well (Davis, 2008:315). Cooper and Schindler (1998:427) refer to descriptive statistics as a measure of location (mean, median and mode) and dispersion of variability (variance, standard deviation, range and quartile deviation). Some of the descriptive techniques that were used in this study include:

4.8.1 Frequency distributions

Various illustrations of data are presented in the form of frequency distribution tables. This entails the construction of a table that shows in absolute and relative terms how often the different values of the variable are encountered in the sample. The frequency distribution indicates how popular the different values of the variables are among the units of analysis. These are useful in characterizing the sample and understanding the data composition.

4.8.2 Cross tabulations

The study adopted cross-tabulations as advanced by Aaker et al (1995:605). This enabled the study to examine associations within the data. By cross tabulating data, the study was

able to extract meaning from answers provided by respondents. Studies by Churchill and Iacobacci (2005:410) share in this view.

4.8.3 Graphs and charts

According to Hair, Black, Babin and Anderson (2000:524) graphs enable readers extract meaning at a glance. They also depict trends, proportions, magnitudes and differences. Based on this view, the study represented information using some graphs. The types of the graphs adopted in this study included; histograms bar charts, pie charts and line graphs. These graphs were used in chapter 5 to organize and analyze data in the study.

4.9 Ethical Issues

The study undertook several ethical safeguards

4.9.1 Anonymity and respect of persons

During the study, respondents were not required to reveal their names. The identity of respondents was kept confidential throughout the entire research exercise. Data was analyzed without reference to personal identities.

4.9.2 Non-maleficance

While undertaking interviews, the study respected the choice of the respondents. This was done by letting respondents know at times that the research engagement process was voluntary and that they can choose to stay in the process or withdraw at any time. This practice has also been adopted in studies by other scholars such as Kanuk and Berenson (1975:443).

4.9.3 Beneficence

While undertaking such studies, the beneficence principle requires that the study should provide extra benefit for the respondents. When undertaking fieldwork, the study provided a token of appreciation in form of small gifts such as pens, branded handkerchiefs and bottle openers where possible to respondents. At the end of this study, findings and recommendations shall be shared with respondents.

4.9.4 Justice

In research, justice is a complex philosophical principle and in general it requires that the researcher treat participants with fairness and equity during all stages of research. Mutual trust is an ethical issue. The researcher must uphold standards of confidentiality and anonymity as promised to respondents. For this study, all respondents were treated equally and professionally, observing mutual respect in interviews and maintaining interview focus. Conversations were intended to build mutual trust. Interviewers were constantly reminded by the researcher to ensure they do not divert into confrontations.

4.10 Summary and Conclusion

This chapter on the research methodology details the various steps that were used in executing this study. It provides an in-depth discussion of the research design that was adopted throughout the course of the research study. The specific layout that was trialed to obtain empirical evidence for successfully achieving the research objectives is detailed. The section provides an elaboration of the methodological design, sampling strategy, sample frame and sampling procedures. It includes data collection methods/techniques chosen for the study we discussed in detail. The format, construction and layout of the data collection instrument (questionnaire) are explained, showing how it was designed, structured and administered in the field. The course of the data analysis process was reviewed and various statistical procedures are highlighted, together with the preferred reliability and validity assessment procedures. The results obtained from the research are presented in chapter 5.

CHAPTER 5: PRESENTATION OF RESULTS

5.1 Introduction

The purpose of this chapter is to present the results obtained from the sixty two (62) respondents who completed the questionnaire and 23 study participants who responded to interviews. All the 62 returned questionnaires were well answered and were used for further data analysis. 11 respondents failed to return the questionnaires for different reasons. It was revealed that, they had been assigned official government duties and had travelled abroad for an unspecified time. Some claimed they did not have time to spare to attend to the questionnaires because of the various meetings they had to attend. Another reason for non-response was most of the members of the AC were not permanent staff and were only available during committee meetings therefore getting questionnaires from them was difficult. Some of the respondents were not available to meet outside working hours which made them unreachable. Consequently, the response rate for survey study was 85% and response rate for qualitative study was 100%. Therefore the total response rate was 95% for both quantitative and qualitative study. The response rate results are in line with Amin (2005:7) who argues that a response rate ≥ 50 is good enough as the representative of a survey population.

The tools used in addressing the research problem in this research were SPSS and AMOS 25. The chapter commences with descriptive statistics on the demographic profile of the respondents, followed by an illustration of the measurement scales concerning the variables discussed in the research study. In addition, Confirmatory Factor Analysis (CFA), and Path Modeling (PM) are presented and thereafter the test results are discussed. Lastly, a conclusion of the chapter was undertaken. The subsequent section proceeds with descriptive statistics concerning the demographic profile of the respondents.

5.2 Demographic characteristics of the respondents

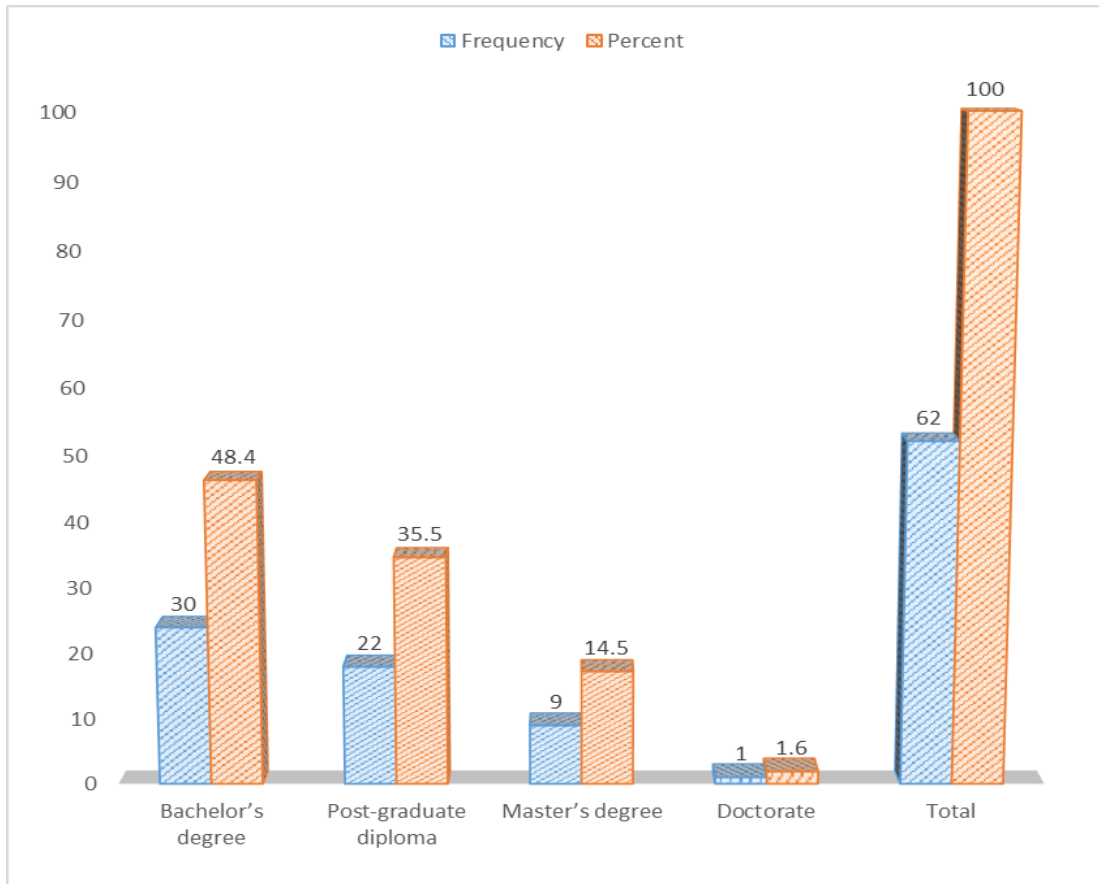
According to Kasekende (2014), presentation and interpretation of the demographic profile of the study sample is very important because it enables the researcher to obtain the overall mental and physical picture of the sample. This is critical in attaining an

appreciation of their perceptions while linking the conceptions under study. In line with the same argument; Boyle, Dunne, Purdie, Cook and Najman (2002) pointed out that, profiling research respondents is achieved by establishing their demographic characteristics, which may include; age, gender, education among other things. In line with the above, Kirtiraj (2012) professed that, in social sciences research, personal characteristics of respondents have a very significant role to play in expressing and giving the responses about the problem. In custodian of this matter, the demographic characteristics (Education and Experience among others) for the 62 respondents were examined, presented and used later in the report to draw systematic conclusions.

5.2.1 Education level of respondent

Fig 5.1 presents descriptive statistics of respondents' academic qualification. Respondents' academic qualifications were categorized as Doctorate, Master's degree, Bachelor's degree, Post graduate Diploma, and Certificate.

Figure 5.1: Respondents by education level



Source: *Primary data*

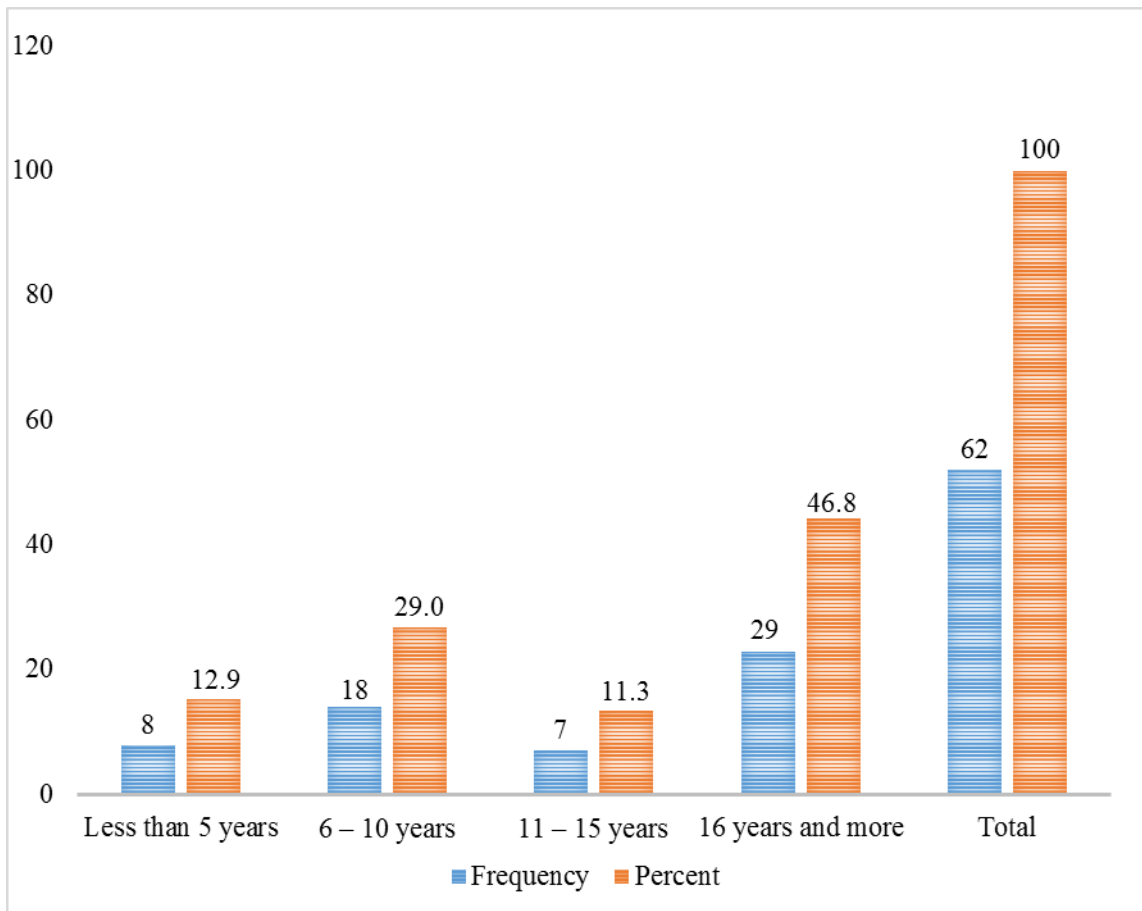
N=62

Figure 5.1 revealed that of the 62 respondents who completed the questionnaires, the majority (48.4%) of respondents held a Bachelor's degree while 22 respondents (35.5%) had Post graduate diplomas, Master's degree were 9 making 14.5% and Doctorate was only 1 (1.6%). Cumulatively, the majority of the employees were graduates, implying that most respondents were educationally qualified and could be in position to give a well balanced view of the research study.

5.2.2 Experience of respondent

Fig 5.2 presents descriptive characteristics of respondents by their time of service in ministry. Respondents' time of service was categorized as those who have serviced for a period of less than 5 years, 6 – 10 years, 11 – 15 years and 16 years and more

Figure 5.2: Respondents by period of service



Source: Primary data

N=62

According to Figure 5.2, many respondents (46.8%) had worked in the Ministry for a period of 16 years and more, 6-10 years (29.0%), less than 5 years (12.9%) and 11-15 years (11.3%). This means that the respondents should be knowledgeable in providing valid information to contribute to the research.

5.3 Empirical findings on the impact of effective response to internal audit findings

In this sub section, the empirical findings for each of the Empirical Objectives is presented, analyzed and interpreted with an overall goal of establishing the contribution of effective response to the implementation of internal audit findings and recommendations in the Uganda government ministries. The items were scaled using the five point Likert scale where code 1= Strongly Disagree, 2=Disagree, 3 = Neutral, 4=Agree and 5= Strongly Agree are discussed based on the questions which are statistically tabulated and presented in the table below with frequencies, Percentages, Mean and Standard deviation according to the responses collected.

5.3.1 Empirical objective one: Determining the level of response to internal audit findings and recommendations among government ministries in Uganda.

The items on the level of response were derived from the dependent variable of the research study. Using three quantitative questions, respondents rated themselves on the implementation of internal audit recommendations in their ministries using responses based on Likert’s scale ranging from 1= strongly disagree, 2=disagree, 3 = Neutral, 4=Agree and 5= strongly agree. Table 5.1 shows pertinent frequency tables, Means and Standard deviations.

Table 5.1: Descriptive statistics on respondents self-rating on implementation of internal audit recommendations

	SA	A	N	D	S D	Mea n	S.Dev
To what extent do you agree with the statement that the actions usually taken by the ministry management adequately address the recommendations	10 (16.1%)	36 (58.1%)	6 (9.7%)	10 (16.1%)	-	2.82	.932

contained in internal audit reports?							
To what extent do you agree with the statement, that there is timely implementation of internal audit recommendations by the ministry management?	8(12.2%)	20 (32.3%)	9(14.5 %)	25 (40.3%)	-	2.94	1.037
To what extent do you agree with the statement, that the fraction of internal audit recommendations that are actually implemented by the ministry management in a given auditing cycle is sufficiently large?	3(4.8%)	22(35.5 %)	6 (9.7%)	31 (50.0%)	-	2.06	1.074

Source: Primary data (2017)

N=62

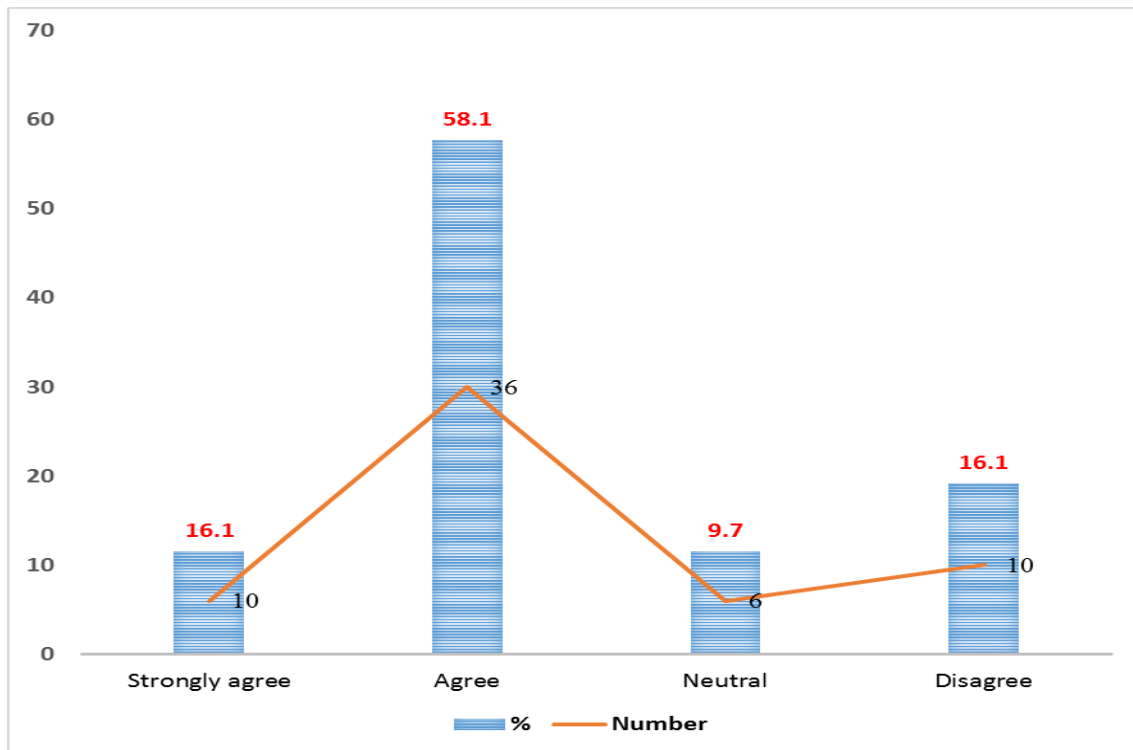
SA=Strongly Agree, A=Agree, N=Neutral, D=Disagree, SD= Strongly Disagree, S.Dev= Standard deviation

The actions measurement scale

Table 5.1 shows appropriate frequency tables, Means and Standard deviations about the respondents self-rating on the implementation of internal audit recommendations. Examining the item “To what extent do you agree with the statement that the actions usually taken by the ministry management adequately address the recommendations contained in internal audit reports?” cumulatively 46 respondents (74.2%) agreed with the statement as compared to 10 respondents (16.1%) who disagreed. A total of 6 respondents (9.7%) remained undecided on this statement. The good rating is confirmed by a good mean value =2.82 and standard deviation =0.932, thus corresponding to the fair actions usually taken by the ministry management to adequately address the recommendations contained in internal audit reports.

The scale was intended to measure the actions usually undertaken by the ministry management to address the recommendations contained in internal audit reports. As revealed in the descriptive (Table 5.1) above, the figure below confirms the statistics generated.

Figure 5.3: Actions measurement scale



Source: Primary data (2017)

N=62

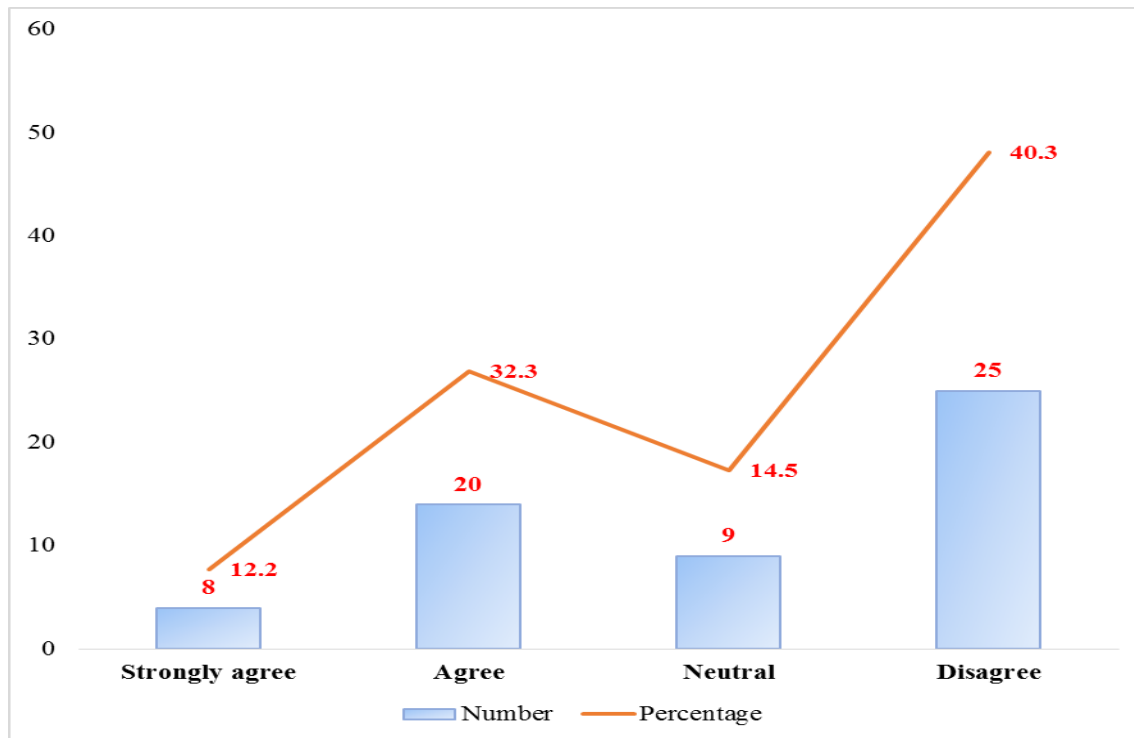
As presented in figure 5.3, 36 (58.1%) of the respondents indicated they agree with the statement that the actions usually taken by the ministry management adequately address the recommendations contained in internal audit reports, 10 (16.1%) strongly agreed with the statement. This confirms that actions usually taken by the ministry management adequately address the recommendations contained in internal audit reports.

The timely measurement scale

Focusing on the item “To what extent do you agree with the statement, that there is timely implementation of internal audit recommendations by the ministry management?” the majority of the respondents 40.3% disagreed that there is timely implementation of internal audit recommendations by the ministry management as compared to their counterparts (44.5%) who agreed with the statement. A total of 9 respondents (14.5%) remained undecided on this statement. The fair rating is confirmed by a mean value = 2.94 and standard deviation =1.037, thus corresponding to fair timely implementation of internal audit recommendations by the ministry management.

The scale was envisioned to measure the timeliness implementation of internal audit recommendations by the ministry management. As revealed in the descriptive (Table 5.1) above, the figure below gives a deeper revelation of the statistics that were generated.

Figure 5.4: The timely measurement scale



Source: Primary data (2017)

N=52

As presented in figure 5.4, 25 (40.3%) of the respondents specified they disagree with the statement that there is timely implementation of internal audit recommendations by the

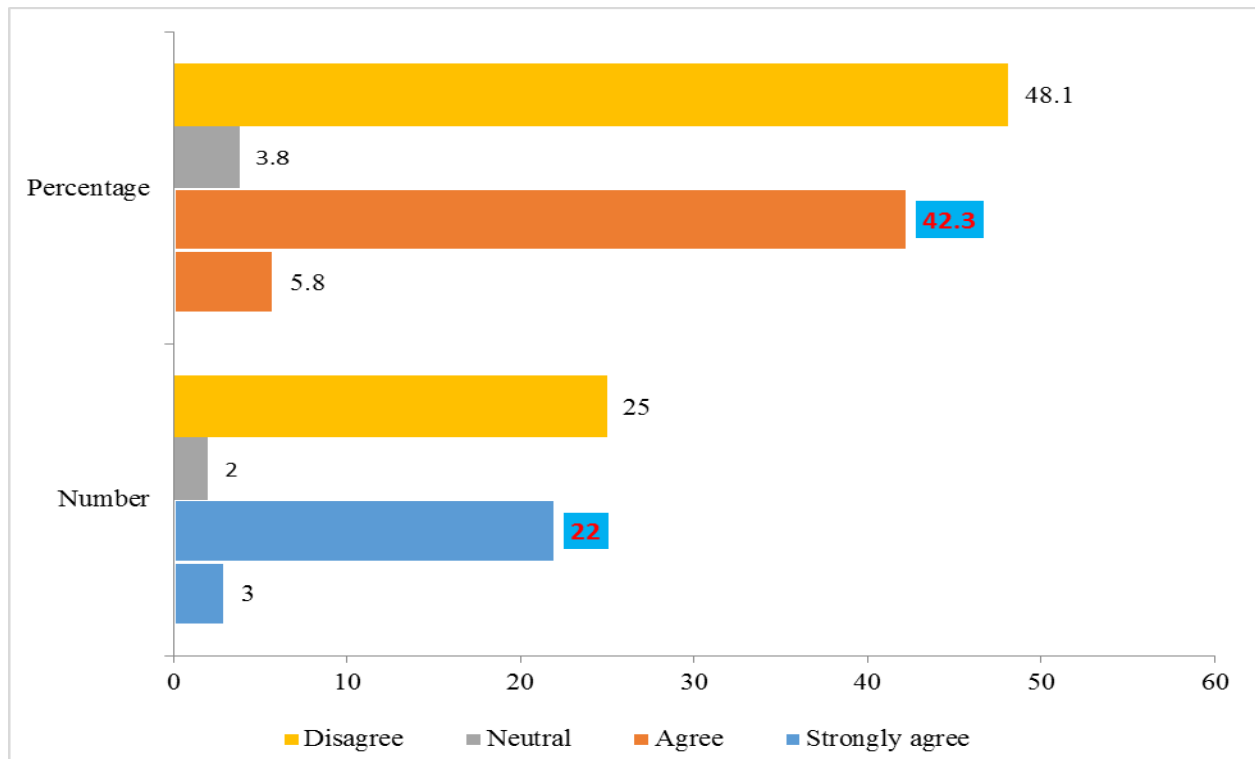
ministry management. This confirms that there is mediocracy in timely implementation of internal audit recommendations by the ministry management.

The fraction measurement scale

Concerning the item “To what extent do you agree with the statement, that the fraction of internal audit recommendations that are actually implemented by the ministry management in a given auditing cycle is sufficiently large?” cumulatively 25 respondents (40.3%) agreed with the statement as compared to 31 respondents (50.0%) who disagreed with the statement. A total of 6 respondents (9.7%) remained undecided on this statement. The fair rating is confirmed by a mean value = 2.06 and standard deviation = 1.074, thus corresponding to a fair fraction of internal audit recommendations that are actually implemented by the ministry management in a given auditing cycle.

As explained earlier, the scale was intended to measure the fraction of internal audit recommendations that are actually implemented by the ministry management in a given auditing cycle. As shown in the descriptive (Table 5.1) above, the figure below provides a deeper revelation of the statistics that were generated.

Figure 5.5: The fraction measurement scale



Source: Primary data (2017)

N=62

As presented in figure 5.5, cumulatively 40.3% of the respondents specified they agreed with the statement that the fraction of internal audit recommendations that are actually implemented by the ministry management in a given auditing cycle. However, (50.0%) of the respondents also disagreed with the statement. 6 (9.7%), decided to be neutral. This confirms that there are internal audit recommendations are fairly by the ministry management in a given auditing cycle.

The average index for the three items

In order to have a general overview of how the respondents rated themselves on the implementation of internal audit recommendations in their ministries, an average index was computed from the three questions in Table 5. 1, giving relevant descriptive statistics.

Table 5.2: Summary descriptive statistics on respondents' self-rating on implementation of internal audit recommendations

Mean		3.21
95% Confidence Interval for Mean	Lower Bound	2.97
	Upper Bound	3.44
Median		3.17
Standard Deviation		.856
Minimum		2
Maximum		5
Range		3
Skewness		0.201

Source: *Primary data (2017)*

Results from Table 5.2, revealed that respondents' ratings on the implementation of internal audit recommendations was average with (Mean = 3.21 and Median =3.17). The opinions were ranging from 2.97 to 3.44 at the 95% Confidence Interval for Mean. Despite the average rating, results from the above table reflected that some respondents scored very poor at a Minimum 2.00 while others scored best at a Maximum of 5. This gave a wide difference as reflected by a high range of 3.00. The wide difference could be attributed to the fact that different ministries operate differently. Results also revealed that, there was similarity in respondents' opinions regarding the implementation of internal audit recommendations (relatively small deviation value =0.856) suggesting that respondents views concerning the implementation of internal audit recommendations do not differ so much from one respondent to another. The difference in opinions as regards low and high levels of the implementation of internal audit recommendations was at 3.00 and is supported by the aforementioned standard deviation (0.856). Results from the table further revealed that there was some degree of skewness, suggesting that the respondents' opinions were not normally distributed (skewness =0.609).

On interview with respondents they said “*Management partially implements the internal audit recommendations and usually the implementation takes long depending on the kind of recommendation*”. “*Some recommendations may span over several financial years*”. “*The implementation process takes long. Some of the issues are complicated. A lot of dialogue with different stakeholders is required before implementation. This may call for parliament approval. They need to consider impact on other agencies output. There is conflict of mandate*”.

On reviewing the internal audit reports from financial years 2014/15 to 2016/2017 on implementation of internal audit recommendations the following was discovered as presented in the table below:

Table 5.3: Percentage of internal audit recommendations implemented

Financial Year	2014/2015	2015/2016	2016/2017
Percentage of Internal Audit Recommendations implemented	63%	66%	69%

Source: *Internal Audit Reports*

There has been an improvement in the percentage of Implemented recommendations over the three years but it is still way below the agreed position with the Development partners of 75%. This implies that the internal audit recommendations are not adequately implemented which may hinder the organization from benefiting on the value of the audit. Since the implementation rate is below the one agreed with Development partners it might hinder funding of further projects.

A recommendation was recorded as implemented if there was action. Action is in terms of actual or part, referred back to business or mitigated by other means.

Table 5.4: Action on recommendations taken 20016/20017
Implementation of audit recommendations

Status	Percentage
Implemented	36%
Outstanding	31%
Partially implemented	28%
Referred back to business	2%
Mitigated by other means	3%

Source: *Internal Audit Report 2016/2017*

The above table 5.4 demonstrates the breakdown of actual action taken in 2016/2017. Recommendations that were wholly implemented are 36%, 31% are outstanding, 28% were partially implemented 3% were mitigated by other factors and lastly 2% were referred back. A recommendation is considered implemented if it is implemented either wholly or partly, or mitigated by other means as well as being referred back to the agency. Therefore the overall implemented recommendation was 69%. If a recommendation is outstanding then no action has been taken. The data for the prior years is not available in the Internal Audit Reports. This points to the quality of the audit reports. The internal audit reports have not been elaborate in the past as to the status of implementation of Audit recommendations. Stakeholders therefore do not get clear information and therefore may not be able to act accordingly.

The audit reports for years 2014/2015, 2015/16 and 2016/2017 all highlight that one of the performance challenges of the internal audit directorate is delayed response to internal audit issues in most ministries and entities.

The findings from qualitative data and audit reports agree with quantitative data where management fairly implements the Internal Audit recommendations and fairly in time.

5.3.2 Empirical Objective Two: Organizational factors as a basis for assessing the adequacy of response mechanisms to internal audit findings and recommendations among government ministries in Uganda.

Using eighteen (18) quantitative questions, respondents rated the contribution of Organizational factors on internal audit recommendations in their ministries. The responses were based on Likert's scale ranging from 1= strongly disagree, 2=disagree, 3 = Neutral, 4=Agree and 5= strongly agree. Table 5.5 shows appropriate frequency tables, Means and Standard deviations.

Table 5.5: Descriptive statistics on respondents' self-rating on organizational factors

Variable	SD	D	N	A	SA	Mean	S.Dev
The responsibility of implementing internal audit recommendations is usually assigned to particular members of staff in the ministry.		4 (6.54%)	2 (3.2%)	50 (80.6%)	6 (9.7%)	4.94	.524
The ministry always has an action plan for implementation of internal audit recommendations which clearly outlines roles and responsibilities for the implementation of each recommendation.		21 (33.9%)	18 (29.0%)	21 (33.9%)	2 (3.2%)	0.624	.903
The ministry has clear mechanisms to monitor and report on the implementation of internal audit recommendations.		29 (46.8%)	16 (25.8%)	14 (22.6%)	3 (4.8%)	2.85	.938
The ministry usually allocates sufficient resources to implement internal audit recommendations.	6 (9.7%)	35 (56.5%)	12 (19.4%)	8 (12.9%)	1 (1.6%)	2.40	.896
The ministry sets realistic and achievable time frames and targets for implementing internal audit recommendations.	3 (4.8%)	28 (45.2%)	12 (19.4%)	17 (27.4%)	2 (3.2%)	2.79	1.010
The Accounting Officer of the ministry and the Minister usually have a role in the planning and monitoring of the	1 (1.6%)	31 (50.0%)	7 (11.3%)	17 (27.4%)	6 (9.7%)	3.08	.821

implementation of internal audit recommendations.							
Members of staff in the ministry are informed about the outcomes of the internal audit and invited to give feedback on how best to implement the recommendations.		7 (11.3%)	12 (19.4%)	39 (62.9%)	4 (6.5%)	4.42	.095
The ministry regularly reviews and monitors the plan for implementing internal audit recommendations and makes amendments, where necessary, to maintain relevance and appropriateness.	5 (8.1%)	23 (37.1%)	10 (16.1%)	24 (38.7%)		2.85	1.069
There are regular reports indicating progress and actions taken to address issues raised in the audit reports until implementation is complete.	2 (3.2%)	28 (45.2%)	10 (16.1%)	19 (30.6%)	3 (4.8%)	2.94	1.114
The ministry management fully appreciates the role of the internal audit unit and adequately supports its activities.		9 (14.5%)	14 (22.6%)	30 (48.4%)	9 (14.5%)	4.65	.770
The ministry has a system in place that accurately tracks progress and records the actions of managers responsible for progressing action against timeframes.			6 (9.7%)	48 (77.4%)	8 (12.9%)	4.03	.398
The implementation of internal audit recommendations in the ministry is usually guided by development of a clear plan in consultation with the internal audit unit and AC clearly specifying responsibilities and timeframes for addressing the required action.		9 (14.5%)	4 (6.5%)	41 (66.1%)	8 (12.9%)	3.89	1.042
There is sufficient frequency of meetings between the AC and the internal auditors in the ministry.		6 (9.7%)	6 (9.7%)	45 (72.6%)	5 (8.1%)	4.63	.610
The activities of the members		11	10	31	10		

of the AC are fully guided by the principle of independence.		(17.7%)	(16.1%)	(50.0%)	(16.1%)	4.93	.378
The audit-related activities and decisions of the Department of Internal Audit are independent of management and other departments.	2 (3.2%)	9 (14.5%)	11 (17.7%)	35 (56.5%)	5 (8.1%)	4.77	.657
The ministry's department of Internal Audit sufficiently monitors management's implementation of internal audit recommendations.		4 (6.54%)	2 (3.2%)	50 (80.6%)	6 (9.7%)	4.79	.627
I am satisfied with the performance of the AC in as far as tabling audit reports and providing advice to the management on significant matters.		9 (14.5%)	14 (22.6%)	30 (48.4%)	9 (14.5%)	4.65	.760
The AC meets regularly to consider issues in relation to the ministry's risk, control and compliance issues including implementation of internal audit recommendations.		7 (11.2%)	12 (19.4%)	39 (62.9%)	4 (6.5%)	4.52	.654

Source: Primary data (2017)

N=62

SA=Strongly Agree, A=Agree, N=Neutral, D=Disagree, SD= Strongly Disagree, S.Dev= Standard deviation

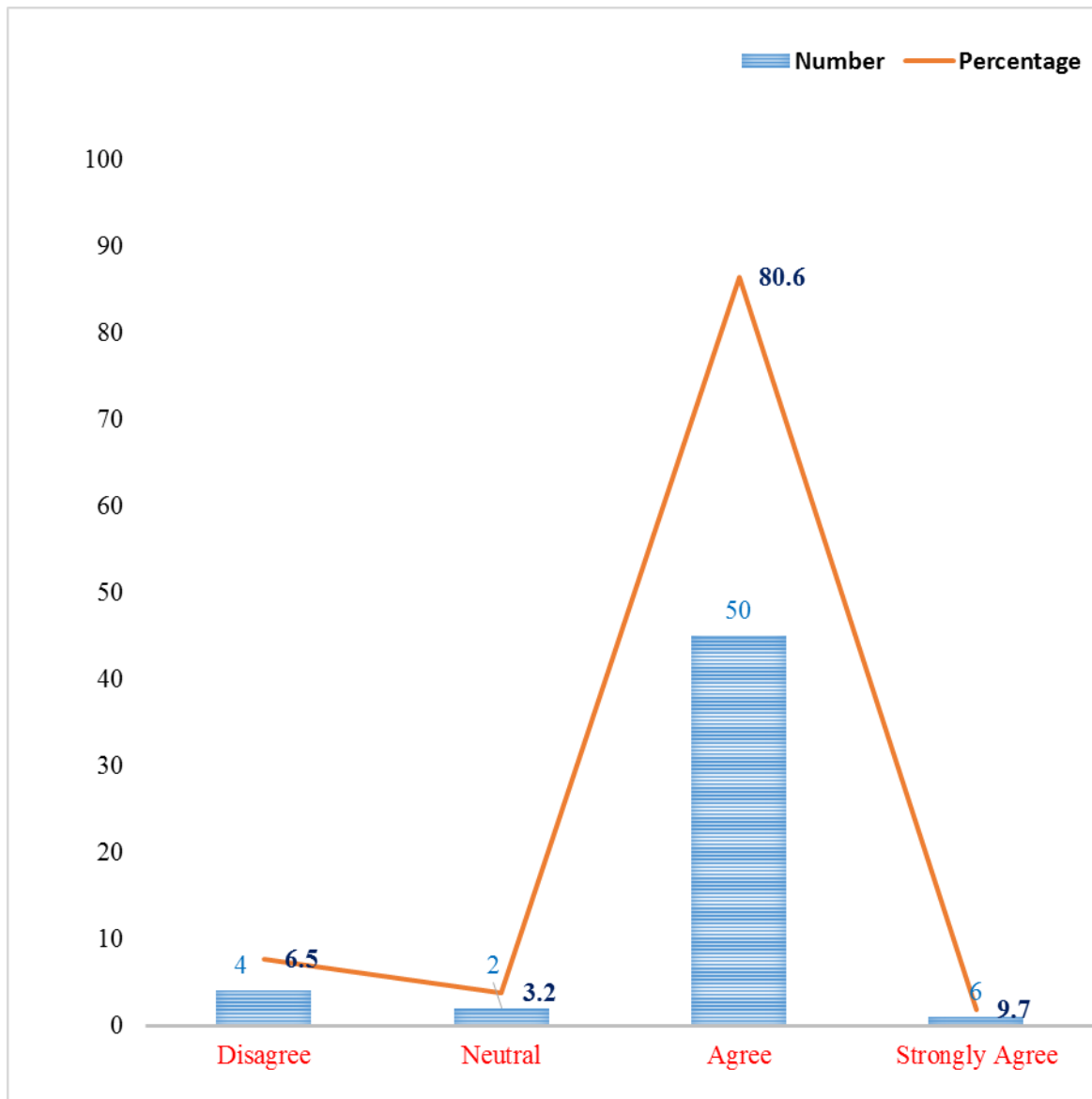
The responsibility measurement scale

Table 5.5 reveals the appropriate frequency tables, means and standard deviations about the respondents' self-rating on the contribution of organizational factors to internal audit findings. Examining the item "The responsibility of implementing internal audit recommendations is usually assigned to particular members of staff in the ministry", cumulatively 56 respondents (90.3%) agreed with the statement as compared to 4 respondents (6.54%) who did not agree with the statement. A total of 2 respondents (3.2%) remained undecided on this statement. The good rating is confirmed by a good mean value =4.94 and standard deviation =0.524, thus corresponding to good

responsibility of implementing internal audit recommendations usually assigned to particular members of staff in the ministry.

The scale above was intended to measure the responsibility of implementing internal audit recommendations usually assigned to particular members of staff in the ministry. As revealed in the descriptive Table 5.5 above, the figure below gives a deeper exposition of the statistics that were generated.

Figure 5.6: The responsibility measurement scale



Source: Primary data (2017)

N=62

As presented in figure 5.6, Cumulatively 56 (90.3%) of the respondents specified they agreed that responsibility of implementing internal audit recommendations is usually assigned to particular members of staff in the ministry. Only 4 (6.5%) of the respondents disagreed with this statement. This confirms that the responsibility of implementing internal audit recommendations is usually assigned to particular members of staff in the ministry.

An interview with Accounting Officers revealed that “*Accounting Officers usually appoint an officer in charge of implementing recommendations*”.

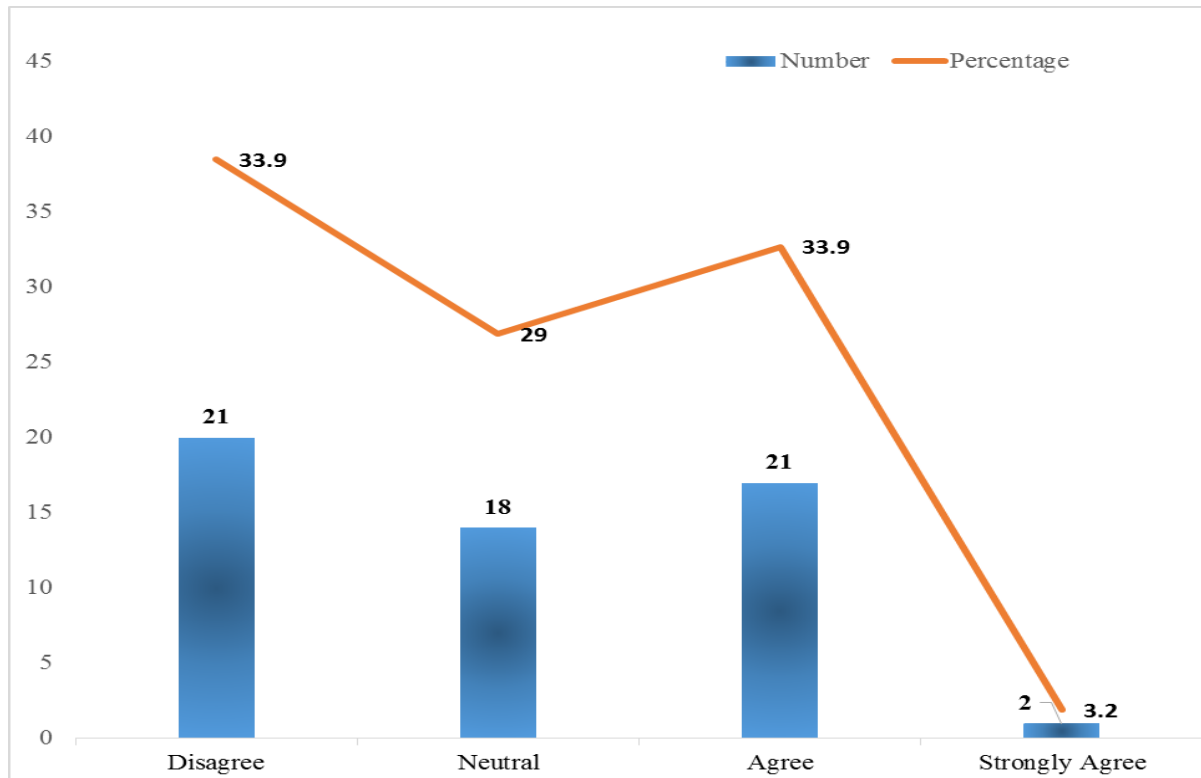
This finding concurs with the finding from the questionnaires implying that responsibility of implementing internal audit recommendations is indeed assigned to particular members of staff which means that the staffs are held responsible.

The action plan measurement scale

Focusing on the item “The ministry always has an action plan for implementation of internal audit recommendations which clearly outlines roles and responsibilities of the implementation of each recommendation”, cumulatively 23 respondents(37.1) agreed with the statement as compared to their counterparts 21 (33.9%) who disagreed with the statement. A total of 18 respondents (29%) were not decided on the statement. The unfair rating is confirmed by a mean value, 0.624, and standard deviation, 0.903, thus revealing that the Ministry has a fair action plan for implementation of internal audit recommendations which clearly outlines roles and responsibilities for the implementation of each recommendation.

The scale was projected to quantify the action plan for implementation of internal audit recommendations which clearly outlines roles and responsibilities for the implementation of each recommendation. As revealed in the descriptive Table 5.5 above, the figure below gives a profound clarification of the statistics that were generated.

Figure 5.7: The Action plan measurement scale



Source: Primary data (2017)

N=62

Figure 5.7 revealed that, cumulatively, 23 (37.1%) of the respondents specified they agreed that the ministry always has an action plan for implementation of internal audit recommendations which clearly outlines roles and responsibilities for the implementation of each recommendation. However, 21 (33.9%) of the respondents disagreed with the statement. Eighteen (18), constituting 29% of the population, remained neutral on this statement. The statistics further reveal that ministries do not always have action plans for implementation of internal audit recommendations which clearly outlines roles and responsibilities of the implementation of each recommendation.

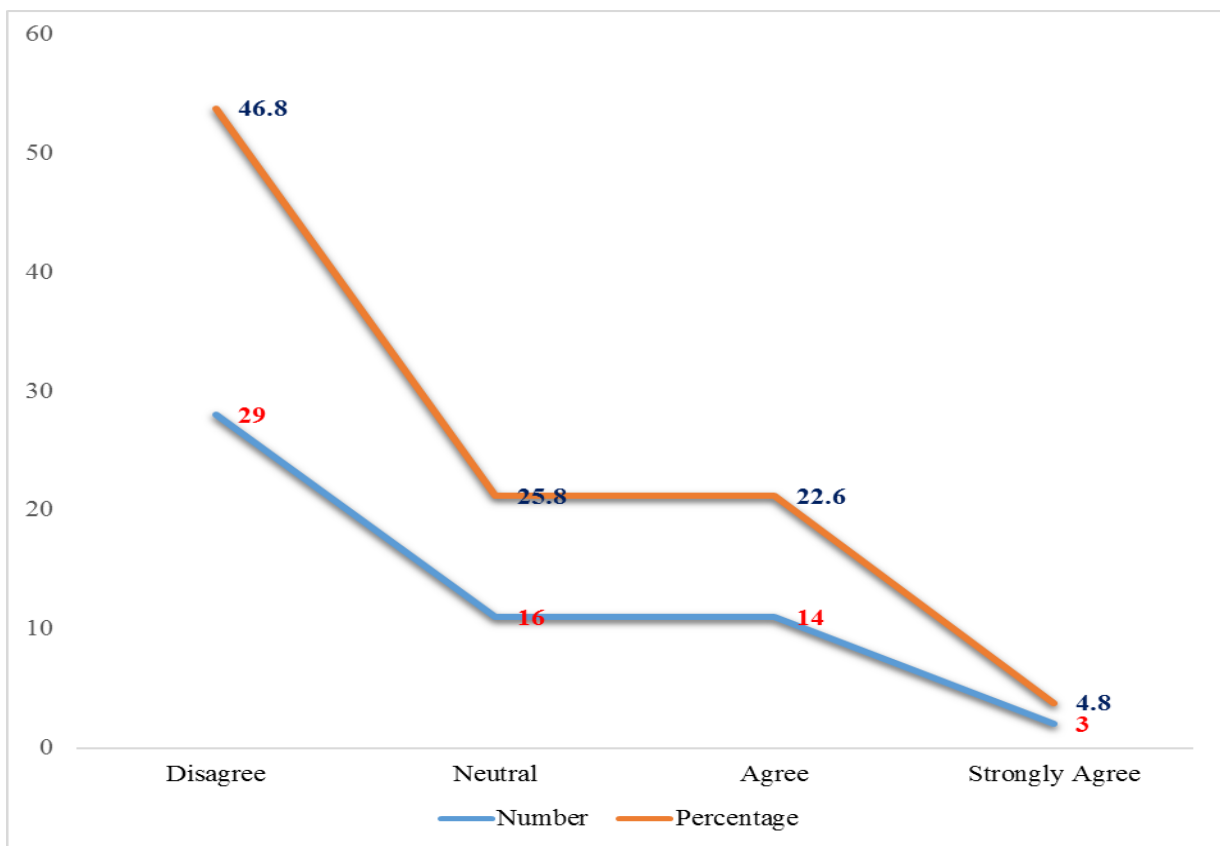
The monitor and report measurement scale

As to whether the ministry has clear mechanisms to monitor and report on the implementation of internal audit recommendations, the respondents' responses indicated that cumulatively, the larger percentage (46.8%) of the respondents disagreed.

The mean =2.85 was slightly below the median score, three(3), which on the five-point Likert scale used to measure items implied that the ministry has minimal clear mechanisms to monitor and report on the implementation of internal audit recommendations.

The purpose of this scale was to quantify as to whether the ministry has clear mechanisms to monitor and report on the implementation of internal audit recommendations. In addition to the descriptive statistics in the Table 5.5, the figure (5.8) below stretches a thoughtful illumination of the statistics that were generated.

Figure 5.8: The monitor and report measurement scale



Source: Primary data (2017) **N=62**

The results from Figure 5.8 revealed that, cumulatively 17 (27.4%) of the respondents agreed that the ministry has clear mechanisms to monitor and report on the implementation of internal audit recommendations. 29 (46.8%) of the respondents disagreed with the statement. Despite the fair mean, 2.85, the median score, three(3), on the five-point Likert

scale used to measure items implied that the ministry has minimal mechanisms to monitor and report on the implementation of internal audit recommendations.

Results from interviews indicated that;

- *ACs are in place to monitor progress of implementation of internal audit recommendations*
- *Quarterly reports are produced and submitted to ACs on the progress of implementation of Internal Audit recommendations*
- *Progress on implementation of internal audit recommendations are reported in the annual reports until implementation is complete.*

One of the interviewees said “the mechanisms are in place but it is the willingness that is lacking”.

A review of the internal audit report for financial year 2014/2015 indicated that there were eight sector ACs in place. In the same year six additional ACs for local governments were introduced. The same report highlights that over the year 62 ACs meetings were held. A review of the internal audit report for financial year 2015/2016 revealed that 67 AC meetings were held over the year. For the year 2016/2017 127 AC meetings were held. The increase in number of ACs and frequency of AC meetings means that mechanisms for monitoring and reporting are in place and they have improved over the years.

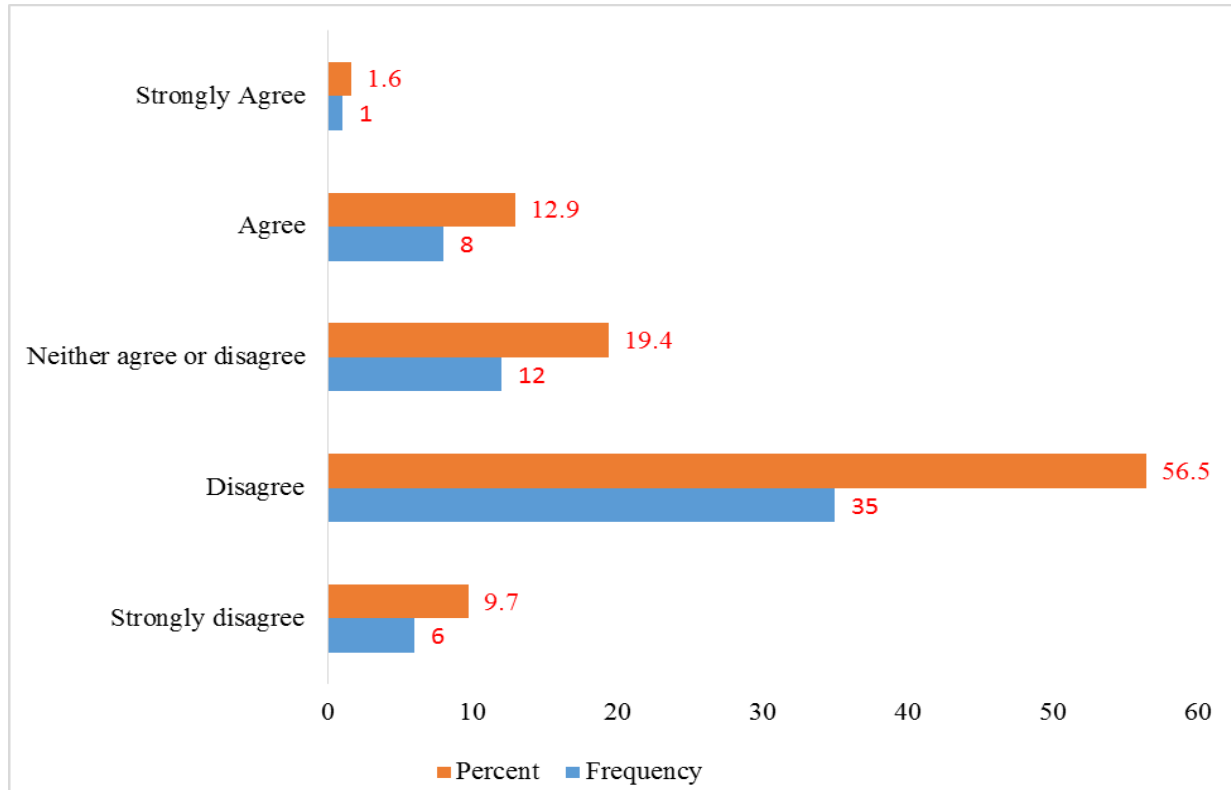
The quantitative and qualitative results agree that the mechanisms are in place however minimal they could be.

The allocation of sufficient resources scale

Cross examining the item “The ministry usually allocates sufficient resources to implement internal audit recommendations”, cumulatively 41 respondents constituting 66.2% disagreed with the statement as compared to 9 respondents (14.5%) who agreed with the statement. A total of 12 respondents (19.4%) remained undecided on this statement. The fair rating is confirmed by a fair mean value = 2.40 and standard deviation =0.896, thus corresponding to un-fair allocation of sufficient resources to implementation of internal audit recommendations.

As illustrated in the above scale was intended to measure the allocation of sufficient resources' in pursuit of implementing internal audit recommendations in the various ministries. As revealed in the descriptive (Table 5.5) above, the figure 5.9 below gives a deeper exposition of the statistics that were generated

Figure 5.9: The allocation of sufficient resources scale



Source: Primary data (2017)

N=62

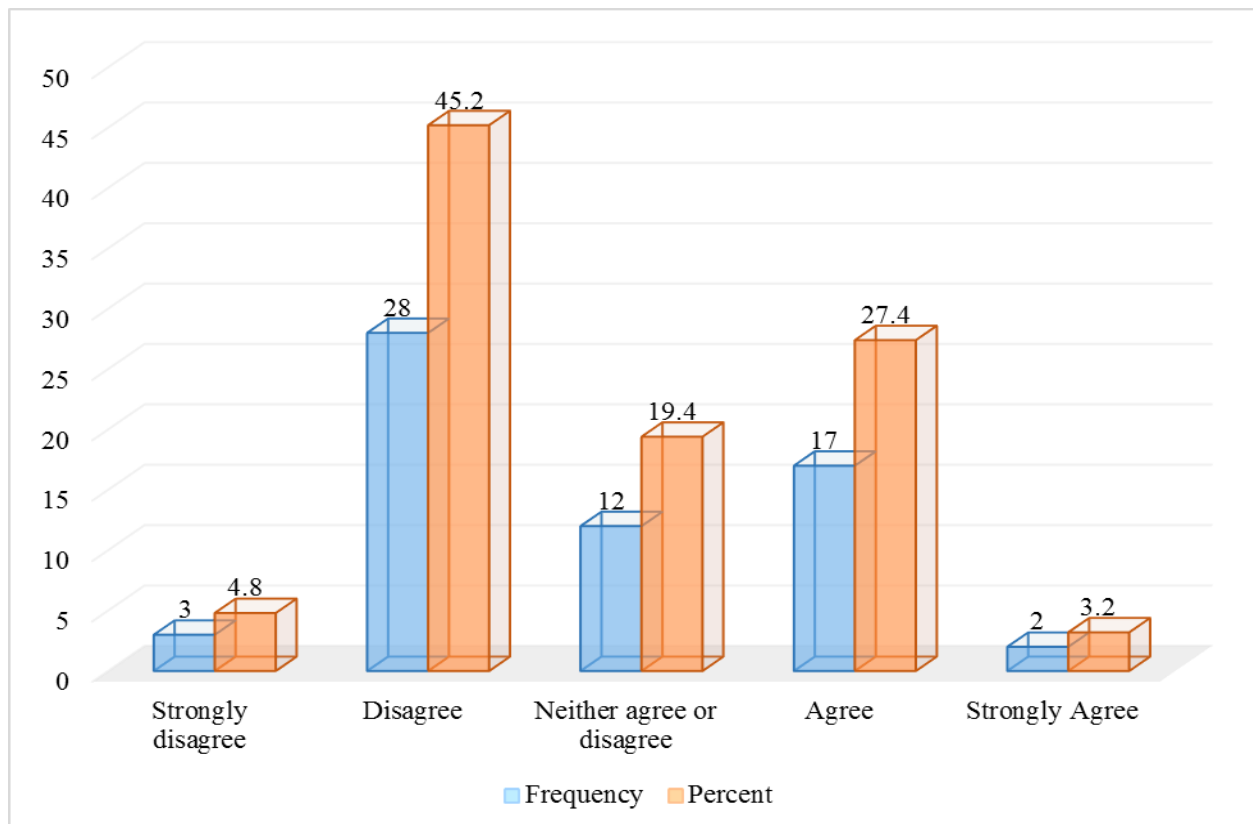
Figure 5.9 revealed that, cumulatively 41 (66.2%) of the respondents disagreed with the statement that “The ministry usually allocates sufficient resources to implement internal audit recommendations”. Only 9 (14.5%) of the respondents agreed with the statement. Despite the fair mean, 2.40, the median score, two(2), on the five-point Likert scale used to measure items implied that the ministry does not always allocate sufficient resources to implement internal audit recommendations in the ministries under study.

Most of the interviewees agreed with the quantitative results highlighting under funding in most ministries. Most of the budgets are minimal that is there are budget limitations.

The realistic and achievable time frames and targets scale

As to whether the ministry sets realistic and achievable time frames and targets for implementing internal audit recommendations, the respondents' responses indicated that cumulatively, the larger percentage (50%) of the respondents disagreed. The mean, 2.79, was slightly above the median score (2.50), three implied that the ministry sets minimum realistic and achievable time frames and targets for implementing internal audit recommendations. As demonstrated above, the scale was intended to measure the realistic and achievable time frames and targets in implementing internal audit recommendations in the various government ministries. In line with the descriptive statistics above in Table 5.5, the figure 5.10 below gives a deeper exposition of the same.

Figure 5.10: The realistic and achievable time frames and targets scale



Source: Primary data (2017)

N=62

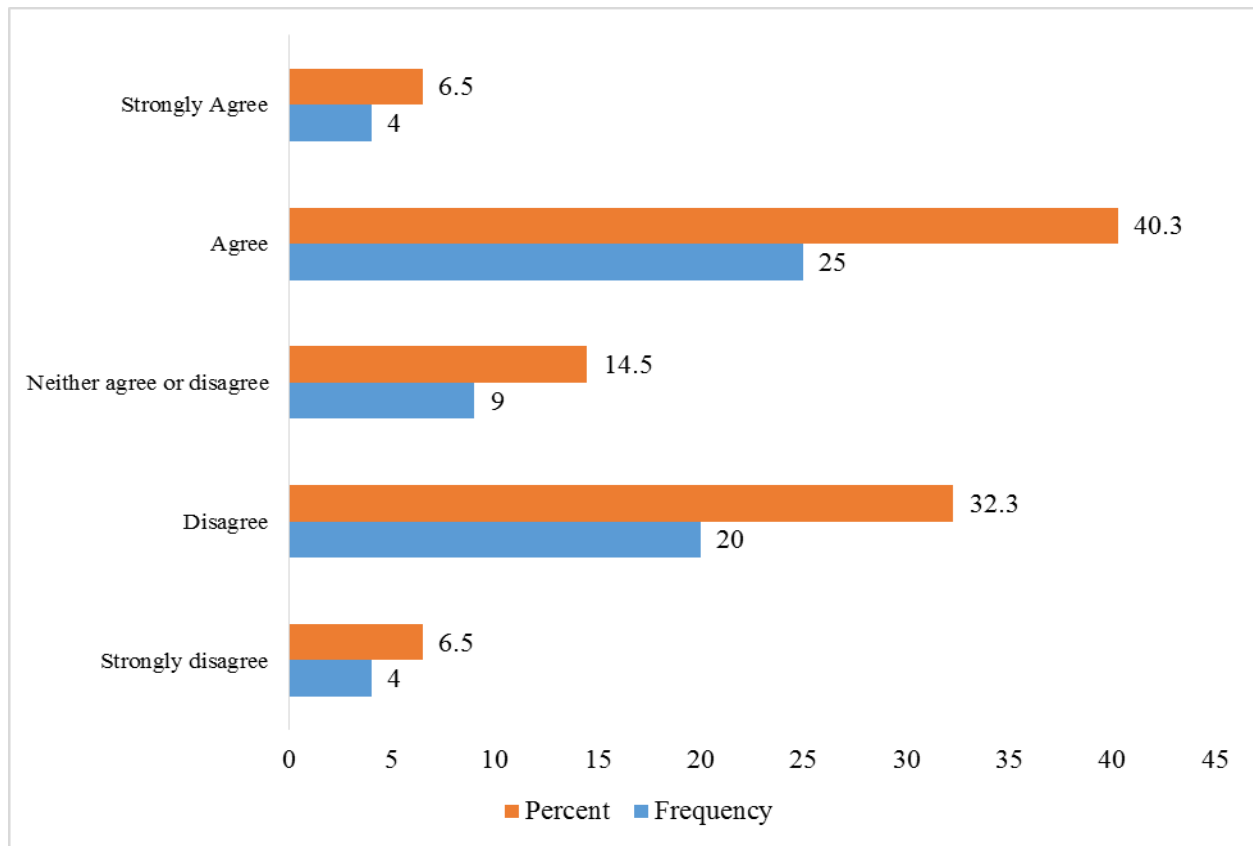
An analysis of the internal audit reports did not indicate whether ministries set realistic time frames and targets. This information was not available in all the audit reports.

The planning and monitoring scale

Responses to the item as to whether the Accounting Officer of the ministry and the Minister usually have a role in planning and monitoring the implementation of internal audit recommendations, results revealed that cumulatively the larger percentage (51.6%) of the respondents disagreed 37.1% of the respondents agreed with the statement and 11.3% decided to be neutral on this statement. The results are supported by mean value, 3.08, and a standard deviation, 0.821. The median score, three (3), on the five-point Likert scale used to measure items implied that the Accounting Officers of the ministry and the Minister usually have a minimal role in the planning and monitoring of the implementation of internal audit recommendations.

The objective of this scale was to quantify as to whether the Accounting Officers of the ministry and the Minister usually have a role in the planning and monitoring of the implementation of internal audit recommendations. In harmony with the descriptive statistics in the Table 5.5, the figure (5.11) below illuminates on the point expressed above.

Figure 5.11: The planning and monitoring scale



Source: Primary data (2017)

N=62

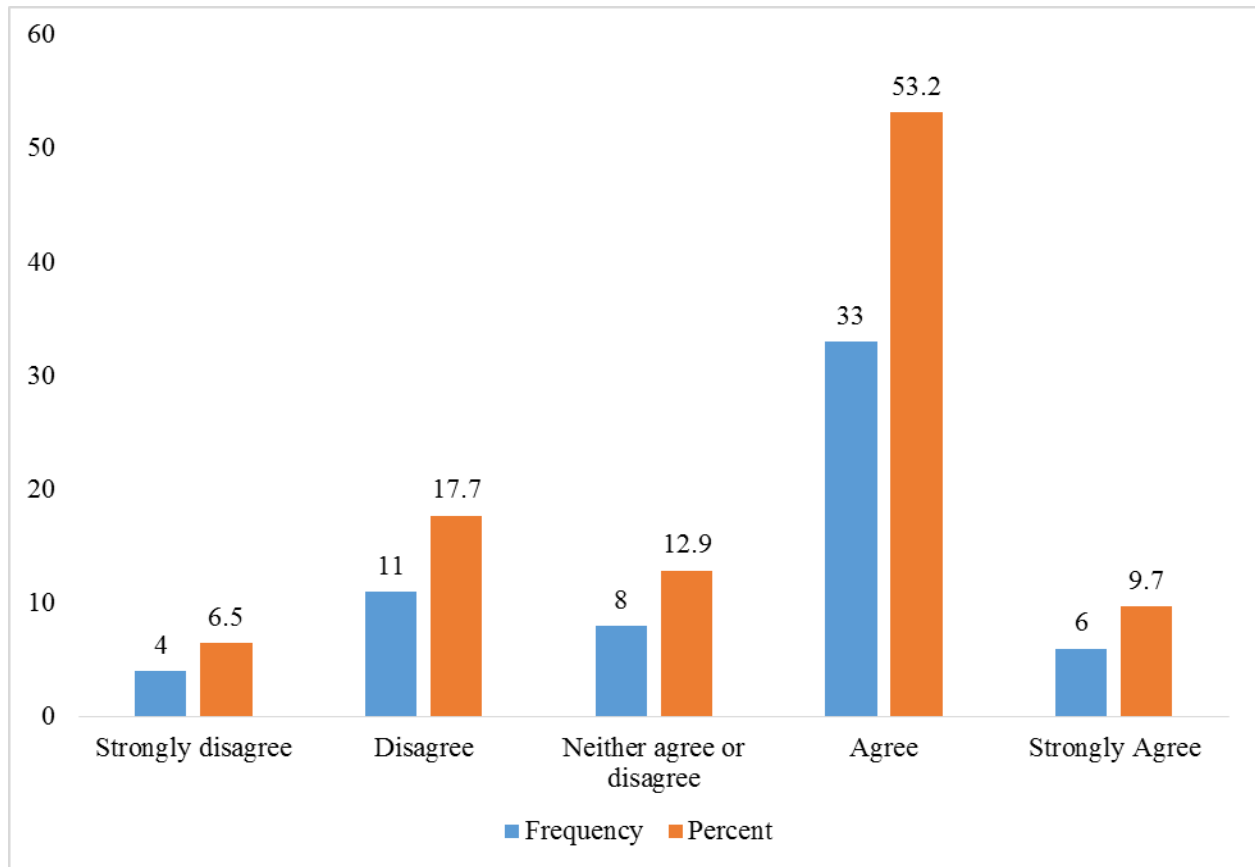
When interviewing, some respondents expressed that their internal audit reports are submitted to ACs who discuss them with Accounting Officers. Ministers are never involved in the planning and monitoring.

The results indeed indicate that the Minister and Accounting Officers have a minimal role in planning and monitoring of implementation of internal audit recommendations.

The communication link scale

With respect to whether members of staff in the ministry are informed about the outcomes of the internal audit and invited to give feedback on how best to implement the recommendations, cumulatively the larger percentage agreed. The mean, 4.42, which corresponds to “agreed”, revealed that members of staff in the ministry are informed about the outcomes of the internal audit and invited to give feedback on how best to implement the recommendations.

Figure 5.12: The communication link scale



Source: Primary data (2017)

N=62

As observed in figure 5.12, cumulatively the majority of the respondents (62.9%) agreed that members of staff in the ministry are informed about the outcomes of the internal audit and invited to give feedback on how best to implement the recommendations. 24.2% of the respondents equally strongly disagree and disagree with the statement and only 12.9% preferred being neutral on this item. This confirms that there is communication between the top management and the members of staff in the various ministries.

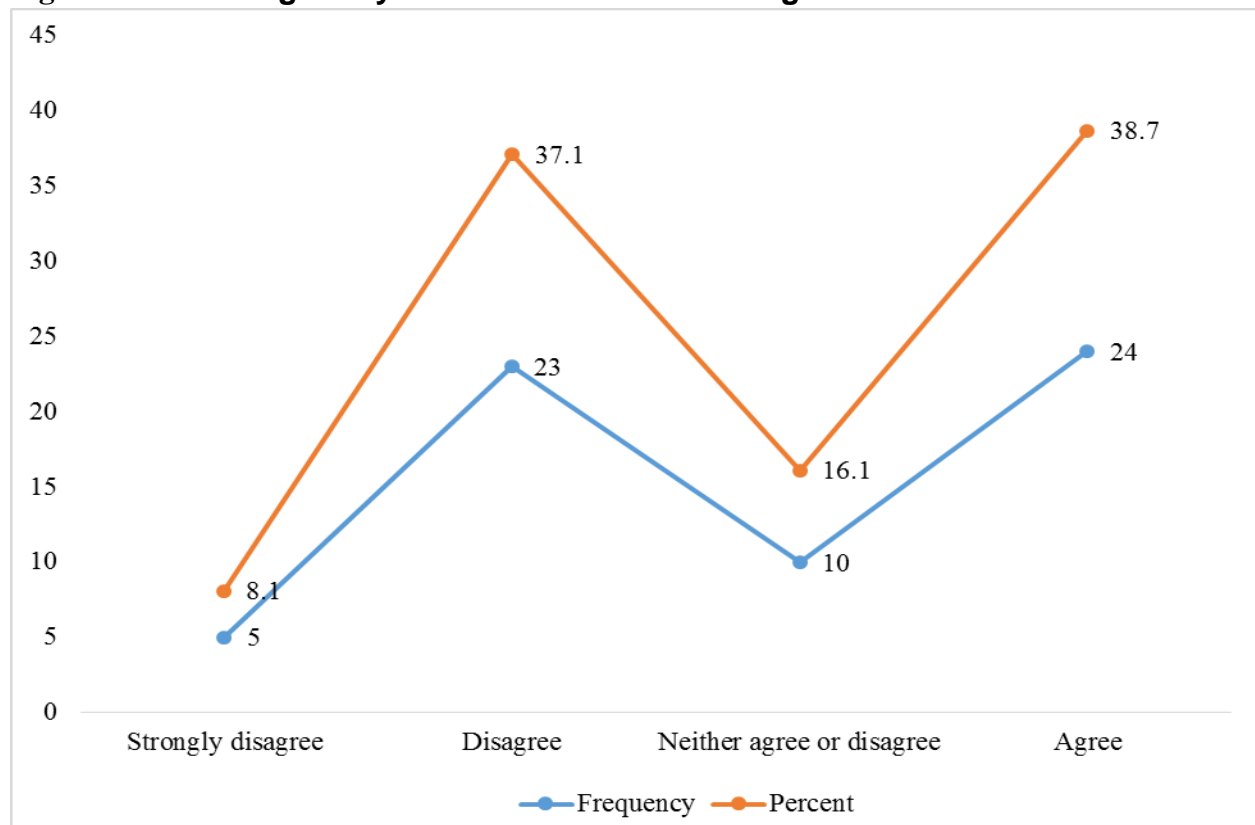
The regular reviews and monitoring scale

With respect to whether the ministry regularly reviews and monitors the plan for implementing internal audit recommendations and makes amendments, where necessary, to maintain relevance and appropriateness, computations revealed that cumulatively, the large percentage (45.2%) both strongly disagreed and disagreed on the matter. 38.7% of the respondents equally agreed and only 16.1% preferred being neutral on this item.

The mean, 2.85, revealed that, the respondents disagreed with the statement that stated that the ministry regularly reviews and monitors the plan for implementing internal audit recommendations and makes amendments, where necessary, to maintain relevance and appropriateness.

Indeed, an interview with the respondents revealed that ministry officials do not regularly monitor the plan for implementation of internal audit recommendations. They alleged that “the plan is just on paper”. It is not monitored and reviewed at all.

Figure 5.13 The regularity of reviews and monitoring scale



Source: Primary data (2017)

N=62

Figure 5.13 above is in line with the descriptive statistics above, it reveals that, cumulatively the majority of the respondents (45.2%) disagreed that the ministry regularly reviews and monitors the plan for implementing internal audit recommendations and makes amendments, where necessary, to maintain relevance and appropriateness. The figure further reveals that 38.7% of the respondents equally agreed with the statement and only 16.1% were neutral on this item. These statistics reveal that there is almost no regular

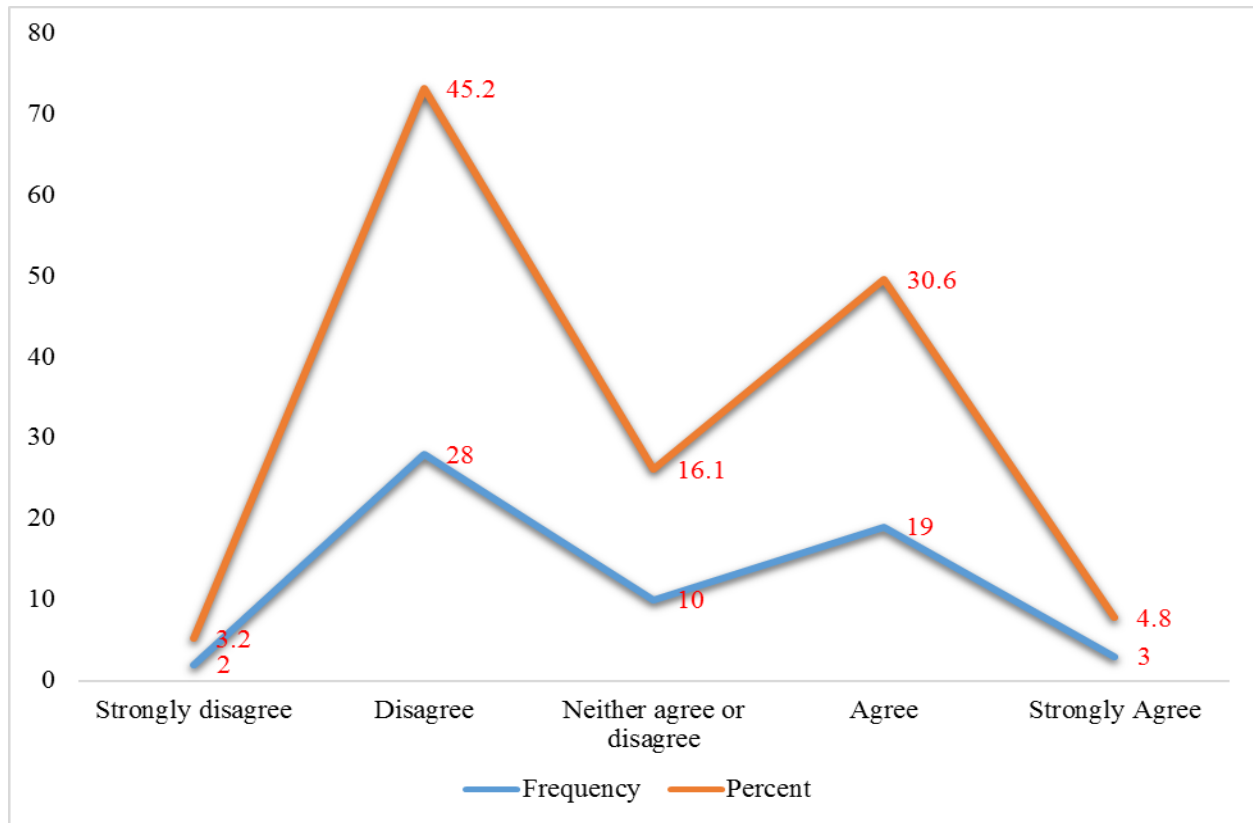
reviews and monitoring plans for implementing internal audit recommendations and making amendments, where necessary, to maintain relevance and appropriateness in the system.

The reports indicating progress and actions taken scale

As to whether there are regular reports indicating progress and actions taken to address issues raised in the audit reports until implementation is complete, cumulatively 30 respondents constituting 48.4% disagreed with the statement as compared to 22 respondents (35.4%) who agreed with the statement. Generally, a total of 10 respondents (16.1%) remained undecided on this statement. The fair rating is confirmed by a fair mean value, 2.94, and standard deviation, 1.114. The median score, three (3), on the five-point Likert scale used to measure items implied that, there are some regular reports indicating progress and actions taken to address issues raised in the audit reports until implementation is complete.

A review of internal audit reports shows that quarterly reports produced show the status of implementation of audit recommendations and action taken. This makes follow up easy for both the internal auditor and management.

Figure 5.14: The regularity of reviews and monitoring scale



Source: *Primary Data (2017)*

Figure 5.14 above illuminates on the descriptive statistics generated above in Table 5.5. It shows that, cumulatively majority of the respondents (48.4%) disagreed with the statement that there are regular reports indicating progress and actions taken to address issues raised in the audit reports until implementation is complete. The figure further reveals that 35.4% of the respondents equally agreed with the statement and only 16.1% were neutral on this statement. The descriptive statistics reveal that there are minimal regular reports indicating progress and actions taken to address issues raised in the audit reports until implementation is complete.

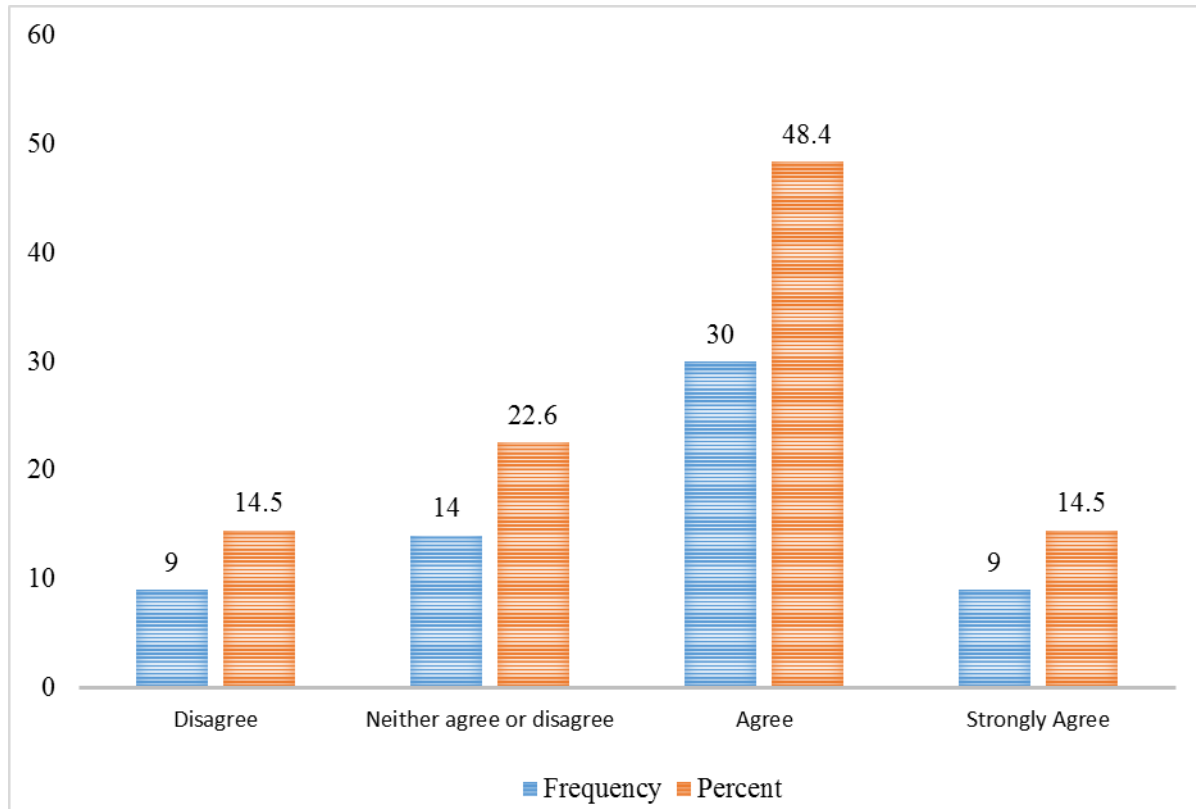
An interview with one respondent revealed that “internal audit reports are late even when the framework is in place for timely submission of reports but it is not followed. General oversight by the Internal Auditor General Department is weak. There is no action for late or none delivery. There is no feedback on errors on internal audit reports”.

Appreciation of the role of the internal audit unit scale

With respect to whether the ministry management fully appreciates the role of the internal audit unit and adequately supports its activities, cumulatively the larger percentage (62.9%) agreed. The mean, 4.65, which corresponded to “agreed” indicated that the ministry management fully appreciates the role of the internal audit unit and adequately supports its activities.

As revealed from the computations above, the scale was intended to measure the appreciation of the role of the internal audit unit in implementing internal audit recommendations in the various government ministries. In relation to the descriptive statistics above, the figure 5.14 below throws more exposition of the same.

Figure 5.15: Appreciation of the role of the internal audit unit scale



Source: Primary data (2017)

N=62

As presented on figure 5.15, 48.4% of the respondents indicated that they agree that the ministry management fully appreciates the role of the internal audit unit and adequately supports its activities, 14.5 strongly agreed with the statement and also 14.5 disagreed. A respondent noted *“Management does not understand the role of internal Audit”. There is lack of cooperation between Internal Audit and management*”. However, 22.6% preferred being neutral on this item. The statistics revealed that the ministry management fully appreciates the role of the internal audit unit and adequately supports its activities.

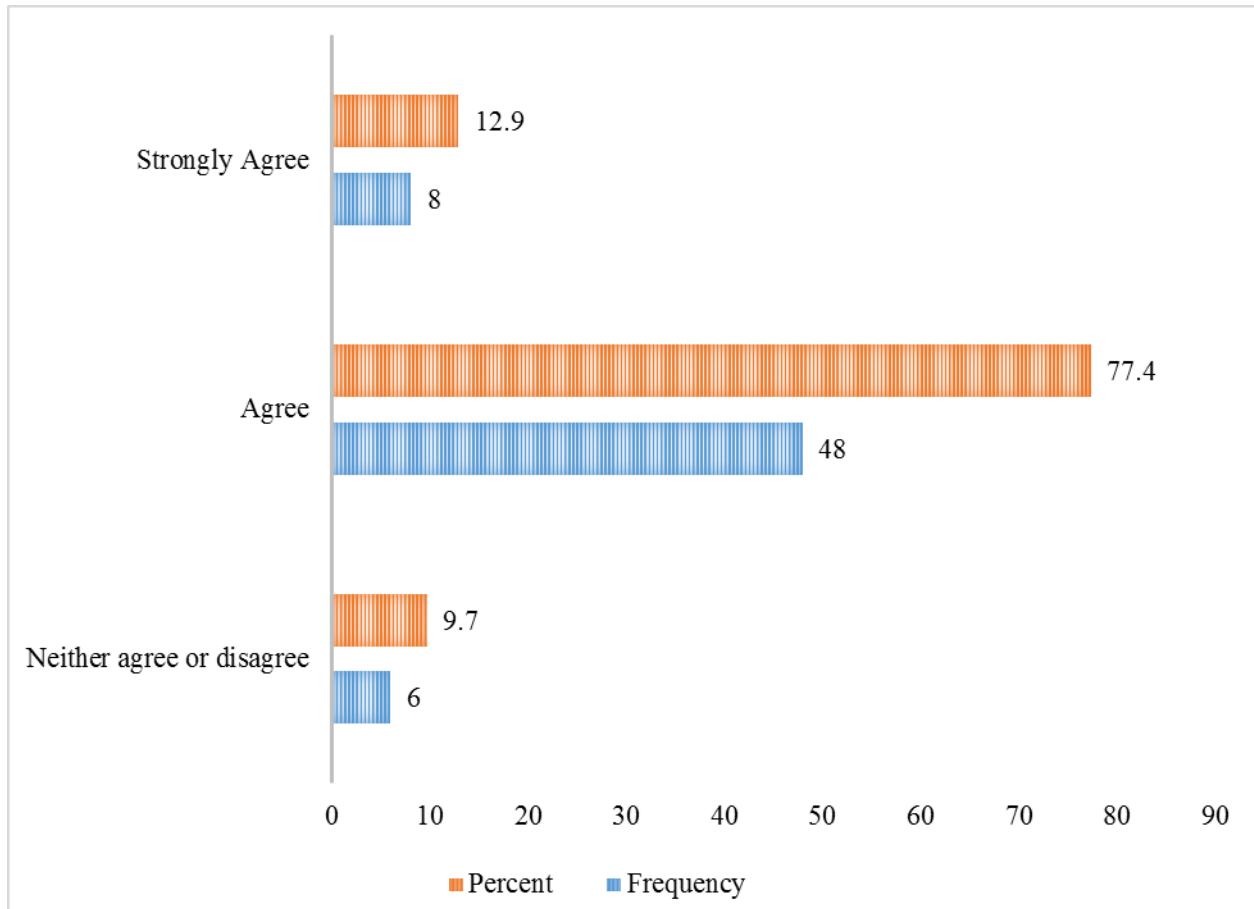
A review of the internal audit report for financial year 2015/2016 revealed how the introduction of the Public Financial Act 2015 contributed to strengthening of the Internal Audit function. The internal Audit reports also revealed that one of the challenges internal audit departments face is operationalization of Internal Audit mandate and structure has not taken place in terms of structure and resources. This has stalled the operations of the internal audit function of different ministries.

The system that accurately tracks progress and records the actions of managers' scale

With regard to whether the ministry has a system in place that accurately tracks progress and records the actions of managers responsible for progressing action against timeframes, the respondents' responses revealed that cumulatively, the larger number (90.3%) of the respondents agreed. The mean, 4.03, was above the median score, which implied that the ministry has a system in place that accurately tracks progress and records the actions of managers responsible for progressing action against time frames. One respondent noted *"internal audit reports are produced on a quarterly basis and submitted to AC highlighting progress and action by management"*.

The scale was intended to measure the system that accurately tracks progress and records the actions of managers responsible for progressing action against timeframes in implementing internal audit recommendations. The figure 5.15 below expounds on the same.

Figure 5.16: The system that accurately tracks progress and records the actions of managers' scale



Source: *Primary data* (2017)

N=62

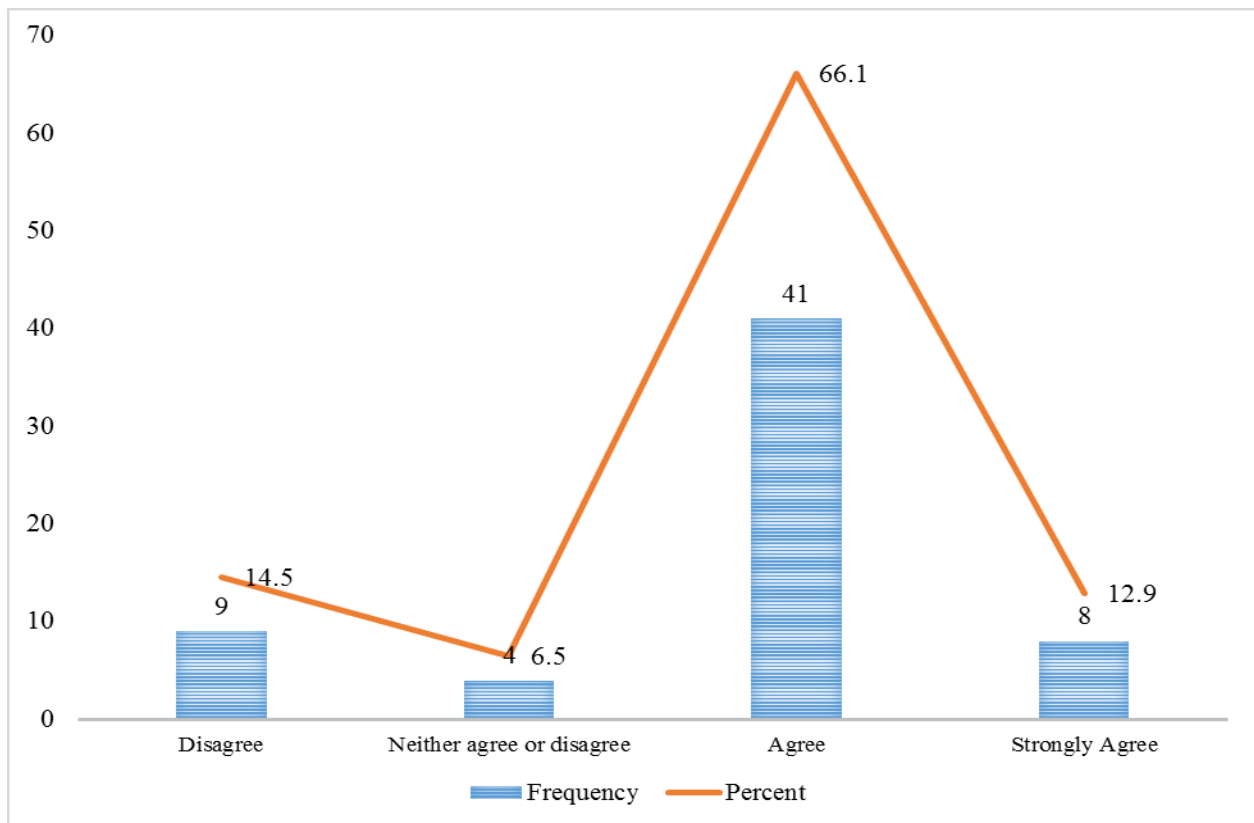
The figure 5.16 further reveals that 77.4% of the respondents indicated that they agree that the ministry has a system in place that accurately tracks progress and records the actions of managers responsible for progressing action against timeframes. The figure further reveals that 12.9% strongly agreed with the statement and also 9.7% neither agree nor disagreed. This means that the ministry has a system in place that accurately tracks progress and records the actions of managers responsible for progressing action against timeframes.

The implementation of internal audit recommendations guided by a clear plan in consultation with the internal audit unit and AC scale

Regarding this item, the respondents' were probed whether the implementation of internal audit recommendations in the ministry is usually guided by development of a clear plan in consultation with the internal audit unit and AC clearly specifying responsibilities and timeframes for addressing the required action. Cumulatively 49 respondents representing (79.0%) agreed with the statement as compared to 9 respondents (14.5%) who disagreed with the statement. A total of 4 respondents (6.5%) remained undecided on this statement. The average rating is confirmed by a fair mean, 3.89, and standard deviation, 0.402. Thus implementation of internal audit recommendations in the ministry is usually guided by development of a clear plan. This is further carried out in consultation with the internal audit unit and AC clearly specifying responsibilities and timeframes for addressing the required action.

The scale generated above was intended to measure whether the implementation of internal audit recommendations is guided by a clear plan in consultation with the internal audit unit and AC. As shown in the descriptive Table 5.5 above, the figure 5. 17 below gives a deeper exposition of the statistics that were generated.

Figure 5.17: The internal audit recommendations guided by a clear plan in consultation with the internal audit unit and AC scale



Source: Primary data (2017)

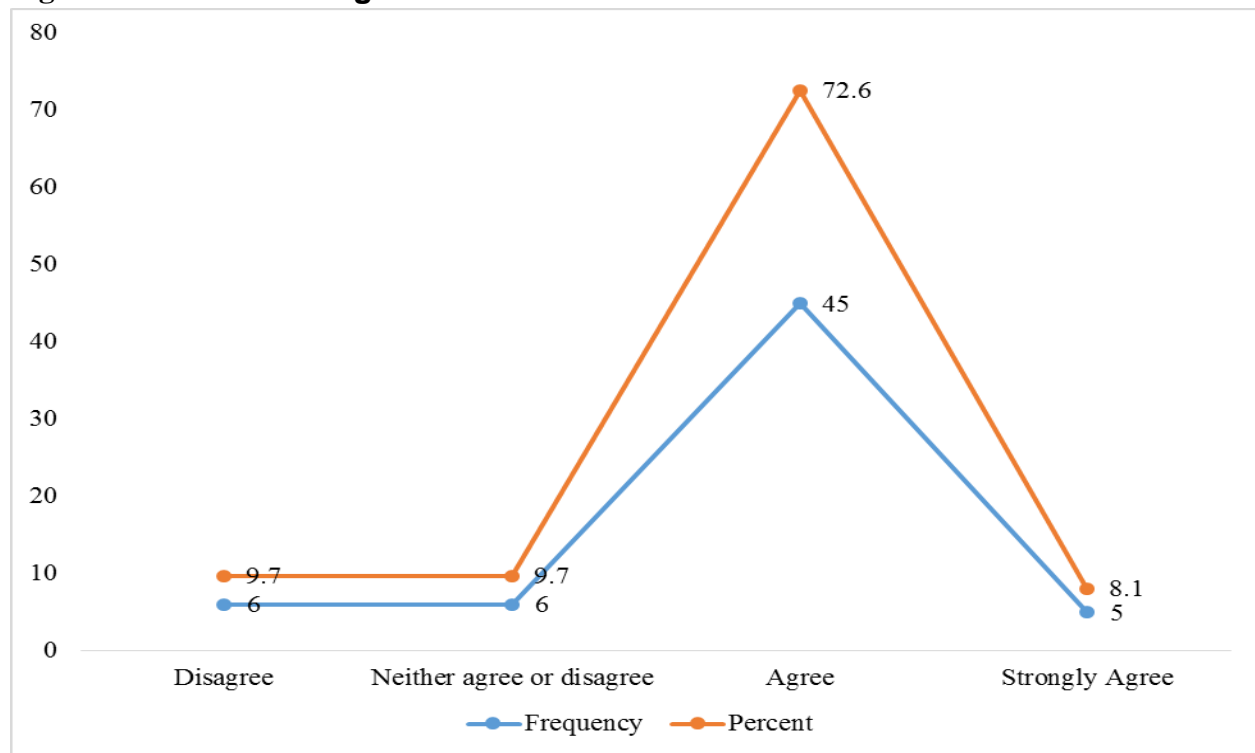
N=62

As observed in figure 5.17 above, the figure reveals similarity with the descriptive statistics, cumulatively majority of the respondents (79.0%) agreed that the implementation of internal audit recommendations in the ministry is usually guided by development of a clear plan. It is done in consultation with the internal audit unit and AC clearly specifying responsibilities and timeframes for addressing the required action. 14.5% of the respondents disagreed with the statement and only 6.5% preferred being neutral on this item. This confirms that the implementation of internal audit recommendations in the ministry is usually guided by development of a clear plan in consultation with the internal audit unit and AC clearly specifying responsibilities and timeframes for addressing the required action.

The meetings between the AC and the internal auditors' scale

In regard to this variable, the respondents' were probed whether there is sufficient frequency of meetings between the AC and the internal auditors in the ministry. Results revealed that 6 respondents representing 9.7%) disagreed, 6 (9.7%) were neutral, 45 (72.6%) agreed and 5 (8.1%) strongly agreed with the statement. The good mean, 4.63, and standard deviation, 0.610, shows that there is sufficient frequency of meetings between the AC and the internal auditors in the ministry.

Figure 5.18: The meetings between the AC and the internal auditors' scale



Source: Primary data (2017)

N=62

Figure 5.18 above sheds more light on the descriptive statistics generated in table 5.4. It reveals that, cumulatively the majority of the respondents (80.7%) agreed with the statement that there is sufficient frequency of meetings between the AC and the internal auditors in the ministry.

It is further revealed that 9.7% of the respondents equally disagreed with the statement and 9.7% were neutral on this item. *One respondent noted “AC members lack time, commitment and are not available”.*

Overall quantitative results confirm that there is sufficient frequency of meetings between the AC and the internal auditors in the ministry.

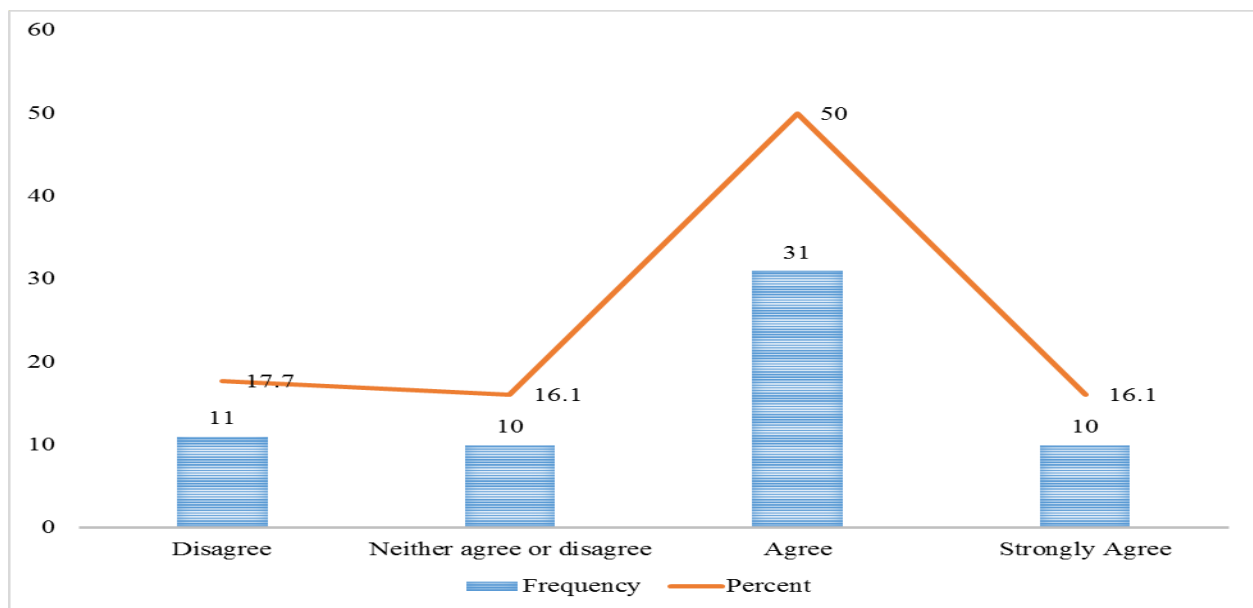
A review of the internal audit reports revealed that in 2014/2015, 2015/2016 and 2016/2017 sixty two (62), sixty seven (67) and one hundred twenty seven (127) AC meetings were held during the year. Over the years the frequencies of meetings have improved which indicates that internal auditors and AC meet more often.

The activities of the members of the AC are fully guided by the principle of independence scale

Focusing on the item “The activities of the members of the AC are fully guided by the principle of independence”, the respondents’ responses revealed that cumulatively, the larger number (66.1%) of the respondents agreed. The mean, 4.63, and standard deviation, 0.610, implied the activities of the members of the AC are fully guided by the principle of independence. *During the qualitative discussion, a respondent noted “AC charter is in place which clearly stipulates their roles and responsibilities.*

The scale was intended to measure whether the activities of the members of the AC are fully guided by the principle of independence. The figure 5.19 below reveals more information on the same.

Figure 5.19: The activities of the members of the AC are fully guided by the principle of independence



Source: Primary data (2017) **N=62**

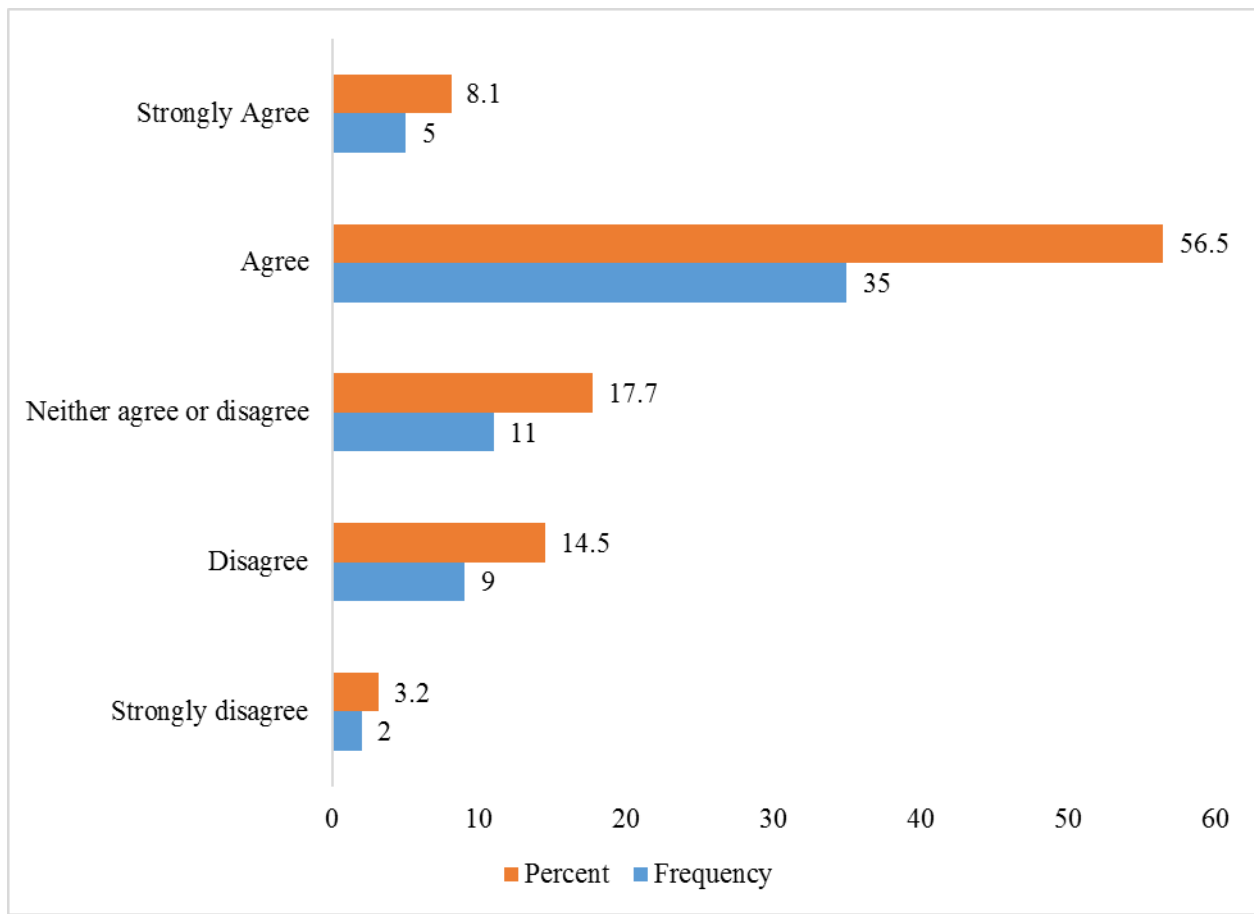
As observed in figure 5.19 above, the figure agrees with the descriptive statistics, cumulatively majority of the respondents (66.1%) agreed that activities of the AC are fully guided by the principle of independence. However, 17.7% of the respondents disagreed with the statement and 16.1% preferred being neutral. This confirms that the activities of the members of the AC are fully guided by the principle of independence.

The introduction of the Public Financial Management Act 2015 strengthened the operations of the AC thus their independence.

The independence of audit-related activities and decisions of the department of IA scale

With respect to whether the audit-related activities and decisions of the Department of Internal Audit are independent of management and other departments, cumulatively the larger percentage (64.6%) agreed. The mean, 4.77 which corresponded with “agreed” revealed that the audit-related activities and decisions of the Department of Internal Audit are independent of management and other departments. The purpose of the above scale was indeed to measure the degree of independence of audit-related activities and decisions of the Department of IA. Following is figure 5.20 elaborating on the discussion.

Figure 5.20: The independence of audit-related activities and decisions of the department of IA scale



Source: Primary data (2017)

N=62

As observed from figure 5.20 above, it is revealed that cumulatively, the majority of the Respondents (64.6%) agreed with the statement. 17.7% of the respondents disagreed with the statement and 17.7% were neutral on this item. Overall, the statistics confirm that the audit-related activities and decisions of the department of internal audit are independent of management and other departments. In support of this statement, a respondent noted; *“There is a budget for internal audit which makes them independent on top of having an Internal Audit Charter. Internal audit plans are approved by AC”*.

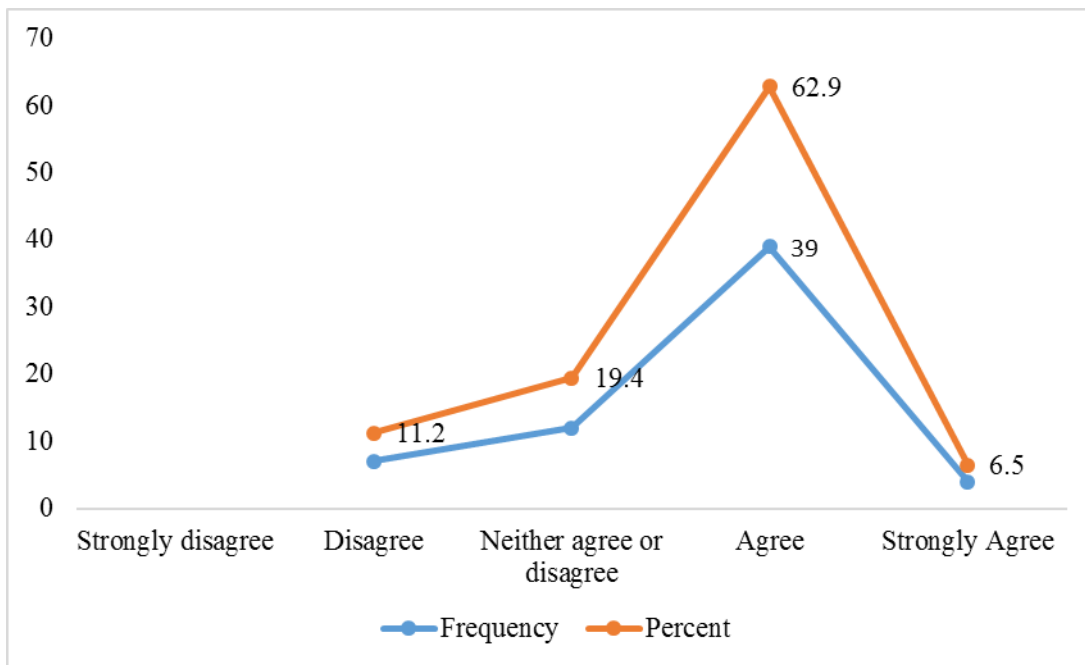
A review of the internal audit reports revealed how funding of IA is dependent on management’s discretion. The reports further highlight how pre-audit undermines the internal audit’s ability to offer constructive and objective counsel to management. The same reports indicate how there is undue influence on internal audit function thus affecting their independence.

The internal audit department sufficiently monitors management's implementation of internal audit recommendations

Focusing on the item, the ministry's department of Internal Audit sufficiently monitors management's implementation of internal audit recommendations; the respondents' responses revealed that cumulatively, the larger number (90.3%) of the respondents agreed. The mean, 4.79, and standard deviation, 0.627, implied that the ministry's department of Internal Audit sufficiently monitors management's implementation of internal audit recommendations. In support of this strong mean, a respondent noted that "Internal Audit department usually produces quarterly reports highlighting the status of implementation of internal audit recommendations".

Audit reports for financial years 2014/2015, 2015/2016 and 2016/2017, consistently point out how low remuneration of internal audit staff impact on their performance. The low remuneration hinders internal audit's ability to monitor management's implementation of internal audit recommendations.

Figure 5.21: The internal audit department sufficiently monitors management's implementation of internal audit



Source: Primary data (2017) **N=62**

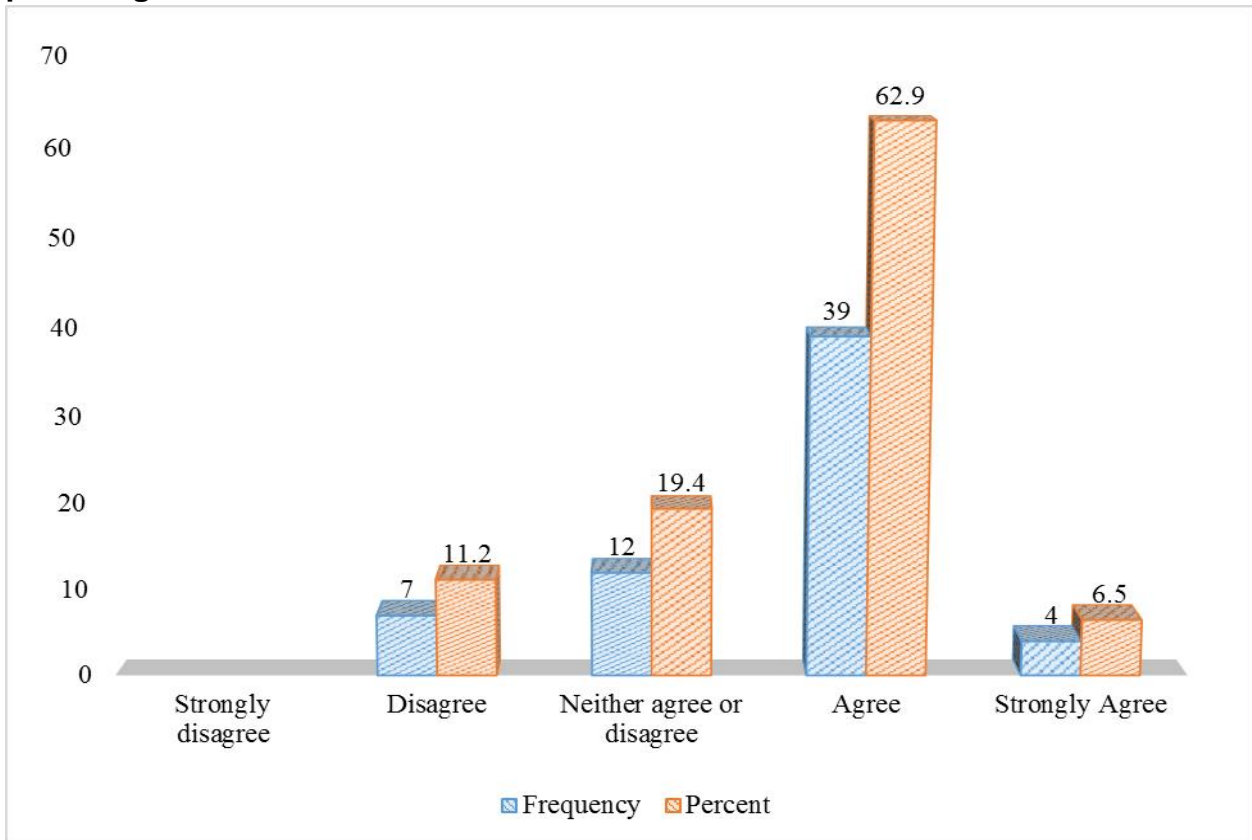
From figure 5.21 above, it is revealed that cumulatively, the majority of the respondents (90.3%) agreed with the statement. 6.5% of the respondents disagreed with the statement and 3.2% were neutral on this item. Overall, the statistics confirm that the ministry’s department of Internal Audit sufficiently monitors management’s implementation of internal audit recommendations.

Satisfied with the performance of the AC in tabling audit reports and providing advice

Regarding this variable, the respondents’ were queried whether they are satisfied with the performance of the AC in as far as tabling audit reports and providing advice to the management on significant matters. Cumulatively 39(62.9%) agreed with the statement as compared to 9(14.5%) who disagreed with the statement. A total of 14 (22.6%) remained undecided on this statement. The mean, 4.65, and standard deviation, 0.760, strongly suggested that the respondents were satisfied with the performance of the AC in as far as tabling audit reports and providing advice to the management on significant matters.

The scale above was intended to measure the Satisfaction with the performance of the AC in tabling audit reports and providing advice. As revealed in the descriptive Table 5.5, the figure 5.22 below gives a deeper exposition of the statistics that were generated.

Figure 5.22: Satisfied with the performance of the AC in tabling audit reports and providing advice



Source: Primary data (2017)

N=62

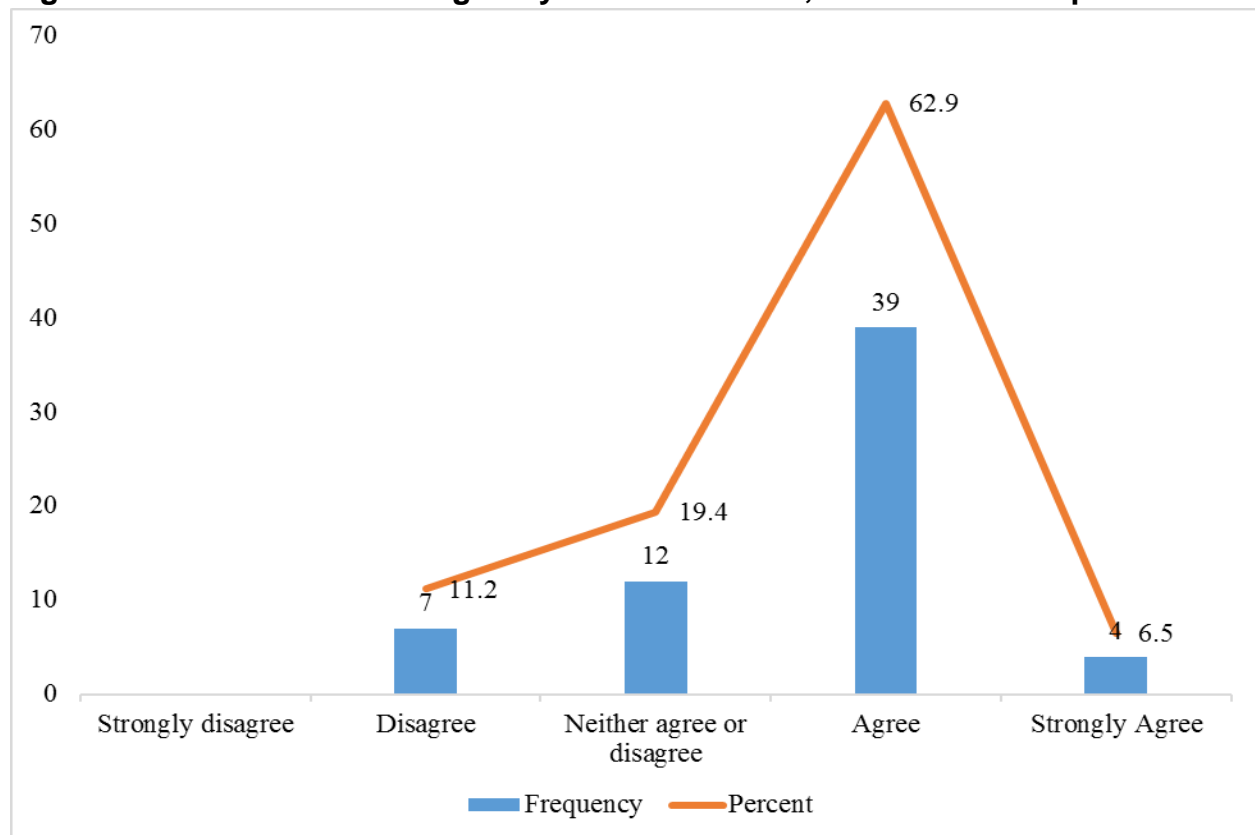
As presented in figure 5.22, 48.4% of the respondents indicated they agree that they are satisfied with the performance of the AC in as far as tabling audit reports and providing advice to the management on significant matters is concerned. 14.5 strongly agreed with the statement and also 14.5 disagreed. However, 22.6% preferred being neutral on this item. This confirms that the respondents are satisfied with the performance of the AC in as far as tabling audit reports and providing advice to the management on significant matters.

A review of the audit reports for financial years 2014/2015, 2015/2016 and 2016/2017 all reveal how ACs need to be properly financed, build capacity and Accounting officers should support them.

The AC meets regularly to consider risk, control and compliance issues

As to whether the AC meets regularly to consider issues in relation to the ministry's risk, control and compliance issues including implementation of internal audit recommendations, cumulatively 43(69.4%) agreed with the statement as compared to 7 (11.3%) who disagreed with the statement. A total of 12 (19.4%) remained undecided on this statement. The good rating is confirmed by mean, 4.52, and standard deviation, 0.654, thus revealing that the AC meets regularly to consider issues in relation to the ministry's risk, control and compliance issues including implementation of internal audit recommendations.

Figure 5.23: The AC meets regularly to consider risk, control and compliance issues



Source: Primary data (2017)

N=62

Figure 5.22 is in agreement with the descriptive statistics, cumulatively majority of the respondents (69.4%) agreed that the AC meets regularly to consider issues in relation to the ministry's risk, control and compliance issues including implementation of internal audit recommendations. 11.2% of the respondents disagreed with the statement and 19.4% preferred being neutral. This confirms that the AC meets regularly to consider issues in

relation to the ministry's risk, control and compliance issues including implementation of internal audit recommendations.

Table 5.6: Summary table for respondents' rating on organizational factors influencing implementation of internal audit recommendations

Serial	Variable	Mean	S.Dev
1	The responsibility of implementing internal audit recommendations is usually assigned to particular members of staff in the ministry.	4.94	.524
2	The ministry always has an action plan for implementation of internal audit recommendations which clearly outlines roles and responsibilities for the implementation of each recommendation.	0.624	.903
3	The ministry has clear mechanisms to monitor and report on the implementation of internal audit recommendations.	2.85	.938
4	The ministry usually allocates sufficient resources to implement internal audit recommendations.	2.40	.896
5	The ministry sets realistic and achievable time frames and targets for implementing internal audit recommendations.	2.79	1.010
6	The Accounting Officer of the ministry and the Minister usually have a role in the planning and monitoring of the implementation of internal audit recommendations.	3.08	.821
7	Members of staff in the ministry are informed about the outcomes of the internal audit and are invited to give feedback on how best to implement the recommendations.	4.42	.095
8	The ministry regularly reviews and monitors the plan for implementing internal audit recommendations and makes amendments, where necessary, to maintain relevance and appropriateness.	2.85	1.069
9	There are regular reports indicating progress and actions taken to address issues raised in the audit reports until implementation is complete.	2.94	1.114
10	The ministry management fully appreciates the role of the internal audit unit and adequately supports its activities.	4.65	.770

11	The ministry has a system in place that accurately tracks progress and records the actions of managers responsible for progressing action against timeframes.	4.03	.398
12	The implementation of internal audit recommendations in the ministry is usually guided by development of a clear plan in consultation with the internal audit unit and AC clearly specifying responsibilities and timeframes for addressing the required action.	3.89	1.042
13	There is sufficient frequency of meetings between the AC and the internal auditors in the ministry.	4.63	.610
14	The activities of the members of the AC are fully guided by the principle of independence.	4.93	.378
15	The audit-related activities and decisions of the Department of Internal Audit are independent of management and other departments.	4.77	.657
16	The ministry's department of Internal Audit sufficiently monitors management's implementation of internal audit recommendations	4.79	.627
17	I am satisfied with the performance of the AC in as far as tabling audit reports and providing advice to the management on significant matters.	4.65	.760
18	The AC meets regularly to consider issues in relation to the ministry's risk, control and compliance issues including implementation of internal audit recommendations.	4.52	.654

Source: *Primary data (2017)*

The average Index for the eighteen items

In order to have a general overview of how the respondents rated how Organisational factors influence implementation of internal audit recommendations in their ministries, an average index was computed from the eighteen items in Table 5.7 giving relevant descriptive statistics.

Table 5.7: Summary descriptive statistics on respondents' self-rating on organizational factors

Mean		3.88
95% Confidence interval for mean	Lower Bound	0.624
	Upper Bound	4.94
Median		4.00
Std. Deviation		.556
Minimum		1
Maximum		5
Range		3
Skewness		0.201

Source: *Primary data (2017)*

Results from the Table 5.7, revealed respondents' ratings on the organization factors in relation to implementation of internal audit recommendations. The opinions were ranging from 0.624 to 4.94 at the 95% confidence interval for mean. Despite the average rating, results from the above table reflected that some respondents scored very poor at a Minimum 1.00 while others scored best at a Maximum of 4.94. This gave a wide difference as reflected by a high range of 3.00. Results also revealed that, there was similarity in respondents' opinions regarding the implementation of organizational factors (relatively small deviation value =0.556) suggesting that respondents views' concerning the organizational factors do not differ so much from one respondent to another. The difference in opinions as regards low and high levels of the organizational factors was at 3.00 and is supported by the aforementioned standard deviation (.556). Results from the table further revealed that there was some degree of skewness, suggesting that the respondents' opinions were almost normally distributed (Skewness = 0.201).

From the above analysis we can therefore conclude that organizational factors influence the implementation of audit recommendations in Uganda Government ministries.

5.3.3 Empirical objective three: Examining the enabling and constraining factors affecting response to internal audit findings and recommendations among government departments in Uganda

The items on obstacles to effective response to internal audit findings were derived from the third objective of the research objective. The items that were cross examined in this objective catered for both environmental and personal factors as illustrated in the framework.

Table 5.8: Descriptive statistics on respondents' self-rating on the enabling and constraining factors affecting response to internal audit findings and recommendations among government departments in Uganda

Variable	SD	D	N	A	SA	Mean	S.Dev
Personal factors							
Competence of staff affects implementation of internal audit recommendations	7 (11.3%)	34 (54.8%)	12 (19.4%)	8 (12.9%)	1 (1.6%)	2.40	.896
Response to internal audit recommendations is dependent on attitude of management and staff	3 (4.8%)	28 (45.2%)	12 (19.4%)	17 (27.4%)	2 (3.2%)	2.49	1.012
Personal beliefs influence response to internal audit recommendations	1 (1.6%)	31 (50.0%)	17 (27.4%)	7 (11.3%)	6 (9.7%)	3.08	.821
Environmental factors							
Implementation of internal audit recommendations depend on technocrats from other ministries and	5 (8.1%)	10 (16.1%)		24 (38.7%)	23 (37.1%)	3.44	.769

Development Agencies							
Internal audit recommendations are implemented because of general public perceptions	2 (3.2%)	3 (4.8%)	10 (16.1%)	19 (30.6%)	28 (45.2%)	3.34	1.114
There is political influence in responding to internal audit recommendations		21 (33.9%)	21 (33.9%)	2 (3.2%)	18 (29.0%)	2.62	.903

Source: Primary data (2017)

N=62

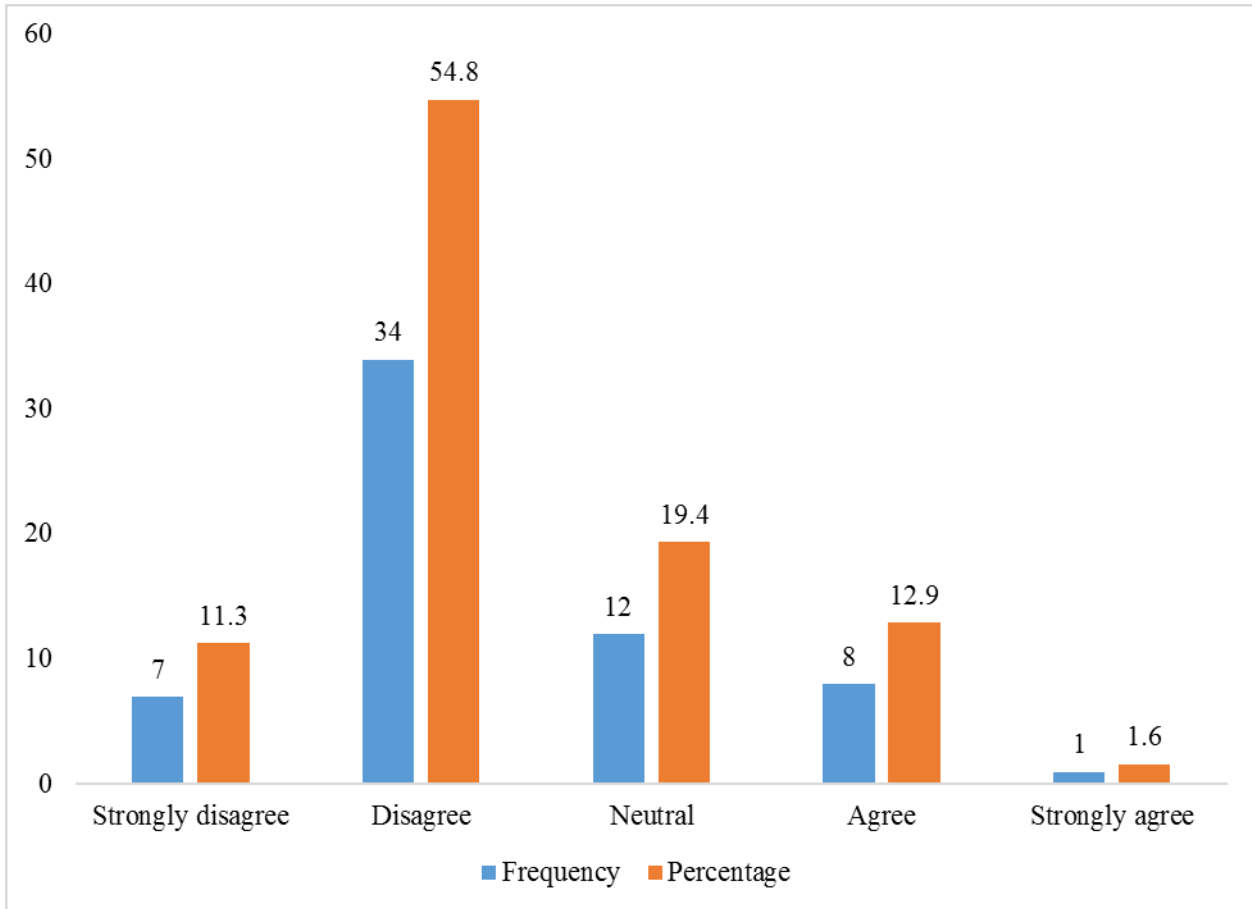
SA=Strongly Agree, A=Agree, N=Neutral, D=Disagree, SD= Strongly Disagree, S.Dev= Standard deviation,

In line with the statistical computations above, the details below interrogate the empirical results through advanced statistical tests to demonstrate the views of the respondents on obstacles to effective response to internal audit findings.

The Competence of staff affects implementation of internal audit recommendations

Competence of staff as to whether competence of staff affects implementation of internal audit recommendations, the respondents' response revealed that cumulatively, the larger percentage (66.1%) of the respondents disagreed. The mean = 2.40 revealed that the majority of the respondents disagreed with the item implying that Competence of staff does not affect implementation of internal audit recommendations.

Figure 5.24: The competence of staff affects implementation of internal audit recommendations



Source: Primary data (2017)

N=62

Figure 5.24 is in agreement with the descriptive statistics, cumulatively majority of the respondents (66.1%) disagreed that competence of staff affects implementation of internal audit recommendations. 14.5% of the respondents agreed with the statement and 19.4% preferred being neutral. Overall, the statistics show that competence of staff, according to the respondents, does not affect implementation of internal audit recommendations.

One respondent noted that “there is lack of skilled and sufficient staff to implement the recommendations. Ministries lack appropriate people qualified enough to implement the recommendations. “Example is upgrading the existing Integrated Financial Management System”.

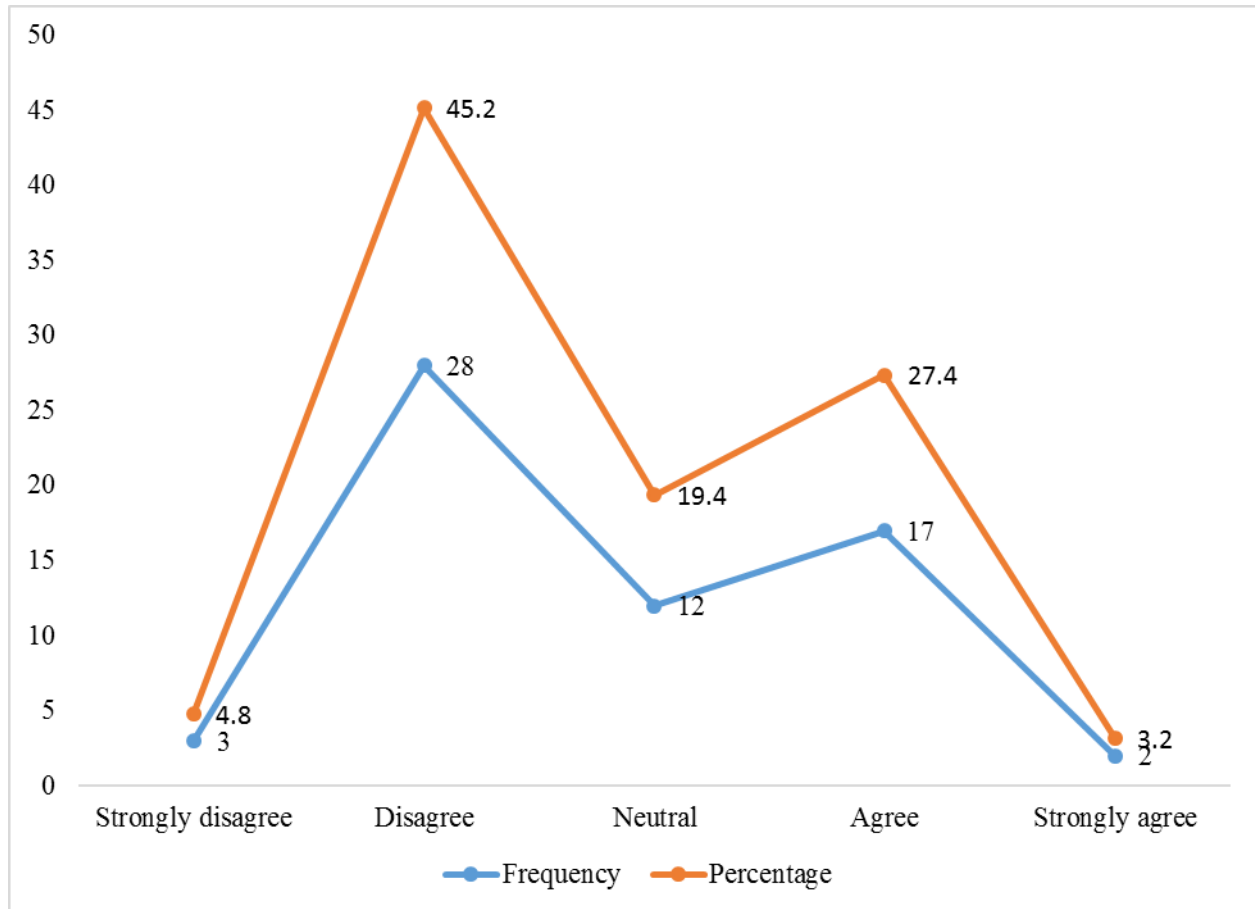
Another respondent noted that “Internal audit Staff are unprofessional, their performance appraisal is generic, they are unethical and there is no professional development for them”. This confirmed that Competence of staff affects implementation of Internal Audit recommendations.

A review of the financial statements for financial years 2014/2015, 2015/2016 and 2016/2017 highlights how one of the performance challenges of the internal audit staff is capacity gaps in Information Technology, performance and forensic audits. This implies therefore that competence of internal audit staff influences response to audit findings and recommendations.

The response to internal audit recommendations is dependent on the attitude of management and staff scale

With respect to whether response to internal audit recommendations is dependent on attitude of management and staff, the respondents' response revealed that cumulatively 31 (50.0%) disagreed with the statement as compared to 19 (30.6%) who agreed with the statement. A total of 12 (19.4%) remained undecided on this statement. A mean = 2.49 was slightly below the median score, three(3), which on the five-point Likert scale used to measure items implied that there is minimal response to internal audit recommendations, depending on attitude of management and staff.

Figure 5.25: The response to internal audit recommendations is dependent on attitude of management and staff



Source: Primary data (2017)

N=62

Figure 5.25 above sheds more light on the descriptive statistics generated in table 5.8. It reveals that, cumulatively the majority of respondents (50.0%) disagreed with the statement that response to internal audit recommendations is dependent on attitude of management and staff. One respondent noted *“Some recommendations are beyond the mandate of management”*.

It is further revealed that 30.6% of the respondents equally agreed with the statement and only 19.4% were neutral on this item. *Another respondent noted; “there is general laxity on the part of management about internal audit matters. “Little attention is paid to internal*

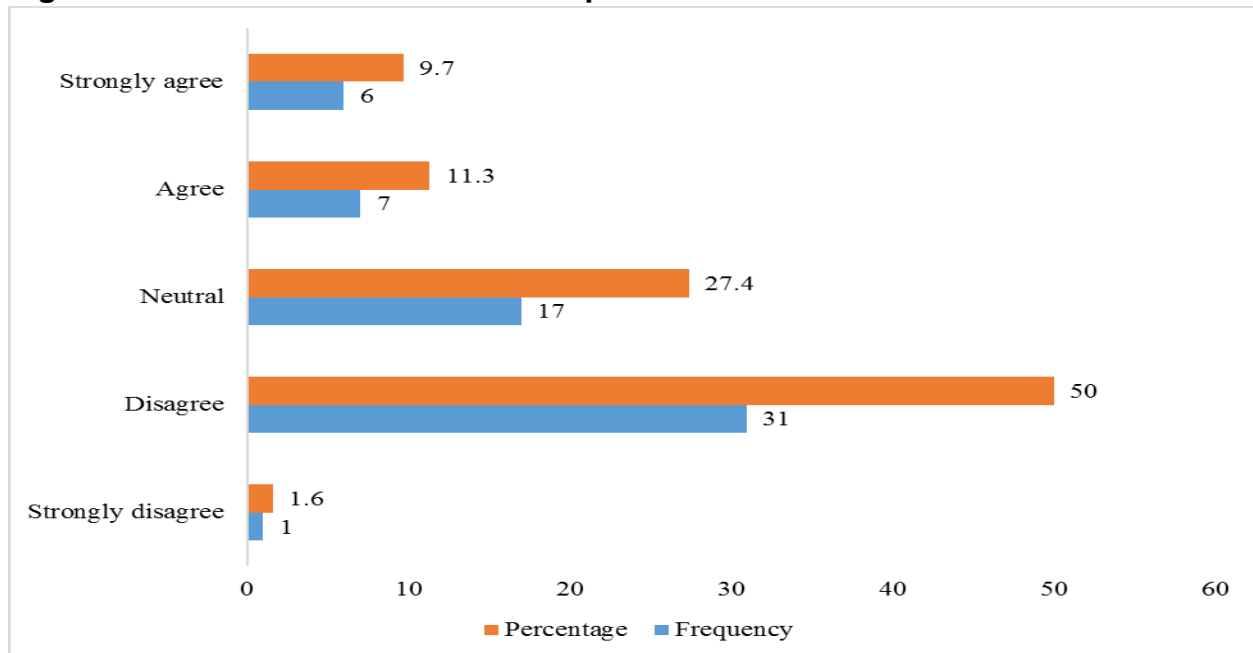
audit observations, IA is regarded as low profile office compared to OAG therefore internal audit brings no consequence”.

A review of the internal audit report for the financial year 2016/2017 clearly states how the operationalization of the internal audit mandate and structure has not taken place in terms of structure and resources. This is the responsibility of management which then points to them not supporting the internal audit department.

Beliefs influence response to internal audit recommendations scale

Regarding this item, the respondents’ were probed whether beliefs influence response to internal audit recommendations. Cumulatively 32 respondents representing (51.6%) disagreed with the statement as compared to 13 respondents (21.0%) who agreed with the statement. A total of 17 respondents (27.4%) remained undecided on this statement. The average rating is confirmed by a fair mean =3.08 and standard deviation =0.821. Thus corresponding to the fact that on a minimal scale, beliefs influence response to internal audit recommendations in the ministries. *One respondent noted “People spend but they do not want to account”. Another respondent noted “Heads of internal audit are usually way below other departmental heads therefore there is reluctance to take advice from junior officers”.*

Figure 5.26: The beliefs influence response to internal audit recommendations



Source: *Primary data* (2017)

N=62

As presented in figure 5.26, cumulatively, 51.6% of the respondents indicated that they disagreed with the statement that beliefs influence response to internal audit recommendations, 21.0% agreed with the statement. This confirms that on a minimal scale, beliefs influence response to internal audit recommendations in the ministries.

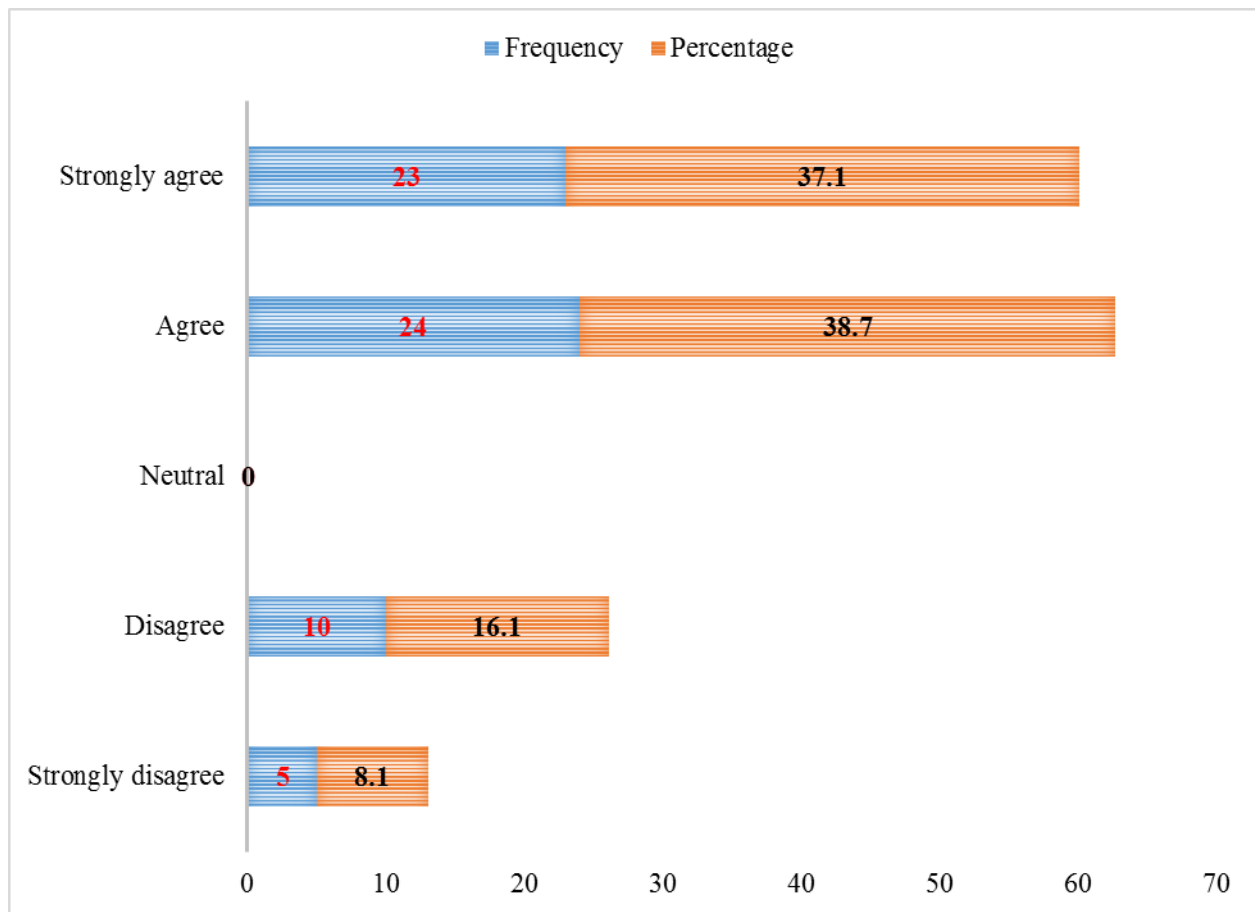
Implementation of internal audit recommendations depend on other ministries and other Development Agencies' scale

Focusing on the item "Implementation of internal audit recommendations depend on other ministries and other Development Agencies", the respondents' responses revealed that cumulatively, the larger number (75.8%) of the respondents agreed. The mean=3.44 and standard deviation= 0.769 implied that the Implementation of Internal Audit recommendations depend on other ministries and development Agencies. A respondent noted "*The implementation process takes long, some of the issues are complicated, a lot of dialogue with different stakeholders is required before implementation which may call for parliament approval and need to consider impact on other agencies output to avoid conflict of mandate*".

"Another respondent noted also that "*Some of the recommendations require a policy change some of the recommendations are implementable in the short or medium term either due to expense of opposing government policy*".

The scale was intended to measure whether the implementation of internal audit recommendations depend on other ministries and development agencies. The figure 5.26 below reveals more information on the same.

Figure 5.27: The implementation of internal audit recommendations depend on other ministries and Development Agencies



Source: Primary data (2017)

N=62

As observed in figure 5.27, cumulatively the majority of the respondents (75.8%) agreed that implementation of internal audit recommendations depend on other ministries and Development Agencies. 24.2% of the respondents equally disagree with the statement. This confirms that it is true that “Implementation of internal audit recommendations is dependent on other ministries and other development Agencies.

The internal audit recommendations are implemented because of general public perceptions' scale

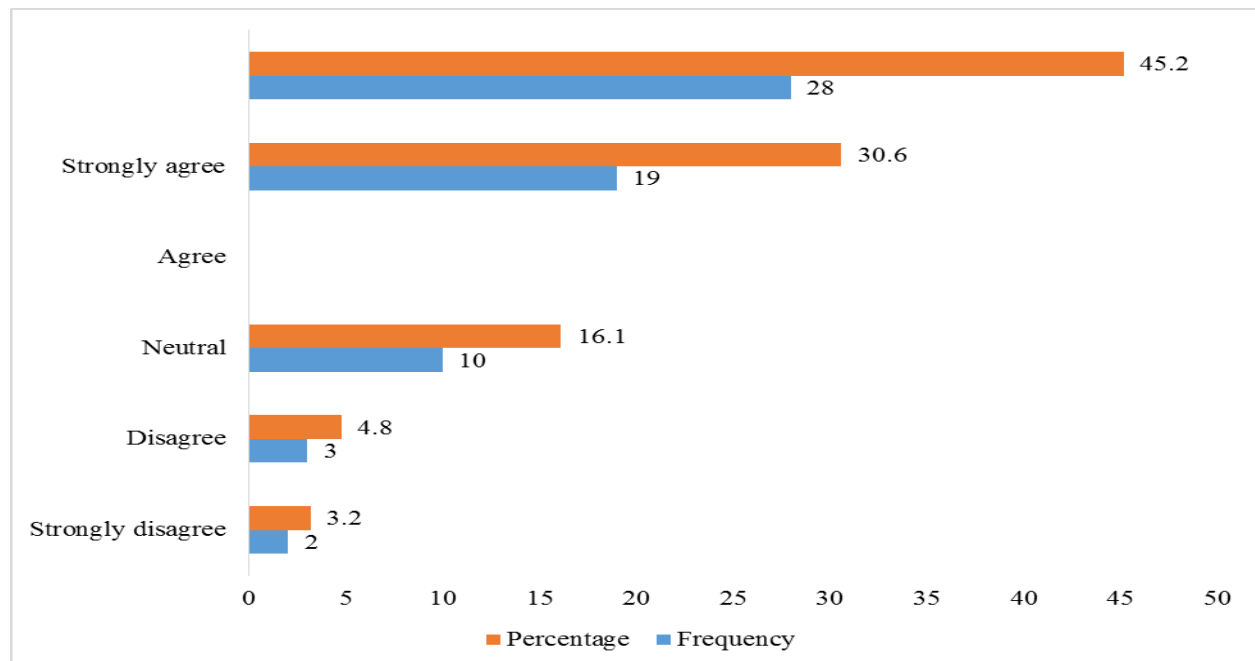
Cross examining the item “Internal audit recommendations are implemented because of general public perceptions”, cumulatively 47 respondents constituting 75.8% agreed with the statement as compared to 5 respondents (8.0%) who disagreed with the statement.

A total of 10 respondents (16.1%) remained undecided on this statement. The fair rating is confirmed by a mean = 3.34 and standard deviation =0.1.114, thus revealing that fairly internal audit recommendations are implemented because of general public perceptions.

From the qualitative discussion one respondent mentioned; “*some recommendations are implemented to look good in the public eyes*”.

As illustrated above, the scale was intended to measure whether internal audit recommendations are implemented because of general public perceptions. As revealed in the descriptive Table 5.27 above, the figure 5.28 below gives a deeper exposition of the statistics that were generated.

Figure 5.28: The internal audit recommendations are implemented because of general public perceptions



Source: Primary data (2017)

N=62

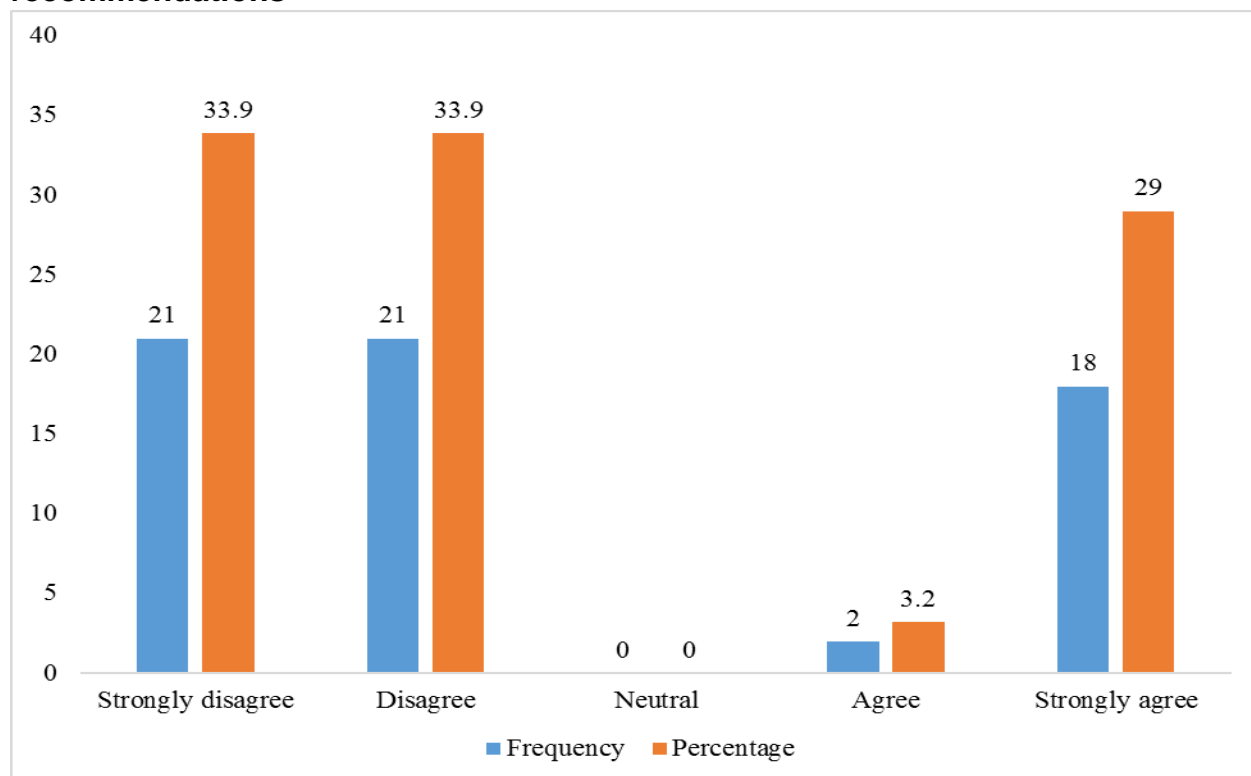
Figure 5.28 above depicts that, cumulatively (75.8%) of the respondents agreed with the statement that only 8.0% of the respondents disagreed with the statement. This confirms that generally, Internal Audit recommendations are implemented because of general public perceptions.

There is political influence in responding to internal audit recommendations' scale

With respect to whether there is political influence in responding to Internal Audit recommendations, cumulatively a percentage (32.2%) agreed with the statement. 33.9% of the respondents disagreed with the statement and 33.9% preferred being neutral on this matter. The fair mean=2.62 which corresponded to "agreed" revealed that there is minimal political influence in responding to internal audit recommendations in the various ministries. In line with the above statement, a respondent noted "*There is influence peddling*", *there is political influence in some of the recommendations to be implemented. "Political leadership is opposed to this". "Permanent Secretaries who are Accounting officers are political appointees so they implement what is politically pleasing"*.

As revealed from the computations above, the scale was intended to measure the political influence in responding to internal audit recommendations in the various government ministries. In relation to the descriptive statistics above, the figure 5.29 below throws more exposition of the same.

Figure 5.29: There is political influence in responding to internal audit recommendations



Source: Primary data (2017)

N=62

From figure 5.29 above, it is revealed that cumulatively, the majority of the respondents (67.8%) disagreed with the statement. 32.2% of the respondents agreed with the statement and surprisingly no respondent was neutral on this item. Overall, statistics confirm that there is minimal political influence in responding to internal audit recommendations.

The average index for the six items

The purpose of this sub section was to help give a general over view of how the respondents rated themselves on the implementation of personal and environmental factors in their ministries. An average index was computed from the six items in Table 5. 9 giving relevant descriptive statistics.

Table 5.9: Summary descriptive statistics on respondents' self rating on environmental and personal factors

Mean		3.67
95% Confidence Interval for Mean	Lower Bound	0.522
	Upper Bound	3.94
Median		3.00
Std. Deviation		.486
Minimum		1
Maximum		4
Range		3
Skewness		0.101

Source: *Primary data (2017)*

The Table 5.9, revealed respondents ratings on the personal and environmental factors in relation to internal audit recommendations. The opinions were ranging from 0.522 to 3.94 at the 95% Confidence Interval for Mean. Despite the average rating, results from the above table reflected that some respondents scored very poor at a Minimum 1.00 while others scored best at a Maximum of 4. This gave a relatively wide difference as reflected by a high range of 3.00. Results also revealed that, there was similarity in respondents' opinions regarding the implementation of both environmental and personal factors (relatively small deviation value =.486) suggesting that respondents' views concerning personal and environmental factors do not differ so much from one respondent to another. The difference in opinions as regards low and high levels of the personal and environmental factors was at 3.00 and is supported by the aforementioned standard deviation 0.486. Results from the table further revealed that there was some degree of skewness, suggesting that the respondents' opinions were almost normally distributed, Skewness = 0.101.

5.4 Model development

Empirical objective IV was stated in Chapter 1 as: development of a model highlighting the process and the factors for effective response to internal audit findings and recommendations among government ministries in Uganda.

In compliance to the primary objective of this study, this part of the chapter will build on the preceding results and parameters in order to develop the model. The processes necessary to develop the model is discussed in detail below:

Factor Analysis

5.4.1 Factor Analysis

Factor analysis (FA) techniques are utilized to address the problem of analyzing the structure of the correlations among a large number of measurement items by defining a large set of common underlying dimensions, known as factors. It takes a large set of variables and summarizes or reduces them using a smaller set of variables (Hair et al., 2006).

The main purpose of the factor analysis therefore include: Understanding the structure of a set of variables, constructing a questionnaire to measure any underlying variables, and reducing a data set to a more manageable level (Field, 2006, p.619). Normal latent dimensions of the structure of the data are identified and then the degree to which a test item also referred to as a (variable) is explained by each factor is determined. This is followed by summarization and data reduction which are the primary uses of Factor Analysis. This purpose can be achieved by either exploratory factor analysis or confirmatory factor analysis techniques. It is generally accepted that exploratory factor analysis technique is used for “take what the data give you”; whereas the confirmatory factor analysis technique involves combining variables together on a factor or the precise set of factors for testing hypotheses as Hair et al (2006, p.105) reveals.

In this study, exploratory factor analysis (EFA) was first conducted to examine the dimensions of each construct (herein called as a factor) and then confirmatory factor analysis (CFA) was performed for testing and confirming relationships between the

observed variables under each hypothesized construct (Hair et al, 2006). The next subsection of this thesis explains exploratory factor analysis performed by using SPSS version 25.0.

5.4.2 Kaiser-Meyer-Olkin (KMO) criteria and Bartlett-test

The most important value during the evaluation of the applicability of factor analysis is KMO value which quality can be determined with the following intervals (Malhotra Simon, 2008):

- KMO \geq 0.9 excellent
- KMO \geq 0.8 very good
- KMO \geq 0.7 acceptable
- KMO \geq 0.6 medium
- KMO \geq 0.5 weak
- KMO $<$ 0.5 unacceptable

In this study, the KMO value was 0.852 revealing that the variables are applicable to appreciating the factor analysis. The major result of Bartlett-test also confirms that the input variables are applicable for factor analysis because there is correlation between them (Sig=0.000).

Table 5.10: Results of Kaiser-Meyer-Olkin (KMO) criteria and Bartlett-test

Kaiser-Meyer-Olkin Measure of Sampling		.852
Bartlett's Test of Sphericity	Approx. Chi-Square	1140.043
	Df	61
	Sig.	.000

Source: Primary data (2017)

Note: DF=degree of freedom, Sig. = significant value

With the target of forming the factor-matrix more comprehensive, promax rotation was used. The variance rate, explained by the given four factors; Personal factors (PF),

Organizational factors (OF), Environmental factors (EF) and Internal Audit (IA) was 60.284%, as showed in the Factor-weight-matrix table (Table 5.12), which is higher than the required 60% (Malhotra Simon, 2008).

Kaiser's criterion of Eigen values greater than one and the scree plot were applied for factors' extraction. Table 5.12 presents results of factors' extraction on the basis of the Eigen values greater than 1 criterion, which resulted in identification of four factors. The first factor explained 23.751% of the total variance and other two factors explained the remaining variance in the model. Generally, the statistical requirements were fulfilled by all factors (communality > 0.5).

Table 5.11: Factor-weight-matrix

Total variance explained							
Factor	Initial Eigenvalues			Extraction sums of squared loadings			Rotation sums of squared loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	3.563	23.751	23.751	3.563	23.751	23.751	3.391
2	1.988	13.257	37.008	1.988	13.257	37.008	1.817
3	1.224	8.163	45.171	1.224	8.163	45.171	1.771
4	1.186	7.904	53.075	1.186	7.904	53.075	1.609
5	1.081	7.209	60.284	1.081	7.209	60.284	1.295
6	.988	6.588	66.871				
7	.874	5.825	72.697				

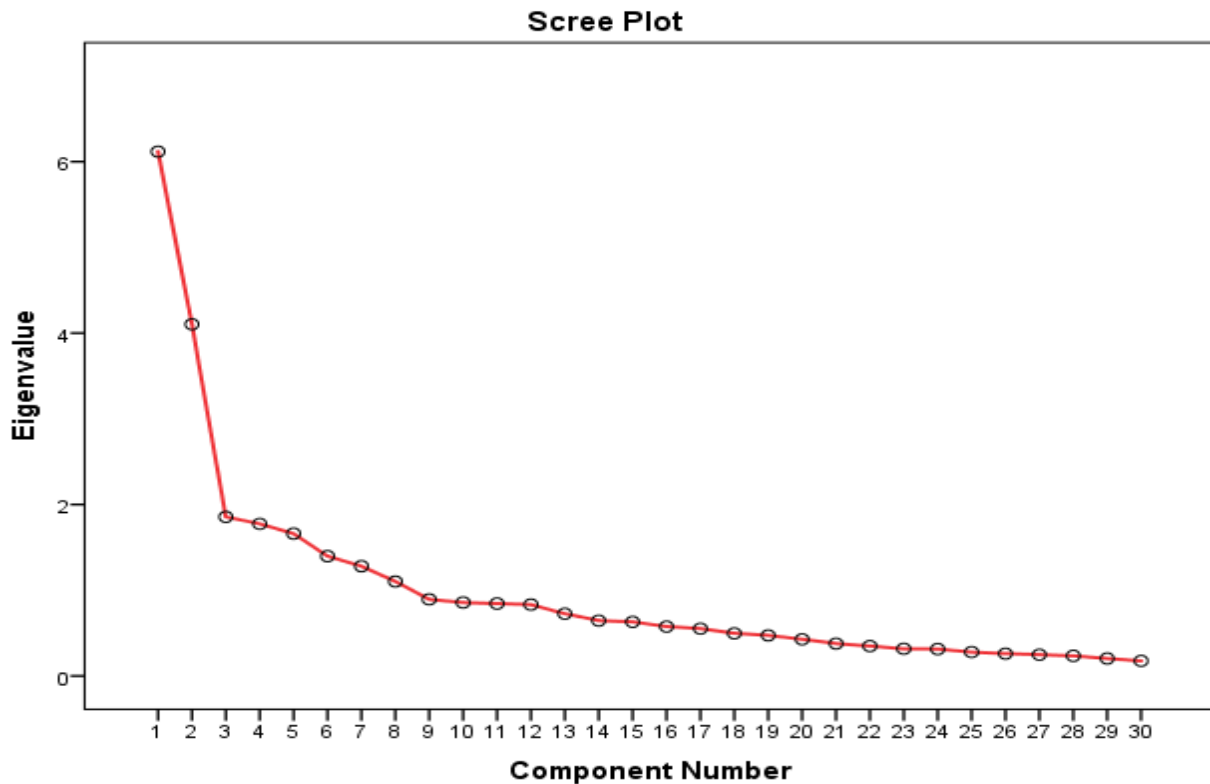
Note: Extraction Method: Principal Component Analysis

Source: Primary data (2017)

Table 5.12 shows Eigen values that were extracted using Principal Component Analysis. The key concept of factor analysis is that multiple observed variables have similar patterns of responses because they are all associated with a latent variable. For example, respondents may have responded similarly to questions about Organisational Factor, Personal Factor or Environmental Factor, which are all associated with the latent variable internal audit findings. Thus, in factor analysis, the number of factors are equal to number of variables (Hair *et al*, 2006). Overall variance in the observed variable is captured by each factor and later the factors are listed in order of variation. (Malhotra Simon, 2008). The Eigen value as revealed in the computations is a measure of variance of the observed variable explained by a factor. A factor with an Eigen value ≥ 1 explain indicates more variations than a single observed variable (Hair *et al*, 2006). As suggested by Hair *et al* (2006), the factors that explained the least amount of variance were generally discarded.

Figure 5.30 below shows the Scree plot test used to confirm the maximum number of factors extracted in this model under Eigen values greater than one criterion. The slope of the Scree plot revealed extraction of three factors, which confirmed extraction of the same number of factors through the Eigen values criterion

Figure 5.30: The Scree plot confirm the maximum number of factors extracted in this model



Source: Primary data (2017)

In a bid to confirm the above results, cross validity check method was used and subsequently factor analysis on datasets was applied (Malhotra Simon, 2008). During the process of cross validity, the criteria for number of elements was also fulfilled after the bisection of data. During the analysis there was no difference between the factor structure of the bisected and complete data which implied that the results are validated.

Table 5.12: Results of Promax rotation

Variable	Component			
	1	2	3	4
OF1	.930			
OF7	.843			
OF8	.829			

OF13	.827			
OF12	.798			
OF14	.601			
OF16	.521			
OF15	.511			
OF4	.501			
EF1		.512		
EF2		.651		
EF3		.562		
PF1			.556	
PF3			.631	
PF2			.565	
DF1				.403
DF3				.312
DF2				.321
Principal Component Analysis Promax with Kaiser Normalization, 4 iterations				

Source: Primary data (2017)

Note: *OF1..., PF1..., EF1...and DF1...are Acronyms of Organisational Factor1..., Personal Factor1..., Environmental Factor1, and Dependent Factor1...respectively.*

Table 5:13 above, reveals the relationship of each variable to the underlying factor expressed by the factor loading. The table shows the output of factor analysis looking at indicators of Organisational Factor, Personal Factor, Environmental Factor and Dependent Factor, with nineteen variables and four resulting factors (i.e. 1, 2, 3, and 4). The variable with the strongest association to the underlying latent variable 1, is OF1, with a factor loading of 0.930.

Since factor loadings can be interpreted like standardized regression coefficients, one could also say that the variable OF1 has a correlation of 0.930 with Factor 1. This would be considered a strong association for a factor analysis in most research fields (Malhotra Simon, 2008).

5.4.3 Exploring factor analysis

Factor analysis was used to explore the interrelationships among a set of variables (Julie Pallant, 2016). It is an interdependence technique, whose primary purpose is to define the underlying structure among the variables in the analysis (Hair et al, 2006). It is a multivariate statistical technique that is used to digest the information contained in a large number of variables as a smaller number of subsets or factors (Hair et al., 2003). It is also treated as a foundation of structural equation modeling along with the multiple regression analysis in statistical analysis (Hair et al, 2006).

Generally, metric data is a requirement in factor analysis which was satisfied in this study because of the Likert-scale that was used in the questionnaire. The requirement of the number of population, that data should be three times larger than the examined variables was also fulfilled (Malhotra Simon, 2008). The table below provides the descriptive statistics of the scale items from sections 5.2 and 5.3 above.

Table 5.13: Descriptive statistics of scale items

Variables	Min	Max	Mean	Std. Deviation
OF1	1	5	4.94	.524
OF8	1	5	4.79	.627
OF12	1	5	4.65	.770
OF4	1	5	4.03	.398
OF6	1	5	3.89	1.042
OF16	1	5	4.63	.610
OF7	1	5	4.93	.378
OF13	1	5	4.77	.657
OF14	1	5	4.65	.760
OF15	1	5	4.52	.654
OF2	1	5	2.85	.938
OF5	1	5	2.40	.896
OF9	1	5	2.79	1.010
OF10	1	5	3.08	.821

OF11	1	5	2.85	1.069
OF13	1	5	2.94	1.114
EF1	1	5	2.40	.896
EF2	1	5	2.49	1.012
EF4	1	5	3.08	.821
PF1	1	5	3.44	.769
PF3	1	5	3.34	1.114
PF2	1	5	2.62	.903
DF1	1	5	2.82	.932
DF3	1	5	2.94	1.037
DF2	1	5	2.06	1.074

Source: Primary data (2017)

Note: Min, Max and Std. Deviation are Acronyms of Minimum, Maximum and Standard deviation. OF1..., PF1..., EF1...and DF1...are Acronyms of Organisational Factor1..., Personal Factor1..., Environmental Factor1, and Dependent Factor1...respectively.

In the analysis of the parameters effective response to internal audit, principal component analysis with promax rotation and Kaiser Normalization were utilized. Using the principal component analysis, the main objective was to determine the smallest number of factors that explain the most variances.

5.4.4 Pearson's Correlations between Latent Factors / Constructs

In this study bivariate Pearson's correlation was also used to assess the linearity in data. It is crucial in initial analysis to know the level of correlation in data and to figure out if deviations from linearity affect correlations. Results revealed that all latent factors were positively and significantly correlated with each other ($p < .05$).

Table 5.14: Pearson's Bivariate Correlations between latent factors / constructs

Correlation Analysis					
Internal Audit (IA)	Pearson Correlation	1			
Environmental factors (EF)	Pearson Correlation	.387**	1		
Personal factors (PF)	Pearson Correlation	.354**	.633**	1	

Organizational factors (OF)	Pearson Correlation	.682**	.689**	.679**	1
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** Correlation is significant at the 0.01 level (2-tailed).

Source: *Primary data (2017)*

5.4.5 Outliers for Latent Factors

After conception, the constructs (n=22) were checked for the presence of univariate and multivariate outliers by calculating Mahalanobis distance respectively. In the case of multivariate outliers, all cases with D^2 greater than the Chi Square (χ^2) critical values of 37.871 corresponding with degree of freedom (df) = 21 at $p = 0.001$ were established. Results of the computation revealed that the maximum Mahalanobis distance (D^2) was 25.130 than the χ^2 critical values of 37.871 for $df = 21$ ($p = 0.001$). This confirmed that there were no multivariate outlier values in the data at this stage.

5.4.6 Testing for normality of data of latent factors/constructs

Normality test is used to determine if a dataset is well-modeled by a normal distribution (Field A.2006). Normality test of data was checked with the two popular normality tests i.e. Kolmogorov-Smirnov test and Shapiro-Wilk test. The results of the test are shown in table 5.15 below. Statistical tests for both tests were found not significant as shown in table 5.15 below, which indicated no departure from the normality of the data. Additionally, Skewness and Kurtosis statistics found less than ± 1 , which also presented no deviation from data normality. Consequently, it was presumed that there was no major problem of a lack of normality in the data used in this thesis.

Table 5.15: Tests for normality

Construct	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Internal Audit (IA)	.278	61	.067	.235	61	.066
Environmental factors (EF)	.234	61	.070	.478	61	.068
Personal factors (PF)	.344	61	.078	.374	61	.077
Organizational factors (OF)	.288	61	.083	.348	61	.084

Source: *Primary data* (2017)

5.4.7 Structural equation modelling (SEM)

Structural equation modelling (SEM) is a powerful, yet complex, analytical technique (Hair et al, 2010). It is a method for measuring relationships among unobserved variables and has been in use since early in the 20th century (Kline, R. B. (2005). Structural Equation Modelling (SEM) was used to test the proposed model. To test the proposed relationships among the study variables, structural equation modelling (SEM) was conducted using the AMOS 25 program (Arbuckle, 2010).

There are three characteristics of SEM which make it a unique statistical technique in multivariate data analysis.

- I. Approximation of multiple interrelated dependence relationships.
- II. Integrating latent variables not measured directly.
- III. Defining a model.

Following the commendation of Anderson and Gerbing (1988), the SEM analysis followed a two-stage process. First, construct validity was assessed by running a confirmatory factor analysis (CFA) for the measurement model of each construct. Second, the structural equation model was estimated for the Conceptual Model. The model developed in this thesis was based on structural equation modelling (SEM) and was used for testing the presumed model, confirmation of hypotheses, testing the applied scales and describing relationships between the relevant variables used in the thesis.

The variables of SEM model can be perceptible, quantitative sometimes referred to as manifest variables, or latent variables that can be determined by the process of manifest variables. The most expressive form of the model is the space diagram that contains all variables of the model and the connections between them (Hair et al, 2010). Thus the model can be divided into two parts a measurement model and a structural model. The measurement model part is a validating factor model in which the measurement of latent variables with manifest variables takes place. The validating factor analysis is the first step to determining an applicable model in the frame of structural equation modelling. According to Neumann-Bodi (2013), we cannot move to the next step in model building until the validity of the measurement model is realized. In the structural part the cause and effect relations among the variables are estimated (Neumann-Bódi, 2013). The two parts are not

separated of course, the estimation of the full model is realized in the same time. Furthermore, Neumann-Bódi, (2013), contends that the difference between the SEM and validity factor analysis is that in the factor analysis there are no assumed one-way relations between the latent variables that means there are no cause and effect relationships between the factors while the SEM determines these connections as well.

The most important scientific conclusion of McDonald, (2002) is the quality of fit of the structural equation model. It is not applicable if the requirement related to the quality of the fit of the two part (measurement model and structural model) is not fulfilled. A model can be handled as applicable if first we fit the measurement model as fit the structural model (Kline, 2010). In the case of latent variable modelling the structural equation modelling is frequently used. The two most common types of this model are the covariance based structural equation modelling - CB-SEM and the partial least squares structural equation modelling (Hair et al, 2010). In this study, the objective was to test a model that is based on theories and the PLS model is not applicable to validate the applicability of the complex model (Hair et al, 2010), CB-SEM model was utilized and latent variables and scales.

During structural equation modeling the estimation methods that were applied in covariance analysis (Maximum-Likelihood and Generalized-Least-Square) assume the normal distribution of the variables which was tested with two different statistical methods Kolmogorov-Smirnov, Shapiro-Wilk (Anderson & Gerbing, 1988). The examination of Mahalanobis-distance makes it possible to filter the variety between each case to ensure the multi-normal distribution. The examination of Mahalanobis-distance makes it possible to filter the variety between each case to ensure the multi-normal distribution. During the study, there was no case when the given value was higher than it was required in the literature (Anderson & Gerbing, 1988).

Before starting the analyses it was important to check and clean the collected data and handle the missing values. The largest problem is given by the missing elements but in this case all of the people filled the questionnaire completely.

5.4.8 Analysis of measurement model

The analysis of the measurement model was taken into concern following validity and reliability indices based on the work of Henseler et al, (2009) and Nemann-Bódi, (2013).

- I. Examination of discriminate validity with the analysis of the difference between AVE and CR.
- II. Examination of direct standardised weights related to reflective indicators (expected value above 0.7) and explained variance (expected value above 0.5).
- III. Examination of average variance extracted of latent variable (expected value above 0.5).
- IV. Examination of composite reliability of latent concept (expected value above 0.7).

5.4.9 Reliability measurement

The reliability of thesis tools was put into consideration using reliability analysis of questionnaires. Reliability analysis was done on all questions under the four variables using Cronbach Alpha Coefficient. Cronbach alpha is mentioned as a measure of internal consistency (Bonett & Wright, 2014). It is one of the most broadly utilized assessments of reliability in the social sciences (Bonett & Wright, 2014). Results of the analysis were indicated in the table 5.16.

Table 5.16: Reliability

Variable	Cronbach's Alpha
Internal Audit (IA)	.798
Environmental factors (EF)	.784
Personal factors (PF)	.851
Organizational factors (OF)	.890

Source: Primary data (2017)

From the Table above, all the reliability statistics measured well above 0.7 as recommended by Garaus and Wagner (2016), thus representing good internal consistency reliability (Julie Pallant, 2016).

5.4.10 Composite reliability

Composite reliability was calculated on all the variables under the study. Operationally, reliability is defined as the internal consistency of a scale, which assesses the degree to which the items are homogeneous. Thus, in this study the composite reliability was predicted to assess the internal consistency of the measurement model as revealed by Jayasingh & Eze, (2015). For reflective measures, all items are viewed as parallel measures capturing the same construct of interest. Thus, the standard approach for evaluation, where all path loadings from construct to measures are expected to be strong (i.e. ≥ 0.70) is used.

Composite reliability measures the overall reliability of a set of items loaded on a latent construct (Hair et al, 2006). Value ranges between zero and one. Values greater than 0.70 reflect good reliability. Between 0.60 – 0.70 is also acceptable if other indicators of the construct's validity are good (Hair et al, 2006)

The formula for calculating composite reliability is as follows:

$$\text{Composite Reliability } (\rho) = \frac{(\sum \lambda_i)^2}{[(\sum \lambda_i)^2 + \sum(\delta_i)]}$$

Where λ is the standardized factor loadings and δ is the indicator measurement error. This can be explained as square of sum of standardized factor loadings divided by square of sum of loadings plus sum of indicator measurement errors.

$$\text{Composite Reliability (CR)} = \frac{(\text{square of the summation of the factor loadings})}{\{(\text{square of the summation of the factor loadings}) + (\text{summation of error variances})\}}$$

For example, the composite reliability for the dimension 'Organization factors-OQs,' was calculated as follows:

$$\text{CR} = \frac{(0.843+0.837+0.798+0.801)^2}{(0.843+0.837+0.798+0.801)^2 + (0.289351+0.299431+0.363196+0.358399)}$$

CR=0.89136517

Therefore, the composite reliability for the construct ‘Organization factors-OQs’ is found to be 0.89. Correspondingly, composite reliabilities for other constructs were estimated. The composite reliability and estimates of all constructs are presented in Table 5.17 below. All composite reliabilities of constructs have a value higher than 0.70, indicating adequate internal consistency apart from Personal Factors-PF. The construct was taken on based on Hair et al (2006), whose studies suggested that if the CR is between 0.60 – 0.70 it is also acceptable if other indicators of the construct’s validity are good. In this study, the following measurement pieces were excluded from the calculation; OF6, OF10, OF13, OF2, OF11, OF9, OF5, DF1, DF3 and DF2 as they had low standardised estimates.

Table 5.17: Composite reliability

	A	B	C	D	E	F	G	H
1					$B = \sum A * \sum A$	$C = 1 - (A * A)$	$D = \sum C$	$E = B / (B + D)$
2				A	B	C	D	E
3	Construct			Estimates	$(\sum \lambda y_i)^2$	$\acute{e}i$	$\sum \acute{e}i$	$(\sum \lambda y_i)^2 / [(\sum \lambda y_i)^2 + (\sum \acute{e}i)]$
4	OQ8	←	OF	0.843	10.751841	0.289351	1.310377	0.89136517
5	OQ4	←	OF	0.837		0.299431		
6	OQ12	←	OF	0.798		0.363196		
7	OQ3	←	OF	0.801		0.358399		
8	EQ2	←	EF	0.751	4.096576	0.435999	1.614634	0.71728688
9	EQ3	←	EF	0.562		0.684156		
10	EQ5	←	EF	0.711		0.494479		
11	PQ1	←	PF	0.556	3.606201	0.690864	1.785759	0.668810785
12	PQ3	←	PF	0.631		0.601839		
13	PQ5	←	PF	0.712		0.493056		

Source: Primary data (2017)

Note: *OF1...*, *PF1...*, and *EF1...* are Acronyms of Organisational Factor1..., Personal Factor1..., and Environmental Factor1... respectively.

5.4.11 Discriminant validity

Discriminant validity accepts that items must associate higher amongst themselves than what they associate with other items from other constructs that are theoretically not too related (Zait & Berteau, 2011). Discriminant validity was assessed by a method, suggested by Hair et al (2006), in which the average variance extracted for each construct is compared with the corresponding squared inter-construct correlations (SIC), and the AVE estimate consistently larger than the SIC estimates indicates support for discriminant validity of the construct. This procedure was used in this research to assess the discriminant validity of each of the constructs.

5.4.12 Average Variance Extracted (AVE)

In classical test theory, average variance extracted (AVE) is a measure of the amount of variance that is captured by a construct in relation to the amount of variance due to measurement error.

Table 5.18: Average Variance Extracted

			B=A*A	C=sumB	D=1-B	E=sumD	F=C/(C+E)	
			A	B	C	D	E	F
Constructs			Estimate	λy_i^2	$\sum \lambda y_i^2$	ϵ_i	$\sum \epsilon_i$	$\sum \lambda y_i^2 / (\sum \lambda y_i^2 + \sum \epsilon_i)$
OF1	<---		0.866	0.74995	4.71094	0.250044	2.28906	0.672991
OF7	<---		0.898	0.80640		0.193596		
OF8	<---		0.664	0.44089		0.559104		
OF13	<---		0.862	0.74304		0.256956		
OF12	<---		0.888	0.78854		0.211456		
OF14	<---		0.660	0.43560		0.564400		
OF16	<---		0.864	0.74649		0.253504		
OF15	<---		0.888	0.78854		0.211256		
OF4	<---		0.799	0.63897		0.310453		
EF1	<---		0.745	0.55502	1.25058	0.444975	0.749419	0.6252905
EF2	<---		0.834	0.69555		0.304444		
EF3	<---		0.862	0.74304		0.221456		
PF1	<---		0.690	0.47679		0.523210	2.123641	0.5752718
PF3	<---		0.678	0.45968		0.540316		
PF2	<---		0.799	0.63897		0.361024		

Source: Primary data (2017)

Note: *OF1..., PF1..., EF1...and DF1...are Acronyms of Organisational Factor1..., Personal Factor1..., Environmental Factor1, and Dependent Factor1...respectively.*

Table 5.18 shows the results of Average Variance Extracted. In order to estimate the AVE, the factor loading values (standardised estimates) in the confirmatory factory analysis results are used (Jayasingh & Eze, 2015).

The following formula is used to calculate the Average Variance Extracted (AVE):
$$V\eta = \frac{\sum \lambda_i^2}{\sum \lambda_i^2 + \sum \epsilon_i}$$

This formula is stated in the following method: AVE = {(summation of the squared of factor loadings)/ {(summation of the squared of factor loadings) + (summation of error variances)}. AVE, as suggested by Fornell and Larcker (1981), must exclude items with standardised coefficient ≤ 0.50 . As such, the following measurement items were excluded for their low scores; OF6, OF10, OF13, OF2, OF11, OF9, OF5, DF1, DF3 and DF2. The AVE estimates from this thesis ranged from 0.575 and 0.6723, which exceeds the threshold of 0.40, as recommended by Kuo and Hsu (2001).

5.4.13 Environmental factors (EF)

The measures of fit for environmental factors (EF) are summarized by the TLI TLI=0.857 and the CFI (0.887). The value of the CFI approximates to .9 and hence the model is judged to have an acceptable fit. Following the computations, all measures associated with the construct are statistically significant. For each measure, the null hypothesis that the true value of the coefficient is zero is rejected at the .001 level of significance. It can be observed that all measures have the correct positive signs. With respect to the SMCC, all measures for environmental factors (EF) have an acceptable coefficient, being very close to or greater than 0.3. Thus, all observed variables are strongly significantly associated with environmental factors. Composite reliability (0.966) exceeds the minimum threshold of 0.7 while the average variance extracted of (0.389) is lower than the minimum threshold of .5. From the results, an overall assessment is that the model is acceptable.

From the general point of view, the examination of the fit of models demonstrates that the assumed model is applicable to explain the correlation between the variables. The fit of model and the quality of the model can be determined by several measures. During the

analysis of the fit of structural models - in the case of validity factor analysis as well - the following fit indices were examined based on Hooper et al (2008), Hair et al (2010) and Byrne (2010). Using Confirmatory Factor Analysis (CFA), the following statistical indicators fared as follows with standards.

Table 5.19: Summary of Confirmatory Factor Analysis (CFA) results

CFA for model fit: Standards	CFA for model fit: Results
Chi-square value < 3	Chi-square value = 2.65
Composite Fit Index (CFI) > 0.9	Composite Fit Index (CFI) = 0.943
Augmented Goodness of Fit Index (AGFI) > 0.9	Augmented Goodness of Fit Index (AGFI) = 0.962
Tucker-Lewis Index (TLI) > 0.9	Tucker-Lewis Index (TLI) = 0.978
Goodness of Fit Index (GFI) > 0.9	Goodness of Fit Index (GFI) = 0.963
Normed Fit Index (NFI) > 0.9	Normed Fit Index (NFI) = 0.924
Incremental Fit Index (IFI) > 0.9	Incremental Fit Index (IFI) = 0.987
Random Measurements of Standard Error Approximation (RMSEA) < 0.08	Random Measurements of Standard Error Approximation (RMSEA) =0.056

Source: Primary data (2017)

5.4.14 Nomological validity

According to Bagozzi (1988), he asserts that Nomological validity is the degree onto which a construct behaves as it should within a system of related constructs. It is tested by examining whether or not the correlations between the constructs in the measurement model make sense (Hair et al, 2006). This type of validity can be supported by demonstrating that the CFA latent constructs are related to other latent constructs in the model in a way that supports the theoretical framework. For three construct model proposed in this research study, all constructs were defined as positive and significant. Therefore, to demonstrate nomological validity the latent constructs must be positively related as suggested in the theoretical model (Hair et. al., 2006). The construct correlations (estimates) were used to assess the nomological validity of the model.

5.4.15 Construct validity

Construct validity is measured using factor loadings for each measurement scale. Construct validity is concerned with the selection of the measurement instrument and its capability to capture the latent variable (Zait & Berteau, 2011). In this study, the factor loadings exceeded the recommended threshold of 0.5 as detailed in Table 5.19 below (Fornell & Larcker, 1981).

Table 5.20: Construct validity

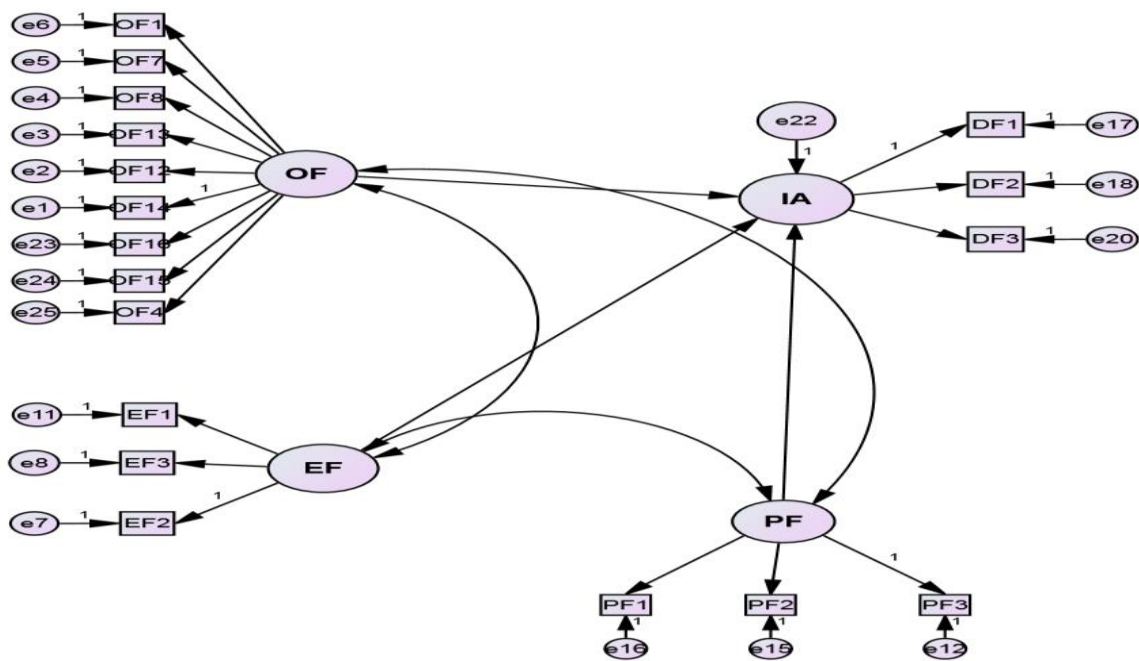
Constructs	Construct validity
Criteria	≥0.5
Environmental factors 0.764	
Personal factors	0.787
Organization factors	0.709

Source: Primary data (2017)

5.4.16 Confirmatory Factor Analysis (CFA)

CFA is a way of “testing how well variables measured represent a smaller number of constructs” (Hair et al., 2006). The study had the purpose of confirming the explored factor structure as illustrated below in figure 5.31.

Figure 5.31: Hypothesized CFA model derived from EFA



Source: Primary data

Note: **OF, EF, PF and IA** are Acronyms of Organization factors, Environmental factors, Personal factors and Internal Audit. **OF, EF and PF** are antecedents or independent variables within this framework as each is assumed to predict to Internal Audit. Similarly, internal audit is the dependent variable in the model as it is predicted by independent variables

From the Figure 5:31 above **OF, EF, PF and IA** are connected to one another by straight single-headed arrows and curved double-headed arrows. In structural equation modeling, a straight single-headed arrow is used to represent a unidirectional path. The arrow originates at the independent variable and points toward the dependent variable. For example, the straight single-headed arrow from **PF** to **IA** represents the hypothesis that Personal factors (PF) predicts effective response to internal audit recommendations (IA).**-
/*//

In contrast, curved double-headed arrows connecting two variables represents covariance, or correlation, between variables. A curved arrow connecting two variables means that the two variables are expected to co vary, but no hypothesis is made regarding any causal influence between them. For example, the two-headed curved arrow connecting **EF** to **PF** means that no hypothesis is made as to which variable determines or predicts the other.

Perhaps EF causes PF, perhaps PF causes EF, perhaps each has some causal influence on the other, or perhaps their correlation is due to the influence of some shared but unmeasured variable. The model presented in Figure 5.31 proposes that each of the three antecedent variables is expected to have a direct effect on internal audit.

5.4.17 Goodness of fit statistics of revised CFA model

The conceptual model developed earlier was from the literature and is explained in chapter 3. The estimated structural equation model for the conceptual model is presented in the Table 5.20) below. The measures of fit for the model are summarized by TLI (.978), CFI (.943) and RMSEA (.056). Both TLI and CFI are in the recommended minimum threshold of 0.90. However, the RMSEA lies contentedly within the maximum threshold of .08. Consideration of the significance of the paths in the structural model indicates that all of the 14 estimated coefficients associated with the construct are statistically significant. For the 14 measures, the null hypothesis that the true value of the coefficient is zero is rejected at the .001 level of significance (identified by the symbol ***).

Table 5.21: Goodness of fit statistics of revised CFA model

Constructs and Measures	Coefficients ^a		Standard Error	Probability ^c	SMCC ^d
	Unstndsd	Stndsd			
StructuralModel	Goodness of fit: 0.963 TLI=.985, CFI=.945, RMSEA=.056				
Organization Factors	Construct reliability (CR)=.958, Variance extracted (VE)=.650				
OF1←PF	1.833	0.875	.074	***	.500
OF7←PF	0.074	1.108	.018	***	
OF8←PF	0.364	1.350	.052	***	
OF13←PF	1.410	0.535	.101	***	.407
OF12←PF	1.130	1.402	.146	***	
OF14←PF	1.164	1.261	.026	***	
OF16←PF	1.028	0.671	.115	***	.450
OF15←PF	1.103	0.535	.156	***	
OF4←PF	1.392	1.412	.126	***	
Environmental	Construct reliability (CR)=.820, Variance extracted (VE)=.450				
EF1←PF	1.025	.679	.085	***	.460

EF2←PF	1.171	.726	.092	***	.527
EF3←PF	1.028	.671	.116	***	
Personal	Construct reliability(CR)=.956, Variance extracted (VE)=.359				
PF1←EF	1.000	.541	N/A	N/A	.393
PF3←EF	1.105	.631	.105	***	.398
PF2←EF	1.125	.639	.106	***	.409

Source: Primary data (2017)

Notes

a. Estimated regression coefficients: Unstdnsd=Unstandardized, Stnsd=Standardised

b. Standard error of estimated unstandardized coefficient

c. Probability of at value equal to or greater than actual value in a two-tailed test for significance of coefficient under the null hypothesis that the true value is zero. The symbol *** indicates that the null hypothesis is rejected at the .001 level of significance.

d. SMCC=squared multiple correlation coefficient

(TLI=Tucker-Lewis index, CFI=Comparative fit index, CR=Construct reliability, VE= Variance extracted)

5.4.18 Basics of nomological analysis of the structural model

The Table 5.21 presents the results of the confirmatory factor analysis (CFA) for the measurement models of all three constructs of Organisational factors (OF), Personal factors (PF) and Environmental factors (EF). The analyses are evaluated in terms of the TLI and the CFI measures of fit; the statistical significance of the estimated coefficients, squared multiple correlation coefficient, composite reliability and average variance extracted are significantly associated with their observed variables because all the estimation parameters of those variables are acceptable, which shows that signs are positive.

Table 5.22: Basics of analysis of the structural model

Constructs and Measures	Coefficients ^a				
	Unstan	Stand	Stand.Error ^b	Probability ^c	SMCC ^d

Organisational factors	TLI=0.963	CFI=0.975	CR=0.867	VE=0.441	
OF1←PF	1.000	0.541	N/A	N/A	0.473
OF7←PF	1.011	0.641	0.106	***	0.493
OF8←PF	1.211	0.741	0.109	***	0.493
OF13←PF	1.000	0.566	0.115	***	0.523
OF12←PF	1.023	0.575	0.166	***	0.480
OF14←PF	1.000	0.753	0.112	***	0.491
OF16←PF	1.210	0.748	0.115	***	0.393
OF15←PF	1.211	0.741	0.109	***	0.493
OF4←PF	1.023	0.575	0.115	***	0.393
Personal factors	TLI=0.938	CFI=0.919	CR=0.820	VE=0.420	
EF1←PF	1.025	0.789	0.166	***	0.493
EF2←PF	1.000	0.786	0.105	***	0.499
EF3←PF	1.176	0.645	0.118	***	0.394
Environmental factors	TLI=0.857	CFI=0.887	CR=0.966	VE=0.389	
PF1←EF	1.400	0.655	0.111	***	0.492
PF3←EF	1.054	0.654	0.109	***	0.392
PF2←EF	1.104	0.755	0.115	***	0.383

Source: Primary data (2017)

Notes

- a. Estimated regression coefficients: *Unstan* = Unstandardized, *Standed* = Standardised
- b. *Stand.Error^b* = Standard error of estimated unstandardized coefficient
- c. Probability of a *t* value equal to or greater than actual *t* value in a two-tailed test for significance of coefficient under the null hypothesis that the true value is zero. The symbol *** indicates that the null hypothesis is rejected at the .001 level of significance.
- d. *SMCC* = squared multiple correlation coefficient

(TLI = Tucker-Lewis index, CFI = Comparative fit index, CR = Construct reliability, VE

= Variance extracted)

The measures of fit for the TLI and the CFI are evaluated in the context of suggested minimum threshold values of .9 (Arbuckle, 2010). The statistical significance of coefficients is evaluated in terms of the results of a hypothesis test with the null hypothesis that the true coefficient is zero using a significance level of 5%.

The SMCC is evaluated in terms of the minimum value of 0.3. Construct reliability (CR) should have the lower threshold, which is equal to 0.7 and the variance extracted (VE) should have the lower threshold, which is equal to 0.5. The squared multiple correlation coefficient (SMCC) should be at least 0.3 (Hair et al., 2006).

5.4.19 Organizational factors (OF)

For the construct of organizational factors (OF), measures of fit according to the TLI=0.963 and the CFI =0.975 exceed the minimum threshold of 0.9. Thus the model is judged to be acceptable in terms of fit. As can be perceived from the table 5.21, all measures associated with the construct are statistically significant. For each measure, the null hypothesis that the true value of the coefficient is zero is rejected at the .001 level of significance. All measures have the correct positive signs. With respect to the SMCC, all measures for organizational factors (OF) have an acceptable coefficient ranging from 0.3 to 0.5. Composite reliability (0.820) exceeds the minimum threshold of 0.7 while the average variance extracted of 0.490 is marginally lower than the minimum acceptable threshold of 0.5. From the results, an overall assessment is that the measurement model for perceived value is acceptable.

5.4.20 Personal Factors (PF)

With respect to the constructs of personal factors (PF), both the TLI and the CFI measures of fit approximate to 1 as shown in Table 5.21. Thus the measurement model is evaluated as very acceptable. All measures associated with the construct are statistically significant. For each measure, the null hypothesis that the true value of the coefficient is zero rejected at the .001 level of significance. As observed all measures have the correct positive signs. With respect to the SMCC, all measures for perceived quality have an acceptable

coefficient ranging from 0.4 to 0.5. Composite reliability (0.820) exceeds the minimum threshold of 0.7 while the average variance extracted of 0.441 approximates to the minimum acceptable threshold of 0.5. From the results, an overall assessment is that the measurement model for personal factors (PF) is acceptable.

5.4.21 Structural Model Evaluation and Hypotheses Testing

A research hypothesis is a “*statement created by researchers when they speculate upon the outcome of a research or experiment*” (Shuttleworth and Wilson, 2008). It is a prediction of the research study. Research hypothesis is important for formulation of theory to specifically conclude what is true and what is not true (Ranjit, 2005). There are two types of hypothesis that is a null and alternative (research) hypothesis. The alternative (research) hypothesis developed in chapter 3 are: (H1_a) There is a positive relationship between Environmental factors and internal audit, (H2_a) There is a positive relationship between personal factors and internal audit ,and (H3_a) There is a positive relationship between organizational factors and internal audit. The research hypothesis developed in chapter 3 were directional hypothesis. It was predicted that there is likely to be a positive relationship between environmental, personal and organizational factors as a review of literature suggested. The null hypothesis therefore are: (H1₀) There is no relationship between Environmental factors and internal audit, H2₀) There is no relationship between personal factors and internal audit and (H3₀) There is no relationship between organizational factors and internal audit. A null hypothesis is the statement to be tested and alternative (research) hypothesis is denial of the null hypothesis (Kaur, 2013).

The hypothesis should be empirically tested if logical deductions and inferences are to be made from it. The general goal of a hypothesis test is to rule out chance (sampling error) as a plausible explanation for the results from a research study (Kabir, 2016). The hypothesis is tested by setting a statistical significance level. A significance level of 1% was used in this research giving 99% confidence level of the results from the study.

This subdivision presents results of hypotheses testing. Table 5.24 shows three hypotheses represented by causal paths (H1₀, H2₀, H3₀) that were utilized to test the relationships between the latent constructs. The constructs used in the proposed theoretical model were classified in two main groups: exogenous and endogenous constructs. Exogenous constructs were Organizational Factors (OF), Personal Factors

(PF) and Environmental factors (EF) while endogenous construct was Internal Audit (IA). In some cases, hypotheses are not supported because the process of modification was applied to the Conceptual Model; hypotheses will be rejected if the process is not applied to the Modified Conceptual mode. A summary of the hypotheses, associated paths and results presented in Table 5.23 below.

Table 5.23: Tests of hypotheses

Construct	Path Coefficient	Hypothesis
Environmental factors	Environmental factors → Internal audit	H1 ₀
Personal factors	Personal factors → Internal audit	H2 ₀
Organization factors	Organization factors → Internal audit	H3 ₀

Source: Primary data (2017)

Likewise, in testing the hypotheses, results shown in Table 5.24 revealed that the three hypotheses i.e. H1_a, H2_a and H3_a were positive and statistically significant. The results suggest that standardized estimates for these hypotheses ($\beta = 0.77, 0.65$ and 0.34 respectively) indicate statistical significance and thus showing support for these hypotheses. While, three hypotheses i.e. H1₀, H2₀ and H3₀ having standardized estimates ($\beta = 0.093, 0.077, 0.098$, respectively) were found statistically not significant. Hence, these hypotheses were rejected.

Table 5.24: Summary of the Tests of hypotheses

Construct	P-Value	Hypotheses	R/hip	SRW	Supported	
Environmental (EF)	***	H1 _a	EF → IA	0.34	Yes	
Personal (PF)	***	H2 _a	→ PF	IA	0.65	Yes
Organization (OF)	***	H3 _a	OF → IA	0.77	Yes	

Source: Primary data (2017)

Notes: H1_a, H2_a, H3_a= Hypotheses 1, 2 and 3.

EF= Environmental factor, **PF=** Personal factor and **OF=** Organisational factor

***P-Value**-Probability of a t value equal to or greater than actual t value in a two-tailed test for significance of coefficient under the null hypothesis that the true value is zero. The symbol *** indicates that the null hypothesis is rejected at the .001 level of significance.*

***SRW** = Standard Regression weights*

5.5.1 H1_a: There is a positive relationship between Environmental factors (EF) and internal audit

The path coefficient estimate of H1₀ was 0.34, and this advocates a significant relationship between EF and IA. The Sig.value reveals a 0.01 level of confidence affirming that the hypothesis is significant and supported.

5.5.2 H2_a: There is a positive relationship between Personal factors (PF) and internal audit.

The path coefficient estimate of H2_a was 0.65, and this supports a significant relationship between PF and IA. The Sig.value reveals a 0.01 level of confidence which then supports the hypothesis and affirming that it is significant.

5.5.3 H3_a: There is a positive relationship between Organization Factors (OF) and internal audit.

As revealed from the table 5.24 above, the path coefficient estimate of H3_a was 0.745, and this endorses a significant relationship between OF and IA. The Sig.value reveals a 0.01 level of confidence which then accepts the hypothesis is significant and supported.

5.5 Summary of the chapter

From the research above many statistics were calculated, ranging from descriptive to structural equation modeling. The kernel of the research study was to use structural equation modeling to estimate the proposed conceptual model and indeed this was achieved. Screening of dataset was carried out before executing structural equation modeling (SEM) because SEM is very sensitive to such matters. Results revealed that there were very few outliers; it was, however, decided to retain some cases, as there was enough evidence that these outliers were not part of the entire population (Hair et al, 2006).

Skewness and kurtosis were also used to investigate normality of the data. Results suggested that data were normally distributed.

Both exploratory and confirmatory factor analyses used in this study of the individual scales indicated factor structures consistent with the literature. Principal components analysis and orthogonal model with promax rotation method were applied to perform the EFA using SPSS version 25. The preferred mode of promax rotation was selected because when the promax rotation is performed, the different factors show some level of correlation amongst themselves while indicating the factor structures (Hair et al, 2006). The internal consistencies of the scales were also found to be satisfactory.

To estimate the proposed model, composite measures of the constructs (e.g. Organization factors, Personal factors and environmental factors) were used which were found to be loading on a second-order variable (IA). This was done to reduce the number of parameters to be estimated given the number of observations (Hair et al, 2006).

To test the discriminant validity of the model, exploratory factor analysis (EFA) was run across all the constructs to verify whether the items are loading properly in their respective constructs or not. The result of the EFA indicates pretty good discriminant validity result.

Once the discriminant and convergent validity of the model were tested, CFA was run to test the overall model fit. The measurement model was found to be an adequate fit to the data with $\chi^2/df = 2.65$, Goodness-of-Fit Statistic (GFI) = 0.924, AGFI = 0.962, Comparative Fit Index (CFI) = 0.943, Normed Fit Index (NFI) = 0.924, and a Root Mean Square Error of Approximation (RMSEA) of 0.046. The item-factor loadings were greater than 0.5 and significant at 0.05 level. The standardised regression weights for all measurement items were positive and above the recommend level (>0.7).

As hypothesized, the influence of the relationships between the variables under study advocates a significant relationship between organisational factors, personal factors and environmental factors on IA were explored. This implies that organization factors, personal factors and environmental factors affect the response to internal audit findings and recommendations among Uganda Government Ministries.

The generated statistical computations and the model (refer to chapter 6) highlight that internal audit recommendation response effectiveness is strongly influenced by organisational factors. In addition personal and environmental factors do have a minimal

significant impact on internal audit recommendation effectiveness in the Uganda government ministries.

The generated statistical computations and mode I (refer to chapter 6), could be applied in policy and practice in two ways;

(i) That policy makers and those in the field of internal audit could utilize the model to align their policies and programs towards being inclusive enough to articulate the issues of internal audit efficacy in Uganda government ministries with emphasis on organisational factors.

(ii) That more resources and efforts could be engaged in stakeholder coordination and ministerial awareness to guarantee effective response to internal audit efficacy in Uganda government ministries

Generally, this chapter was more of exploratory and interpretive in its nature, and its findings prove that the theories which the study adopted thus “Agency theory and Institutional theory” are very relevant and valid and they are worth adopting for any further studies related to social research. This chapter provided the background research results that was necessary for the development of the proposed model presented in Chapter 6.

CHAPTER 6: RESULTS AND MODEL DEVELOPMENT

6.1 Introduction

This chapter discusses the empirical research results of the research detailed in chapter 5. The chapter begins with an overview of the main objectives of this research. It then presents the summary of the study; summary of the specific objectives that guided the study, summary of the discussion on response rate, key findings of the thesis; the descriptive statistical results and the hypothesised relationships. It also shows the model developed from the empirical findings. The last section of the chapter presents the conclusions derived from the research.

6.2 Overview of the research

The primary objective of this study was to examine the response to internal audit findings and recommendations among government departments in Uganda. Specifically, the thesis sought to determine the level of responsiveness to internal audit findings and recommendations, to assess the effectiveness of the process of response to internal audit findings and recommendations, and to identify and examine the enablers and obstacles to effective response to internal audit findings and recommendations. The thesis developed an empirically tested hypothesized model for understanding the response to internal audit findings and recommendations among government ministries in Uganda. By extending the model of Agency theory and Institutional theory in the context of understanding the response to internal audit findings and recommendations, this study incorporated factors from other models applied in internal audit findings. In this background, the main empirical objectives of the thesis included; determining the level of response to internal audit findings and recommendations among government ministries in Uganda, assessing the adequacy of response mechanisms to internal audit findings and recommendations among government ministries in Uganda, establishing factors for effective response, examining the enablers and obstacles to effective response to internal audit findings and recommendations among government ministries in Uganda and developing an appropriate model highlighting the process and the factors for effective response to internal audit findings and recommendations among government ministries in Uganda. In line with these

objectives, a hypothesized model of the factors for effective response to internal audit findings and recommendations among government ministries in Uganda was developed, tested and validated by exploring relationships between the studied attributes.

The results and findings of the thesis on the subject under investigation are discussed in this chapter 6 along with the hypotheses tested. The results and findings were compiled by evaluating and analyzing information gathered from the respondents. The results of the thesis are presented as per the research questions, with descriptive statistical analysis used to identify percentages to answer all questions in the survey. The results are reported with input from 62 respondents who participated in the survey.

6.3 Summary and discussion

This sub-section presents the summary and discussion of the specific objectives that guided the study.

6.3.1 Empirical Objective one: Determine the level of response to internal audit findings and recommendations among government ministries in Uganda.

The first empirical objective of the study was “To determine the level of response to internal audit findings and recommendations among government ministries in Uganda.” Findings revealed that respondents’ ratings on the implementation of internal audit recommendations was average with (Mean = 3.21 and Median =3.17). The opinions were ranging from 2.97 to 3.44 at the 95% Confidence Interval for Mean. The difference in opinions as regards low and high levels of the implementation of internal audit recommendations was at 3.00 and is supported by the standard deviation (0.856).

The findings revealed that 74.2% agreed that management usually undertakes adequate response to internal audit recommendations. This implies the actions of management in responding to internal audit recommendations are adequate. In addition it was revealed that 44.4% agreed with management responding to internal audit findings and recommendations in time. This indicates that internal audit recommendations are usually not responded to in time which delays their implementation. It was also discovered that 40.3% agreed that the number of recommendations implemented by management is large. That implies that there is partial implementation of recommendations due to factors

mentioned in the next sections. Below is a table showing percentage of recommendations implemented over the last three financial years.

Table 6.1: percentage of recommendations implemented over the last three financial years.

Financial Year	2014/2015	2015/2016	2016/2017
Percentage of internal audit recommendations implemented	63.3%	66.2%	69.2%

Source: *Internal Audit Reports*

There has been an improvement in the percentage of Implemented recommendations over the three years but it is still way below the agreed position with the Development partners of 75%. This implies that the internal audit recommendations are not adequately implemented which may hinder the organization from benefiting on the value of the audit. Since the implementation rate is below the one agreed with Development partners it might hinder funding of further projects.

In the financial year 2016/2017 the status of implementation of Audit Recommendations is given in the following table.

Table 6.2: The status of implementation of audit recommendations in financial year 2016/2017

Status	Percentage
Implemented	36%
Outstanding	31%
Partially implemented	28%
Referred back to business	2%
Mitigated by other means	3%

Source: *Internal Audit Report 2016/2017*

The data for the prior years is not available in the internal audit reports. This points to the quality of the audit reports. The internal audit reports have not been elaborate in the past

as to the status of implementation of Audit recommendations. Stakeholders therefore do not get clear information and therefore may not be able to act accordingly.

The findings of the study agree with the work of Mihret and Yismaw (2007) who established that management's response to the internal findings and recommendations is generally not adequate and management does not give the recommendations great attention thus affecting their timely implementation.

6.3.2 Empirical Objective Two: Analyze organizational factors as a basis for assessing the adequacy of response mechanisms to internal audit findings and recommendations among ministries in Uganda.

The second empirical objective of the study was "To Assess the adequacy of response mechanisms to internal audit findings and recommendations among government departments in Uganda." Findings revealed that organizational factors positively impact on response to internal audit findings and recommendations among government ministries in Uganda. Accordingly, respondents' ratings on the organization factors in relation to internal audit recommendations revealed that the opinions were ranging from 0.624 to 4.94 at the 95% Confidence Interval for Mean. Despite the average rating, results reflected that some respondents scored very poor at a Minimum 1.00 while others scored best at a Maximum of 4.94. This gave a wide difference as reflected by a broad range of 3.00.

As mentioned in Chapter 3, there is limited literature on this objective. The Better Practice Checklist (2009) of the Australian Audit Office was used to check whether government ministries in Uganda have adequate response mechanisms in place for monitoring and implementing internal audit recommendations. The findings revealed the following:

Responsibility of implementation of recommendations is assigned to a person who coordinates implementation which facilitates more timely and focused follow-up of actions. Action plans clearly outlining roles and responsibilities for the implementation of each recommendation accepted are not developed which delays the timely implementation of the recommendations because a timetable for implementation is not drawn. It was also discovered that the plan is just on paper but it is never implemented. Time frames and targets are usually not realistic and achievable because ministries lack financial resources to implement the plan. The minister and accounting officer have a minimal role in planning and monitoring the implementation of recommendations. The AC discusses the plan with

only the accounting officer but it was never established if the accounting officer discusses it with the Minister. Accounting officers' reappointment is based on the implementation of recommendations though non implementation has no consequences it only affects their reappointment as accounting officers. Incorporating the plan as part of the accounting officer's performance agreement increases the likelihood that the implementation plan will be acted upon. Internal audit department produces reports indicating progress of implementation which are submitted to AC on a quarterly basis for monitoring. Sometimes these reports are submitted late and not regularly and there are no repercussions for late or non-submission. This implies that the office of the IAG is weak on the oversight role. This would explain the partial and untimely implementation of the recommendations. The quality assurance department does not give feedback to internal audit on errors in the internal audit reports. As a result of this irregularity/none compliance/ineptness/deficiency, many errors go unnoticed and hinder the timely and adequate implementation of the recommendations. However it was revealed that the implementation plan is not regularly reviewed and monitored which makes it irrelevant and inappropriate. This means that the proposed actions are outdated and may no longer be necessary. Progress and actions taken to address issues raised in the audit is reported in the annual reports until implementation is complete. Staff are informed about the outcome of the audit and are invited to give feedback on how best to implement the recommendations. This makes them become part of the solution and ensure that the plan actually works because they were involved in formulating it.

6.3.3 Empirical objective three: Examine enabling and constraining factors for effective responses to internal audit findings and recommendations among government ministries in Uganda.

This sub-section of the study provides discussion on the ratings of construct items obtained through exploratory factor analysis (EFA). These latent factors assisted in identification of factors for effective response to internal audit findings and recommendations.

6.3.3.1 Organizational factors (OF)

For this construct, participants were measured by eighteen items. Findings revealed that the mean scores for eighteen measured items for this scale were between 4.78 (± 1.916)

and 5.00 (± 1.846), which reflected the respondents' strong belief on its importance in determining effective response to internal audit findings and recommendations in Uganda government ministries.

The item (OF1) "The responsibility of implementing internal audit recommendations is usually assigned to particular members of staff in the ministry" was rated highly, while item (OF2) "The ministry always has an action plan for implementation of internal audit recommendations which clearly outlines roles and responsibilities for the implementation of each recommendation" was rated low (see Table 5.3). Nevertheless, the average mean score of these items were above the neutral point. In addition, Cronbach's Alpha coefficient for this constructs was 0.873. This finding suggests strong internal consistency of the measurement items of OF1 construct. The high ratings of the item of OF1 construct may suggest that responsibility of implementing internal audit recommendations is an important aspect that is why it is assigned to particular members of staff in the ministry. Assigning responsibility of implementation of recommendations to a particular member or unit is of utter most importance because it facilitates timely and focused follow-up of actions. The member or unit is answerable in case there is non-implementation. If effective implementation is to take place the first key mechanism that an organization should put in place is giving the responsibility to a particular person. The findings also reveal that the ministry does not usually have an action plan for implementation which explains the delay in implementation of recommendations.

6.3.3.2 Personal factors (PF)

For this construct, observations of the study members were measured by three items. The findings revealed that the mean scores for the three measured items for this scale were between 2.02 (± 1.616) and 2.35 (± 1.646), which reflected the respondents' weak perception of the factor in influencing effective response to internal audit findings in Uganda government ministries.

The item (PF3) "Beliefs influence response to Internal Audit Recommendations" was rated highly. This was followed by item (PF2) "Response to Internal Audit recommendations is dependent on attitude of management and staff". However, item (PF1) "Competence of staff affects implementation of Internal Audit recommendations" was rated lowest.

Generally, overall, the findings revealed that all items relating to this construct were rated low by the respondents and the mean score for all three items was between 2.02 (± 1.616) and 2.35 (± 1.646), which suggested that the sample generally disagreed and it reflects the respondents' weak level of agreement with the factor's importance in determining effective response to internal audit findings in Uganda government ministries. Furthermore, the Cronbach's alpha estimate value of PF construct was .764, which indicated that this construct had a strong reliability of the measurement item.

Individual beliefs were rated highly by respondents which showed its importance in determining effective response to internal audit recommendations. The findings agree with the work of Alzeban (2015:539-559) which showed that culture positively relates to internal auditing quality. Badea (2013) as well asserts how organisational culture has a crucial role in the employees' behavior in terms of their communication, team work and successful performance. Attitude was also under this construct and respondents ranked it second to beliefs. Auditee behavior or attitude according to Masood and Lodhi (2016) influences their cooperativeness and understanding of internal audit recommendations which in turn affects their implementation. Lastly, competence of staff under this construct was ranked lowest by respondents which implied its low assessment in determining effective response to internal audit findings and recommendations. This could be due to the respondents' perception that competence can only be emphasized if people have the right attitude and culture. If people lack these two, however competent they are, whatever is recommended will never be implemented. This makes internal audit staff incompetent in performing these audits. Thus the auditees' response to internal findings and recommendations in those areas will not be effective.

6.3.3.3 Environmental factors (EF)

For this construct, participants were measured by three items. The findings revealed that the mean scores for three measured items for this scale were between 2.00 (± 1.313) and 2.13 (± 1.346), which reflected the respondents' weak level of agreement with the factor in assessing effective response to internal audit findings and recommendations in Uganda government ministries.

The item (EF1) "Implementation of Internal Audit recommendations depend on other ministries and Development Agencies" was rated highly. This was followed by item (EF2)

“Internal Audit recommendations are implemented because of general public perceptions”. However, item (EF3) “There is political influence in responding to Internal Audit recommendations” was rated lowest.

Generally, overall, the findings revealed that all items relating to this construct were rated low by the respondents and the mean score for all five items was between 2.00 (± 1.313) and 2.13 (± 1.346), which suggested that the sample generally disagreed and it reflects the respondents' weak level of agreement with the factor being important in assessing effective response to internal audit findings in Uganda government ministries. Furthermore, the Cronbach's alpha estimate value of EF construct was .734, which indicated that this construct had strong reliability of the measurement item.

Cascarino and Esch (2005) argued that internal audit activities are performed in diverse legal and cultural environments; within organizations that vary in purpose, size, complexity, and structure; and by persons within or outside the organization. As suggested by Carhill and Kincaid (1989:50-55), public sector agencies operate in a rigid framework where activities are authorized by legislation and that these agencies are service-oriented and hence attach lower priority to cost factors and issues associated with profitability. Thus the environment is an important aspect to consider because it affects the practice of internal auditing and thus response to the internal audit findings and recommendations. Though it was rated low by respondents it cannot be ignored as organizations are not independent of the environments that they operate in. Other ministries and development agencies were ranked highly by respondents, which shows that ministries do not work in isolation. Their decisions are interrelated for the smooth running of the Government. Decisions made in one ministry or agency can affect the operations in another ministry or agency. In other words, before implementation is done in one ministry impact on another ministry or agency has to be considered in case there is conflicting mandates. General public perceptions was also considered important from the findings because ministries' management are answerable to citizens who are the principals. They want an accountability of how tax payers' money has been utilized. One means of accountability is an assurance that identified weaknesses are corrected and remain corrected. This implies that ministry management who are agents have to effectively respond to internal findings and recommendations for the public or citizens' sake. Political pressure was rated low by

respondents this could be due to the sensitivity of the issue. The respondents were public servants so they were careful on mentioning anything that was political oriented. Respondents work in a political environment so have to be careful on what information is revealed because of the code of secrecy. However literature shows how important political pressure is important in influencing response to internal findings and recommendations. Schliemann's and Twist, 2016 acknowledges how the political salience of the findings will influence their response.

6.3.4 Empirical objective three: Examine enabling and constraining factors for effective responses to internal audit findings and recommendations among government ministries in Uganda.

The third empirical objective of the study was, "To examine the obstacles and enablers to effective response to internal audit findings and recommendations among government departments in Uganda." Findings revealed that organizational, personal and environmental factors are great obstacles and enablers to effective response to internal audit findings and recommendations among government ministries in Uganda. The results also revealed respondents ratings on the organizational, personal and environmental factors in relation to internal audit recommendations. The opinions were ranged from 0.522 to 3.94 at the 95% Confidence Interval for Mean, reflecting that some respondents scored very poor at a Minimum 1.00 while others scored best at a Maximum of 4. Despite of the high range, the difference in opinions as regards low and high levels of the organizational, personal and environmental factors was at 3.00 and was supported by the standard deviation 0.486. These obstacles are discussed in section 6.3.3 and 6.3.2 above.

6.3.5 Empirical objective four: Develop an appropriate model highlighting the process and the factors for effective response to internal audit findings and recommendations among government ministries in Uganda.

The fourth objective of the study was, "To develop an appropriate model highlighting the process and the factors for effective response to internal audit findings and recommendations among government ministries in Uganda." A model was developed after eliminating problematic items, which were OF6, OF10, OF13, OF2, OF11, OF9, OF5, DF1, DF3 and DF2(Table 6.3).

Table 6.3: Deleted Variables due to low AVE

Variable	Label	(AVE)
OF6	The ministry has clear mechanisms to monitor and report on the implementation of internal audit recommendations.	.412
OF13	The ministry management fully appreciates the role of the internal audit unit and adequately supports its activities.	.312
OF2	To what extent do you agree with the statement, that there is timely implementation of internal audit recommendations by the ministry management?	.234
OF5	The ministry always has an action plan for implementation of internal audit recommendations which clearly outlines roles and responsibilities for the implementation of each recommendation.	.323
OF9	The Accounting Officer of the ministry and the Minister usually have a role in the planning and monitoring of the implementation of internal audit recommendations.	.411
OF10	Members of staff in the ministry are informed about the outcomes of the internal audit and invited to give feedback on how best to implement the recommendations.	.213
OF11	The ministry regularly reviews and monitors the plan for implementing internal audit recommendations and makes amendments, where necessary, to maintain relevance and appropriateness.	.312
DF1	To what extent do you agree with the statement that the actions usually taken by the ministry management adequately address the recommendations contained in internal audit reports?	.403
DF3	To what extent do you agree with the statement, that the fraction of internal audit recommendations that are actually implemented by the ministry management in a given auditing cycle is sufficiently large?	.312
DF2	To what extent do you agree with the statement, that there is timely implementation of internal audit recommendations by the ministry management?	.321

Source: Primary data (2017)

Note: AVE is an Acronym of average variance extracted

The CFA was re-run for assessing the measurement model fit. The results of the model revealed that goodness of fit indices were improved and the revised model demonstrated a better fit to the data. Results of the respective measurement model after removal of redundant items indicated the absolute fit measures that GFI and RMSEA were 0.963 and 0.056 respectively and the incremental fit measures that is CFI was 0.945. All these measures surpassed the minimum recommended values. In addition to these indices, the ratio of χ^2/df was 1.643, which was within the acceptable threshold level (i.e., $1.0 < \chi^2/df < 3.0$). These goodness of fit statistics therefore confirmed that the model adequately fitted the data.

Further critical analyses of other estimation criteria revealed that the model fit the data adequately well, such that, standard regression weight were all greater than 0.7, standard residual were all within the threshold level (+2.58 , - 2.58) , and critical ratios values were above 1.96. In summary, the results confirmed that model was fit to the data, indicating no further refinement in the model was required. Thus, the un dimensionality of the model / data was established (Byrne 2001; Hair et al, 2006).

The model further has several interesting features worth noting. First, it contains both latent (unobserved) and manifest (observed) variables. Second, it contains both causal relationships among latent variables, represented by single-headed arrows, and correlational or bi-directional relationships among several of the residuals. These are represented by the dual-headed arrows connecting PF with EF and EF with OF and OF with PF, respectively.

The value 0.58 in the model is the correlation between personal factors (PF) and Environmental factors (EF). The value 0.48 is the correlation between Environmental factors (EF) and Organization factors (OF). The value 0.60 is the correlation between Personal factors (EF) and Organization factors (OF). All the values revealed a positive association between the exogenous variables, thus the correlation between OF and PF in

this thesis stands greatest with 0.60, followed by PF and EF with 0.58 and least EF and OF with 0.48 respectively.

The strong correlation between personal factors and organizational factors is not surprising because prior studies evidence the effect of personal factors on organizational behavior. Personal factors can determine organizational behavior and organization factors could as well determine personal behavior. Culture was the most significant of the personal factors. Buble, (2012) asserts how organization culture is a requirement for successful and developed organizations in the current times. Culture has a crucial role in influencing employees' behavior in terms of their communication, team work and successful performance (Badea, 2013). It is presumed organizational culture can be employed to keep employees under control and committed towards achieving the goals of the organization. They also highlight how organizational culture is the heart of activities in the organization and it influences its overall effectiveness and quality. Strong organisational policies specifically strong human resource practices have a positive relationship with performance (Lopez, Peon & Ordous, 2005; Mayo, 2000; Mabey & Raniraz, 2005; Ferris, Perrew, Raft, Zinko, Stoner & Laird, 2007; Jamal, 2008 Masood & Lodhi, 2016). These human practices could be training, career development, knowledge sharing and management, performance appraisals, promotion systems and job security (Masood, 2016).

The correlation between personal factors and environmental factors was also strong because the environment shapes beliefs, attitudes and knowledge, and personal factors could shape the environment. External stakeholders influence beliefs, attitude and knowledge of individuals in organizations. As stated by Goldenweiser (1916), culture and environment co-operate and must be regarded as co-determinants. In this research the environmental factors considered were political environment, society and other ministries and development agencies.

There is a positive correlation between environmental factors and organizational factors. Organizations are subjected to forces of change which they must respond to. These forces could be both internal and external to the organization and they drive changes within the organization. These forces would explain why there is positive correlation between the

organization and the environment particularly in this research what was considered was the external environment.

Furthermore, the value 0.77 revealed the standardised regression weight between Organization factors (OF) and Internal Audit (IA). The value 0.65 revealed the standardised regression weight between Personal factors (PF) and Internal audit (IA) and 0.34 revealed the standardised regression weights between Environmental factors (EF) and Internal audit (IA) as the endogenous variable. All the values revealed a positive association between the exogenous variables and the endogenous variable. Thus the predictive model between OF and IA stands greatest with 0.77, followed by PF and IA with 0.65 and the least being EF and IA with 0.34 respectively. These relationships are discussed in section 6.3.

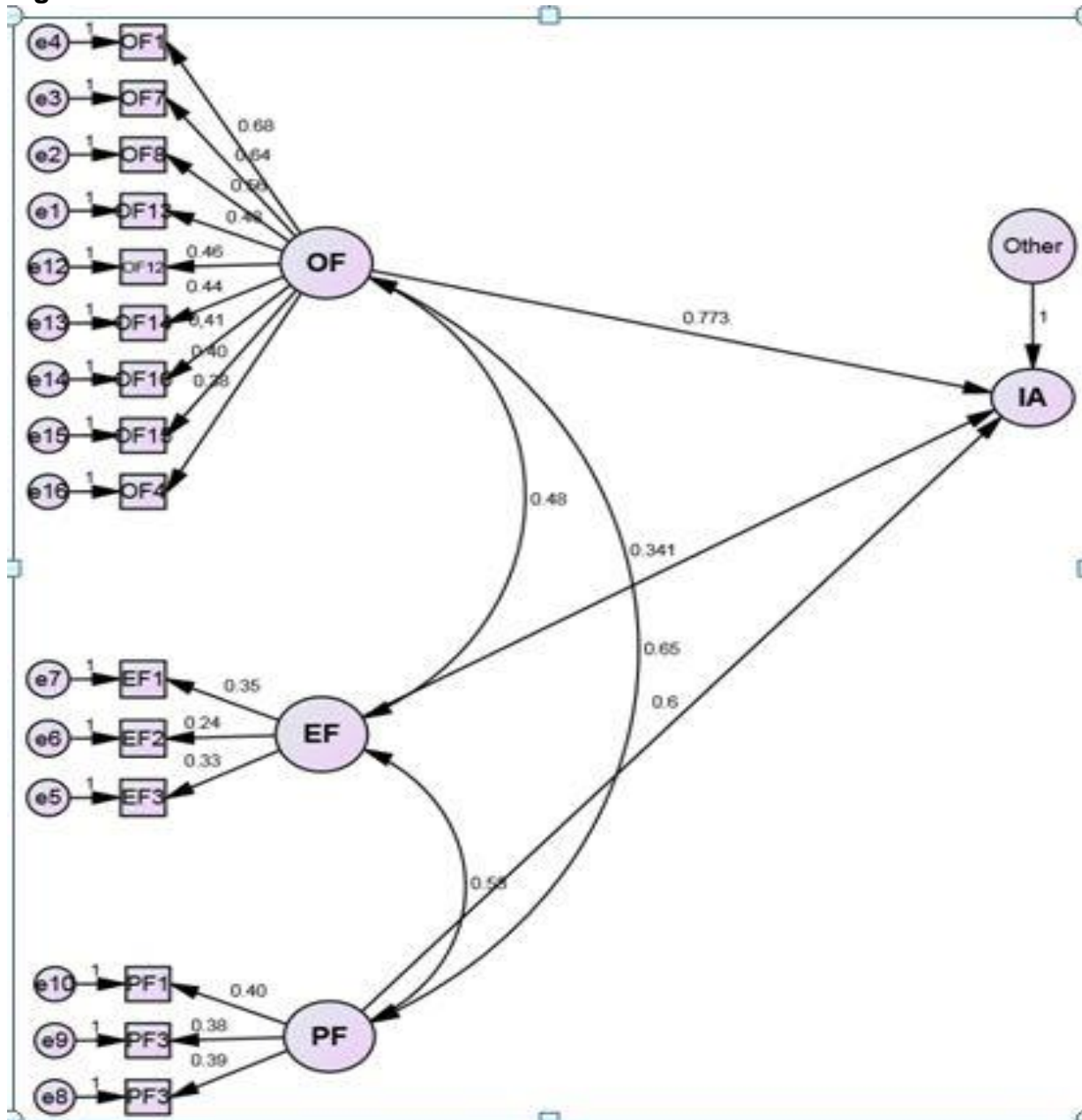
The standardized coefficients revealed a stronger relationship between OF and IA. As one would expect, the relationship between PF and IA is strong as well. The measurement portion of the model is also quite good – the lowest R^2 value is 0.24, which is a realistic value to achieve in organizational sciences research (Pallant, 2016), and the other R^2 values are higher, demonstrating that the model is accounting for a large percentage of the variance in the measured items.

6.3.6 The developed model and how it could be applied in practice

In this study, confirmatory factor analysis (CFA) was performed on the measurement model to assess the un-dimensionality, reliability, and validity of measures. Two broad methods were utilized in the CFA to assess the measurement model. First, consideration of the goodness of fit (GOF) criteria indices and second, evaluating the validity and reliability of the measurement model. During the process of factor analysis, the factor weights that are lower than 0.5 are worth to be excluded. In this study, CFA tested the four-factor model. During the draft of connection paths, the study fulfilled the basic requirement that the regression arrows should be drawn between errors connected to the same factor (Gaskin, 2012). The continuous repetitive confirmation process through the applicable fit of the measurement model was applied with the aim that the reliability of the indicators should reach the required 0.7 value (Hair et al, 2010). Because of low standardized estimates; OF6, OF10, OF13, OF2, OF11, OF9, OF5, DF1, DF3 and DF2 were removed as already

detailed in Table 6.3 above. The elimination of the items above led to an increased reliability of the scales. Subsequently, model fit was improved. The model produced a highly acceptable fit.

Figure 6.1: Final CFA model



Source: Primary Data (2017)

Note: OF, EF, PF and IA are Acronyms of Organization factors, Environmental factors, Personal factors and Internal Audit Efficiency. OF, EF and PF are antecedents or independent variables within this framework as each is assumed to predict to Internal Audit

efficiency. Similarly, internal audit efficiency is the dependent variable in the model as it is predicted by independent variables

The model has several interesting features worth noting. First, it contains both latent (unobserved) and manifest (observed) variables. Second, it contains both causal relationships among latent variables, represented by single-headed arrows, and correlational or bi-directional relationships among several of the residuals. These are represented by the dual-headed arrows connecting PF with EF and EF with OF and OF with PF, respectively.

From the figure 6.1, the value 0.77 revealed the standardised regression weight between Organization factors (OF) and Internal Audit Efficiency (IA). The value 0.65 revealed the standardised regression weight between Personal factors (PF) and Internal audit (IA) and 0.34 revealed the standardised regression weights between Environmental factors (EF) and Internal audit (IA) as the endogenous variable. All the values revealed a positive association between the exogenous variables and the endogenous variable. Thus, the predictive model between OF and IA stands greatest with 0.77, followed by PF and IA with 0.65 and the least being EF and IA with 0.34 respectively.

Furthermore, the value 0.58 is the correlation between personal factors (PF) and Environmental factors (EF). The value 0.48 is the correlation between Environmental factors (EF) and Organization factors (OF). The value 0.60 is the correlation between Personal factors (PF) and Organization factors (OF). All the values revealed a positive association between the exogenous variables, thus the correlation between OF and PF in this study stands greatest with 0.60, followed by PF and EF with 0.58 and least EF and OF with 0.48 respectively.

The standardized coefficients revealed a stronger relationship between OF and IA. As one would expect, the relationship between PF and IA is strong as well. The measurement portion of the model is also quite good – the lowest R^2 value is 0.24, which is a realistic value to achieve in organizational sciences research (Pallant, 2016), and the other R^2 values are higher, demonstrating that the model is accounting for a large percentage of the variance in the measured items. It is paramount to note that even though this model fits the

data well and provides a theoretically consistent set of findings, there may be other equivalent models that fit the data equally well.

The generated statistical model highlight that internal audit effectiveness is strongly influenced by organisational factors, whereas personal and environmental factors do have a minimal significant impact on audit effectiveness in the Uganda government ministries. The generated model could be applied in the Uganda government policy and practice in two ways;

(i) That policy makers and those in the field of internal audit could utilize the model to align their policies and programs towards being inclusive enough to articulate issues of pertaining to environmental and personal factors with special emphasis on organizational factors. Agencies should work on their structures, culture, norms and systems to be able to realize the benefit of internal auditing. Once these are dealt with the internal audit function will be effective and they will be able to achieve the objective of value addition.

(ii) That more resources and efforts could be engaged in stakeholder coordination and ministerial awareness to guarantee effective response to internal audit efficacy in Uganda government ministries.

6.3.7 The Integrative internal audit model and the principal-agency and institutional theory

It is envisioned that internal assessment of internal audit function need to always be conducted by management (agent) on behalf of government (principal) that is responsible for putting in place internal audit structures. In order to strengthen the principal-agent relationship, the model suggests an agreement between management (agent) and government (principal) under well stream internal audit structures. The model stipulates the roles, expectations and obligations of both management (agent) and government (principal) in undertaking internal audit and responding to internal audit findings and recommendations. The model proposes an embedment of performance based contracting arrangements into the operational framework of internal audit structures through which accounting officers in each ministry must ensure that responses to internal audit findings and recommendations are adhered to. The commitment of the political and technical wing at the corporate, directorate, functional and operational levels is also paramount in

enforcing the agreements. The agreement should align interests of both management (agent) and government (principal) into mutually agreed commitments. The agreements should empower management (agent) and government (principal) internal audit stakeholders to revoke or reject a contracting arrangement that is not meeting their expectations.

The model anchors on horizontal power relations where there is participation of all stakeholders, collective action and decision making with no party superior to another or capable of invoking closure rules. The assumption is that collaboration among the actors will help to restructure and re-develop internal audit function without much interference after political decisions have been made. The model supports mutual dependence and some degree of equality in decision-making, rather than domination of one or more parties. The model thus subscribes to integrated approaches for realizing results in line with the stakeholder specifications and expectations.

It recognizes the contribution of all internal audit stakeholders in supporting internal audit imitation, conception, design, planning, financing, implementation, monitoring, sustainability and management. The model suggests continuous interaction of the management (agent) and government (principal) to effectively undertake internal assessment of internal audit effectiveness based on on mainly environmental factors of public perception, organisational factors of mainly internal audit implementation plans and personal factors of mainly attitude of management and staff. This should be aimed at having holistic and traceable internal audit effectiveness elements of audit independence, value for money and internal audit recommendations enforcement.

6.4 Other aspects of the empirical research

In the following sections, discussions will focus on the response rate, participants' demographic characteristics, constructs and items, and hypotheses tested in this study.

6.4.1 Response rate

The field study employed both a qualitative and quantitative approach using a survey design for collecting data. 1 surveys were administered and 62 responses were obtained which were included in the data analysis. The final response rate in this study was 95 per

cent. The overall useable response rate in this study is higher than what was initially anticipated from the response rate reported in previous studies in the same domain. The response rate achieved in this study is reasonably higher than that of in earlier studies on internal audit in the various government ministries. For instance, Molise Moloji (2016) in his research. Therefore, the response rate in this study can be considered acceptable.

6.4.2 Participants' demographic characteristics

The results of participants' demographic characteristics revealed that the majority of the respondents were holders of a bachelor's degree (42.2 per cent). This was not surprising because looking at the latest educational statistics of Uganda's 2014 education profile report, it asserts that Uganda has a young educated population; with up to 4% of the population holding bachelor's degrees.

6.5 Hypotheses testing discussion

A summary of the hypotheses tests are presented in the Table 6.4 below. Hypotheses were developed in chapter 3 and tested in chapter 5. Discussions of each hypothesis in support of existing empirical findings follow

Table 6.4: Summary of the tests of hypotheses

Construct	P-Value	Hypotheses	R/hip	SRW	Supported
Environmental (EF)	***	H1 ₀	EF → IA	0.34	Yes
Personal (PF)	***	H2 ₀	→ PF IA	0.65	Yes
Organization (OF)	***	H3 ₀	→ OF IA	0.77	Yes

Source: Primary data (2017)

Notes: H1₀, H2₀, H3₀= Hypotheses 1, 2 and 3.

EF= Environmental factor, **PF**= Personal factor and **OF**= Organisational factor

P-Value-Probability of a t value equal to or greater than actual t value in a two-tailed test for significance of coefficient under the null hypothesis that the true value is zero.

*The symbol *** indicates that the null hypothesis is rejected at the .001 level of significance.*

SRW = Standard Regression weights

6.5.1 Relationship between environmental factors (EF) and internal audit (IA)

The path coefficient estimate of $H1_0$ was 0.34, and this advocates a significant relationship between EF and IA. The Sig.value reveals a 0.01 level of confidence affirming that the hypothesis is significant and supported. The hypotheses reveals a relatively positive moderate relationship between the constructs. The findings revealed that some of internal audit findings are complicated and a lot of dialogue is required with different stakeholders before implementation. Some of them require Parliament approval as well as dialogue with different ministries and Agencies. Sometimes the suggested recommendations could bring about conflicts in mandates of different agencies and ministries and might require a policy change. Indeed the audit reports mentioned how government has not embraced risk management practices in its operations. Risk management is a government policy which has to be implemented by all ministries and agencies. These findings are in line with conclusions reached by Power, 1997 and Walker, 2014 who believe that auditing no longer focuses on compliance but on adding value to organizations. If this value is to be realized by organizations the impact on other ministries and agencies has to be considered before internal audit findings and recommendations are effectively responded to. The findings also revealed that there is political influence in activities of some ministries as one respondent put it there is influence peddling. Permanent Secretaries, who are mostly Accounting Officers are political appointees and may only respond to what is politically pleasing. If political leadership is opposed to the recommendation it will not be implemented. This finding agrees with Schliemann's and Twist, 2016 who assert that internal auditors work in a political environment where they are expected to be sensitive to political issues and be responsive to the political rules of the game. This implies that response to internal findings and recommendations will depend on them being politically acceptable by auditees. The findings in this study also agree with Wamajji, 2015 findings which indicate that the Auditor General's recommendations continue not to be implemented in Uganda as a result of

corruption which originates from political pressure. The findings are also in line with Wolf (1993), Rainey and Steinbauer (1999) and Wright et al. (2005) who highlight that political influence is a key factor in reducing managements' role in effectively responding to internal audit recommendations. Political influence from interest groups, news media and citizens (Rainey (2003) also hinders management from effectively responding to internal audit findings and recommendations. Management will respond to what citizens, news media and interest groups are interested in in order to please them. Though the relationship between environmental factors and effective response to internal audit findings and recommendations was moderate it cannot be ignored because ministries have stakeholders both internal and external whose views have to be considered if effective response is to be achieved. Moreover ministries work in a political and legal environment indicating that ignoring the environment they operate in would be suicidal.

6.5.2 Relationship between personal factors (PF) and internal audit (IA).

The path coefficient estimate of H₂₀ was 0.65, and this supports a significant relationship between PF and IA. The Sig.value reveals a 0.01 level of confidence which then backs the hypothesis and affirming that it is significant. Findings revealed that some of the accounting officers are adamant to implement internal audit recommendations because they believe that internal audits a low profile office compared to the Office of the Auditor General. Heads of Internal audit are usually way below other departmental heads therefore there is reluctance by auditees to take advice from junior officers. This implies that little attention is paid to their observations as their observations bring no consequence. The non-consequence is evidenced by the fact that non implementation by Accounting officers of internal audit recommendations does not result in their dismissal it only affects their reappointment as Accounting officers. The recommendations delivered by Internal Audit are not always welcome from a managerial point of view because they are often considered to be challenging the management's authority or legitimacy, which leads to reluctance in implementation. The accounting Officer also gets audit fatigue from being asked too many questions therefore will just not respond to the internal audit findings. There is also a culture of people wanting to spend but do not want to account worst of all management does not want to be questioned by their juniors. The audit reports reviewed also highlight that there are capacity gaps in Information technology, performance and

forensic audits which affects the quality of recommendations and receptiveness of the recommendations. These results are in agreement with the findings of Albrecht et al (1998) who conclude that personality is an essential factor impacting on internal audit effectiveness. It is also in support of the work of Hahn (2015) who notes that if the internal department lacks staff who are competent, quality of recommendations will be wanting and auditees will be unreceptive in implementing them. Furthermore, the results agree with the findings of Arena and Azzone (2009b) who emphasize how management (the auditees) will or will not implement recommendations made by the Internal Audit function if they do not perceive it to be of quality. The behavior of the auditee will determine the response to internal audit findings and recommendations through their cooperation and acceptance of audit findings. As Masood and Lodhi (2016) put it, the auditee perception about the auditors' competence, understanding of the audit recommendations and auditee's cooperativeness influence audit effectiveness. This implies that if the auditee does not believe the auditor to be competent they will not take their advice seriously and will be uncooperative. It also implies that if the auditee does not understand the audit recommendations they will be reluctant to implement them. Attitude of management determines if recommendations are implemented or not because they make decisions like hiring proficient staff, developing career channels for staff and providing independence of the internal audit function (Hahn, 2015). Fernandez and Rainey (2006) also agree that top managements' commitment to change play a crucial role in mobilizing the critical mass needed to follow through. From the findings it can be deduced that beliefs, values, attitude, knowledge and understanding influence response to internal audit findings and recommendations. Alzeban, (2015:539-559) actually concluded that culture positively relates to internal auditing quality which auditing quality from literature can be measured by number of recommendations implemented. Badea (2013) and Kustinah (2013) conclude how organizational culture has a crucial role in the employees' behavior in terms of their communication, team work and successful performance. Therefore if effective response is to be realized in Government ministries there has to be an overall change in attitude, culture and competence of auditees which requires sensitization.

6.5.3 Relationship between organizational factors and internal audit (IA).

The path coefficient estimate of H3₀ was 0.773, and this endorses a significant relationship between OF and IA. The Sig.value reveals a 0.01 level of confidence which backs the hypothesis as significant and supported. These results are in agreement with the findings of (GOA, 1991). GOA argues that Auditors and organizations must be committed to identifying and bringing about needed change. The auditor's commitment should be personal and professional while the organization should be supportive and reinforce the commitment to its staff. To achieve desired goals, auditors and management should work together, the realization by management that auditors are there to protect the organization is very important. Auditors are not employed to look for mistakes but are there to help management to execute their duties more effectively.

The results also indicated that in some ministries management and staff do not understand the role of internal audit which hinders the implementation of recommendations. This is in line with the finding of Birkett et al (1999) who established that management's lack of awareness of the role of internal audit results in non-cooperation during the audits and non-implementation of recommendations. For an audit to be viewed as effective Implementation of audit recommendations is highly relevant (Van Gansberghe, 2005) and the management of an organization is viewed as the customer receiving internal audit services. As a result, management's commitment to use audit recommendations and its support in strengthening internal audit is vital if audit is to be effective (Sawyer, 1995).

The findings also revealed that there is frequency of meetings between management and internal audit department which allows both parties to be actively involved in the audit results and making sure that recommendations are implemented. The internal audit reports actually stress how the AC meetings have increased over the years from 62 in the year 2014/2015 to 127 in 2016/2017. This supports the work of Sarens and Beedle (2006), who concluded that stronger management support manifests itself in a relatively higher frequency of meetings with management (formal and informal) and a more meaningful dialogue with management, reflecting an active interest on their part in audit results and the follow-up of recommendations and action plans.

In addition to the above, Atuhumuza (2016), in the study of the factors affecting successful implementation of the Auditor General's recommendations in Soroti District, Uganda, confirmed that organizational factors like restrictive budgets affected implementation of the Auditor General's recommendations. The results in this study agree with his findings because it was discovered that ministries do not have enough financial resources to implement the recommendations due to restrictive budgets. Other researchers like Fernandez and Rainey, 2006 also agree that a sufficient budget is necessary to achieve the organizational goals but as some authors have observed different countries' budget allocation is not appropriate (Swarbrick, 2011; Zyl et al, 2009; Sifah, 2012). This indicates that to effectively implement the Auditors recommendation the organization has to commit financial resources and support the auditing activities. Nwaobia et al, (2016) also acknowledge how adequate funding of internal audit functions would enhance effectiveness of internal audit function and boost good governance in public sector organizations. Funding of internal audit functions could be in form of supporting their activities like following up recommendations and making sure implementation is done timely and adequately. In fact it was discovered in this study that Internal Auditors just make recommendations and do not follow up due to lack of a budget for follow up activities. The audit reports reviewed also suggested how operationalization of the internal audit mandate has not taken place in terms of structure and resources. Korje (2016) agrees with this finding that there is lack of follow up to make sure that recommendations have been implemented.

The findings also revealed that AC members are inappropriate. Most of the members are retired and are looking at being members as a retirement job. There is lack of funding for the ACs and at times the members solicit for funding. This interferes with their independence and yet if they are to perform their job they should be objective. The internal audit reports reviewed also suggest that AC need to be financed, build capacity and accounting officers should support them if they are to be effective. Zain et al. (2006) Barau et al. (2010); Abdulaziz and Nedal (2015) findings conquer with the above findings where they conclude that "Independent, competent and interactive AC is likely to implement Internal Audit recommendations.

In addition, results established that the Internal Audit function in some instances is not independent. They are not financially dependent because the auditee is the financier. Their

budget is not protected as it is approved by accounting officers. The decentralization of Internal Audit from Ministry of Finance and Economic Planning affected their independence. The internal audit reports also highlight how funding of internal audit is dependent on management's discretion. The same reports state how there is undue influence on internal audit function. Stewart and Subramaniam, (2010), argue that an auditor's independence is interfered with if there is economic interest from auditing the work of someone who has the power to affect the internal auditor's employment or salary. Christopher et al. (2009) also agrees that if the Board is to rely on the work of the Internal Auditor it must be independent from management. The findings also revealed that there is lack of independence of internal auditors because most of them (46.8%) have been working in the same Ministry for more than 16 years. This brings a familiarity threat that interferes with their objectivity and independence. This finding agrees with the findings of Zinyama (2013:267-28) who noted the current public audit function does not have independence from its operations yet independence and objectivity is the cornerstone of the audit function. According to him, it is because the auditors are not rotated, which is also due to acute shortage of competent and qualified personnel in Uganda Ministries. Uganda ministries lack competent, qualified and ethical internal auditors to help the internal audit function achieve its objective. One of the reasons given were that internal auditors earn low salaries, their work load is huge and they lack professional development. Indeed the audit reports mentioned that there is low remuneration of internal audit staff which impacts on their performance. This affects the quality of their work which in turn affects their independence. This was evidenced by late internal audit reports and oversight from Office of Internal Auditor general being weak. As a result of this, no wonder there is no timely implementation of Internal Audit recommendations in Uganda Government ministries.

The internal audit function was also not found to be independent because they are hired and appraised by the Auditee. Alzeban and Sawan (2013:443-454), Price water house Coopers, 2000; Scarbrough et al, 1998; Sawyer, 1995) argue that the AC must be vested with the authority to appoint, remove and assess the performance of the audit manager as such involvement further enhances the independence of the internal auditing function. The statistical findings and internal audit reports also revealed that internal auditors are involved in Pre – audit of payments which interferes with the auditors' independence and

objectivity. It weakens their moral authority to give constructive advice later when the same payments are being audited.

It was also established in this study that ministries usually assign responsibility of implementation of recommendations to a particular member of staff which ensures timely implementation and effective follow up. However it was also established that ministries lack an action plan for implementation of recommendation. Where the plan was present it was just on paper and not being followed. Lack of an action plan delays the whole implementation process as time frames are not set and targets not met. This was clearly evidenced in the partial implementation of recommendations and usually not in time. The findings indicated a strong positive correlation between organizational factors and implementation of internal audit recommendations implying that the organization's structure, processes, policies, culture and guidelines are very important in influencing response to internal audit findings and recommendations in Uganda government ministries.

6.6 Conclusion

This chapter aimed at discussing the key findings of the research study. It was observed that the response rate (95%) achieved in this study was higher than the initial expectation of the researcher, and compared reasonably well with earlier studies carried out to examine the response to internal audit findings among Uganda Government Ministries.

The demographic information suggested that majority of the respondents were bachelor's degree holders (48.4%). In addition, about 47 per cent of participants in this survey were between a period of 16 and more years of service with the ministry. This finding suggested that the majority of the respondents were adults of working age and vast experience in terms of service with government ministries. In addition, the findings, regarding education, revealed that the level of education of most of the participants was minimum bachelor's degree, which was higher compared to the education level of an average citizen in Uganda where the literacy rate is low. This also indicated that the respondents had some level of competence in their positions.

The model proposed in this study helped to explain the overall relationships among the predictor variables and the outcome variable that is implementation of internal audit

recommendations (IA), the dependent variable. The model revealed that 77.3 per cent showed the standardised regression weight between Organization factors (OF) and Internal Audit (IA). The value 65 percent revealed the standardised regression weight between Personal factors (PF) and Internal audit (IA) and 34 per cent revealed the standardised regression weights between Environmental factors (EF) and Internal audit (IA) as the endogenous variable. All the values revealed a positive association between the exogenous variables and the endogenous variable. Thus the predictive model between OF and IA stands greatest with 77.3 per cent followed by PF and IA with 65 per cent and the least being EF and IA with 34 per cent respectively.

The model further revealed that 58 per cent is the correlation between personal factors (PF) and Environmental factors (EF). The correlation between Environmental factors (EF) and Organization factors (OF) is 48 per cent and the correlation between Personal factors (PF) and Organization factors (OF) is 60 per cent. All the values revealed a positive association between the exogenous variables, thus the correlation between OF and PF in this thesis stands greatest with 60 per cent, followed by PF and EF with 58 per cent and least EF and OF with 48 percent respectively.

The standardized coefficients revealed a stronger relationship between OF and IA. As one would expect, the relationship between PF and IA is strong as well. The measurement portion of the model is also quite good – the lowest R^2 value is 24 per cent, which is a realistic value to achieve in organizational sciences research (Julie Pallant, 2016), and the other R^2 values are higher, demonstrating that the model is accounting for a large percentage of the variance in the measured items.

Generally, this chapter complied with objectives which were clearly stated in chapter 1 of this research study. In line with objective one of the study, the level of response to internal audit findings and recommendations among government ministries in Uganda is positively influenced by the organizational, personal and environmental variables. On examining the obstacles and enablers to effective response on internal audit findings and recommendations among government ministries in Uganda; the findings of the study highlight that internal audit effectiveness is majorly troubled by organizational factors. This is followed up by the detailed explanation of the various items and parameters associated

with the proposed model development which was the gist of the research study. The model developed is aligned with the descriptive statistical computations and reveals that, the level of response to internal audit findings and recommendations among government ministries in Uganda is impacted by organizational, personal and environmental variables respectively.

CHAPTER 7: CONCLUSION AND RECOMMENDATIONS

7.1 Introduction

In this chapter, the study is concluded, followed by implications of the research findings that is theoretical and managerial. The next section is about the research contributions followed by limitations of this research study and the directions for future research to be conducted. Finally, the last section will present the conclusions about the key findings of this study.

7.2 Conclusion of the study

Research on effective response to internal audit findings and recommendations in Uganda government ministries was stimulated by an opportunity to examine the response to internal audit findings and recommendations among Uganda Government Ministries with a view of suggesting remedial measures aimed at ensuring effective response to the findings and recommendations. Thus the study was looking at, as well as exploring factors and their influence on internal audit findings and recommendations in Uganda government ministries. The first chapter of this study stressed the purpose of the study as to examine the response to internal audit findings and recommendations among Uganda Government Ministries with a view of suggesting remedial measures aimed at ensuring effective response to the findings and recommendations. This was covered by the following constructs: organizational factors, personal factors and environmental factors.

In this study, the first research question was “What is the level of response to internal audit findings and recommendations among government ministries in Uganda?” The second research question was “Are response mechanisms to internal audit findings and recommendations among Uganda government ministries adequate?” and the third research question was “What are the enabling and constraining factors to effective response to internal audit findings and recommendations among government ministries in Uganda?”

7.2.1 The level of response to internal audit findings and recommendations among government ministries in Uganda

Based on the empirical objectives developed in chapter 1, the study revealed that there is partial implementation of recommendations and implementation is never done on time due to lack of financial resources, follow up mechanisms by auditors, AC and management. Also, management does not support the work of internal audit function because they believe they are junior officers and are reluctant to take advice from them. In addition management also believes some of the internal auditors are incompetent and do not value their recommendations.

7.2.2 Organizational factors as a basis for assessing adequacy of response mechanisms to internal audit findings and recommendations among Uganda government ministries

The main organizational factor as a basis for assessing adequacy of response mechanisms to internal audit findings and recommendations among Uganda government ministries was failure to implement internal audit plans. The study determined that one of the main reasons for non-implementation was lack of an action plan to effect implementation. The implementation plan is usually on paper and is not regularly monitored and reviewed which makes some of the actions outdated. In other instances internal audit was not independent because their funding is dependent on management's discretion. Another obstacle from the study is political pressure from Permanent secretaries, citizens, news media and interest groups to implement recommendations that are pleasing to those parties. Lastly, culture was another obstacle where people like to spend and not be questioned

7.2.3 The enabling and constraining personal and environmental factors affecting response to internal audit findings and recommendations among government ministries in Uganda

The study revealed that the main enabling and constraining factors affecting response to internal audit findings and recommendations among government ministries in Uganda were public perception of internal audit implementation, attitude of internal audit management

and staff, competence of internal audit staff, personal briefs of internal audit stake holders and technocrats of other ministries and development agencies.,.

7.3 Achievement of research objectives

The following table summarizes the research objectives of the study and the specific chapters and sections where each of these objectives was achieved.

Table 7.1 Achievement of research objectives

RESEARCH OBJECTIVES AS PRESENTED IN CHAPTER 1	ADDRESSING THE OBJECTIVES
ONE: Determine level of response to internal findings	CHAPTER 6 Section 6.3.1 on page 159
TWO: Analyze the organizational factors as a basis for assessing the adequacy of response mechanisms to internal audit findings and recommendations among ministries in Uganda	CHAPTER 6 Section 6.3.2 on page 1161
THREE: Examine enabling and constraining factors for effective responses to internal audit findings and recommendations among government ministries in Uganda	CHAPTER 6 Section 6.3.3 and Section 6.3.4 on page 162 - 165
FOUR: Develop an appropriate model for highlighting the process and factors for effective response to internal audit recommendations	CHAPTER 6 Section 6.3.5 – 6.3.6 on page 166

The research study revealed that the hypotheses tested are supported, and that there is a positive influence between them. The empirical results of the study also revealed that organizational factors, personal factors and environmental factors have a significant impact on the effective response internal audit findings and recommendations in Uganda government ministries. As such, the research study revealed that there is need for scrutiny

of the implementation of internal audit recommendations in government ministries. Specifically, the research study revealed that there is need for analyzing the extent to which internal audit recommendations are implemented, the processes for ensuring successful implementation of internal audit recommendations and the factors affecting successful implementation of internal audit recommendations among government ministries. This was particularly important because empirical evidence investigating the above has been scanty especially in Uganda. Most of the studies on internal audit matters concentrated on the importance and effectiveness of the internal Audit Function but ignored the implementation of internal audit recommendations (Kasigwa et al., 2013; Kasigwa, 2014). Based on these findings, effective management of public resources can only be strengthened if internal control systems and processes such as the reporting and implementation of internal audit recommendations are strengthened based on verifiable empirical evidence as revealed in this thesis.

7.4 Recommendations of the Study

Based on the empirical evidence the study recommends the following in a bid to improve on effective response to internal findings and recommendations in Uganda Government ministries:

1. Commitment to continuous quality assurance and improvement. There should be a formal quality assurance program for periodic internal assessment and external assessment such as quality assurance review that includes extensive benchmarking.
2. Secondly link performance measures to strategic goals. The implementation plan should be developed in consultation with AC and executive management and continually track its performance to plan using balanced score cards focusing on outcomes as well as outputs. Performance metrics could include: number of recommendations implemented by management, number of repeat findings and average reporting cycle time.
3. In addition, the Internal Audit function should achieve sufficient strategic stature within the organization. The head of internal audit needs to be strategic, be a member of senior management and communicate regularly with chairman AC.

4. The study also recommends that technology should be leveraged to optimize audit operations. Technology should be used to enhance efficiency, effectiveness and quality. To increase efficiency of operations Internal audit should automate audit issue, tracking and reporting to achieve paperless audits and reports. To strengthen quality Internal audit should apply technology to conduct real time reviews, escalate issues and ensure compliance with standards. Technology solutions could include: integrated internal audit software to streamline the production of work papers, risk assessments, and audit reports and to automate issue tracking, monitoring and administrative activities, data mining or analysis software for predictive analysis and modeling and knowledge tools and databases to provide best practice insights as well as source for organization process bench marking tools.
5. A risk based auditing approach that focuses continually on enterprise risk should be adopted and operationalized. An annual enterprise wide risk assessment should be performed.
6. Another recommendation is human resource strategies should be aligned with organization and stakeholder needs. Staff should be recruited from within and outside the organization, career opportunities should be provided, staff should be rotated after 2-3 years and training and development should be done.
7. In addition, communication should be done regularly with stakeholders to identify their needs, expectations and satisfaction with internal audit. Emerging risks should be identified and communicated to AC.
8. Lastly, the research recommends that values should be operationalized to change attitude and behavior. People should be sensitized on the importance of internal audit for an overall behavior and attitude change. Values should be incorporated in the ministries strategic plan.

7.5 Implications of research findings

The implications of the results of this research study are presented under two headings; that is theoretical implications and managerial implications, which are described as follows.

7.5.1 Managerial implications

Results of this research study have many managerial implications for different stakeholders such as the internal auditors, AC members, accounting officers, senior management of different ministries and managers of business as discussed below.

The exceptional increase in internal audit and its benefits (e.g. assurance, governance and consultancy) are compelling different internal auditors, AC members, accounting officers, senior management of different ministries and managers to develop systems that provide assurance to users that management is looking out for their interests. Given the large investment in internal audit, an understanding of the process and factors that influence response to internal audit findings and recommendations is useful to managers so that they can prioritize their efforts in an effective way. For example, organizational factors were found to be the most significant factor that has a strong influence on response to internal audit findings and recommendations. In addition, personal and environmental factors were found to exert a significant impact on the implementation of internal audit recommendations.

On the other hand, there appears to be a role for managers; such that, internal auditors give recommendations that are implementable and that will help the organization improve its operations. In order to increase effective response to internal audit recommendation, management needs to work on organizational policies, processes, structures, culture, attitude, competence of staff.

7.5.2 Theoretical implications

Theoretical objectives were developed in chapter 1, results for the objectives were presented in chapter 5 and later discussed in chapter 6. The theoretical results in this study contribute to both inadequate and existing research, literature, and knowledge on effective response to internal audit findings and recommendations. When scrutinizing the hypotheses closely, the study contributes to the relationship between organizational factors, personal factors, environmental factors and implementation of internal audit recommendations.

The research study widens knowledge on how effective implementation of internal audit recommendations could be done. The significant theoretical contributions of this study will benefit academia and scholars, who can use the findings in support of their studies. Based on overall empirical findings, organisational factors have a strong and significant influence on implementation of internal audit recommendations. The research study confirms that there is an interrelationship between organisational factors, personal factors and environmental which influences implementation of audit recommendations.

7.6 Research contributions

The primary objective of the study was to examine the response to internal audit findings and recommendations among Uganda Government Ministries with a view of suggesting remedial measures aimed at ensuring effective response to the findings and recommendations. Accordingly, this was achieved. In terms of contribution of the study to knowledge, an empirical model which can inform the development of more robust theory that identifies the links between problem, intervention and outcome, was used. As pointed out, this is the first of the kind of study to try and approach this problem in the Uganda government ministries. In particular, the study has identified gaps as far as response to internal audit findings and recommendations among Uganda Government Ministries is concerned. This empirical study research is particularly helpful for future researchers who may want to answer questions of how or why things work in real life contexts, the empirical model.

This study applied sophisticated statistical techniques, i.e., structural equation modelling (SEM) using AMOS v.25. Structural Equation Modelling (SEM) allows simultaneous evaluation of the adequacy of the measurement model and the causal model that was proposed to investigate the intended behavior. The measurement model validated the constructs (Organisational, Personal and environmental) factors as developed in the conceptual framework. In addition, structural model showing empirical support for the interrelationships between the important constructs, contributed to the knowledge in internal audit recommendations in general and effective response to the findings and recommendations in particular.

The findings of this research suggest that the internal audit recommendations may not be perceived as being effective. The results are expected to inform boards of directors and managers which may subsequently encourage them to develop and improve the effectiveness of the internal audit function within the Uganda government ministries.

Furthermore, this study could be useful for academicians and practitioners. For academicians, it will improve their understanding of effective response to internal audit findings and recommendations. For practitioners, it will help solve the practical problems facing internal audit effectiveness.

7.7 Limitations of the Research study

Although the results of this research study are encouraging and useful, it has some limitations as most field surveys suffer from. Nevertheless, this research study has achieved its aims and objectives. As with any research study of its kind, a number of limitations are recognized by the researcher. These limitations include risks associated with the choice of methodology, the process for analyzing data and the results of the study.

- There was no prior statistical database for reference; this was the first study ever conducted in Uganda government ministries in relation to examining the response to internal audit findings and recommendations among Uganda Government Ministries with a view of suggesting remedial measures aimed at ensuring effective response to the findings and recommendations. Thus no research conducted elsewhere related to the topic under study was identified. This therefore limited the comparison of the research finding. However, despite this limitation, the results of this study remain relevant and provide a bench mark for future reference and comparison.
- The research study adopted a survey design which is done once; which means there is no follow up survey in future that could help establish the sustainability of the research findings from the respondents. The researcher thinks it would have been good as it facilitates comparison of the research findings and objective trends.
- The third limitation recognized by the researcher relates to the fact that this study rests on the perceptions of different groups in the various government ministries. The most obvious limitation of this study was the selection of the groups to

represent the study. In this study, internal audit auditors, heads of ACs and permanent secretaries in the various government ministries were selected for the study. However, it seems that other groups such as board of director members and key staff at these ministries could also contribute to this issue. Hence, the results of the data could not be generalized beyond the selected groups.

- In general, it is worth noting that results of this research study cannot be generalized to internal audit effectiveness in other countries because each country has its own nature and cultural boundaries. Therefore, it could be argued that the findings of the study are not necessarily generalizable to the internal audit effectiveness in other developing countries.
- The fifth limitation of this research study is that it is restricted to the government entities and it focuses on effective response to internal audit findings and recommendations. In other words, it is a study about the profession of internal auditing efficiency. However, organization type characteristics were not used for the basis of analysis in this study as they were outside the scope of the research question. The selection of the three types of independent variables merely ensured the presence of effective response to internal audit findings.
- The sixth limitation recognized by the researcher relates to the process of conducting qualitative studies and in analyzing the data. Chua (1996) states that it is often argued that qualitative research suffers from a lack of trustworthiness. The analysis of qualitative data is less structured which implies that the researcher is likely to be selective in extracting data. A structured and auditable approach to data analysis was adopted. However, even using structured and disciplined approaches, there are serious limits to how much of that rich data can make its way into the analysis—particularly in this type of study. The interviewee responses are voluminous and the time commitment to transcription, editing, coding and preparing for analysis appears overwhelming. Nonetheless, provided the questions are interesting enough and worth the effort in rendering the data, the process of analyzing data faces a limitation that relates to the amount of data that is incorporated into the final thesis. Not all of the qualitative data is reported. An amount of data remained in the project database with much of it redundant despite the interesting stories potentially embodied within this data. Interviewee responses produced different interpretations

of elements of the semi-structured interview. However, it is important to ask whether the findings reported, both theory-driven and serendipitous, would have emerged and would have been convincing without that disciplined, rigorous protocol (Lillis 1999).

- Further, the availability of interviewees only at a specific time is thought to be an additional limitation. Gaining access to the various government ministries' sites proved difficult at times. The time limitations of participants resulted in interview scheduling problems where too many interviews were scheduled too close to each other. This impacted on practical issues such as failing to gather sufficient archival and other data whilst on site, becoming tired, occasionally losing enthusiasm and concentration and thereby there may be loose ends in interviews which should have been followed up. This is a major drawback of fleeting site visits. Whilst site access was generally open for return visits, the opportunity to return was limited because of the number of interviews to be conducted, and delays between data collection and analysis. Often the need to follow up was not evident until too late.

7.8 Future research

This thesis has developed an integrated model that provided a systematic way to understanding effective response to internal audit findings and recommendations in Uganda government ministries. However, due to the limitations of the study the researcher's insights into the nature of future research are as follows:

- Further studies could be conducted in countries where internal audit is well-developed, as well as in developing countries such as Uganda where internal audit is in the relatively early stages of development. More specifically, and stemming from one of the limitations of the study (the target population), further research and a replication of this study in a different sector that is could help provide additional evidence and extend the generalizability of the results.
- Future research studies exploring the relationship between internal audit directors' and auditees' views of effective response to internal findings is another potential area of future research. This could encompass auditees from different levels in the organizations and from different fields of activity.

- As pointed out earlier, the limited previous research studies which address the issue of effective response to internal audit findings has provided mixed findings on effective response to internal audit findings because it has utilized different criteria. Thus, examining the factors that influence response to internal audit findings and recommendations' effectiveness and the possible interactions among them is likely to bear fruit. In other words, further research into identifying other factors that impact on effective response to internal audit findings and recommendations could contribute to reducing the gap in the literature. This also will help deepen the understanding of effective response to internal audit and establish whether internal audit is perceived to be value-adding to government ministries. In addition, this approach could be employed to further develop internal audit as a profession and augment its acceptance in contemporary organizations.

7.9 Conclusion

Research on effective response to internal audit findings in Uganda government ministries. An empirical model was stimulated by the irony that weaknesses in internal control systems of Uganda government ministries have been sighted consistently by the Auditor General's Reports as the major cause of ineffective management of public resources including funds and assets (see Uganda OAG, 2012; 2013; 2014; 2015; 2016). This has led to massive loss of public funds amounting to billions of Uganda shillings through fraudulent practices and activities. Such resource losses are extremely detrimental to the country as they retard economic growth and development.

This research study intended to address this research issue by developing a model highlighting the process and the factors for effective response to internal audit findings and recommendations among government ministries in Uganda. The proposed model in this research study was based on the Agency theory which postulates that an organization consists of a nexus of contracts between the owners of economic resources (the principals) and managers (the agents) who are charged with using and controlling those resources (Jensen and Meckling, 1976:308). Other relevant theories, like the institution theory, as well as other relevant constructs were utilized in this thesis. The model was then tested

against data from 62 participants from Uganda government ministries, using sophisticated statistical software packages, such as SPSS version 25.0 and AMOS version 25.0.

The current research study examined the response to internal audit findings and recommendations among Uganda Government Ministries with a view of suggesting remedial measures aimed at ensuring effective response to the findings and recommendations. The thesis examined Organisational factors, Personal factors and Environmental factors which provides a conceptual framework to explain response on internal audit recommendations. The present research proposed a conceptual causal model that incorporated Organisational, Personal and environmental factors to supply a better explanation and understanding of the impact of each of these factors on internal audit. The results of this research study provide empirical support for the extended and refined model which was generated.

In this study, the responsibility of implementing internal audit scale (OF1) and the allocation of sufficient resources scale (OF7) were observed to have significant impact on organizational factors intentions towards internal audit recommendation, revealing more than half of the total variance in the acceptance intention. Thus, suggesting that organizational factors contribute more in internal audit recommendations than the other two independent factors.

In addition to the above, all the values of (OF, PF and EF) revealed a positive association between the exogenous variables and the endogenous variable. Thus the predictive model between OF and IA stood greatest, followed by PF and IA and the least being EF and IA respectively. Likewise, the correlation between personal factors (PF) and Organizational factors (OF) was strongest, followed by Environmental factors (EF) and Personal factors (PF) and the Environmental factors (EF) and Organization factors (OF). In all these associations, the values revealed a positive association between the exogenous variables and endogenous variables.

The standardized coefficients revealed a stronger relationship between OF and IA. As one would expect, the relationship between PF and IA is strong as well. The measurement portion of the model is also quite good – the lowest R^2 value is 0.24, which is a realistic

value to achieve in organizational sciences research (Julie Pallant, 2016), and the other R^2 values are higher, demonstrating that the model was accounting for a large percentage of the variance in the measured items. It can therefore be concluded that the study complied with all the objectives detailed in Chapter 1.

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APPENDICES

DATA COLLECTION INTRODUCTION LETTER

Dear Respondent,

RE: COLLECTION OF DATA

I am a Doctor of Philosophy (PhD) student in the School of Accounting Sciences, North-West University (Vaal Triangle Campus) South Africa. As part of the requirement for the award of the degree, I am expected to undertake a research study on **DEVELOPING A MODEL FOR EFFECTIVE RESPONSE TO INTERNAL AUDIT FINDINGS IN UGANDA GOVERNMENT MINISTRIES**.

The purpose of the study is to examine the implementation of internal audit recommendations amongst Uganda Government Ministries with a view of suggesting remedial measures for improving the implementation practice so as to enhance effective management of government resources. I am therefore, seeking your assistance to fill the questionnaires attached. The attached questionnaire will take about ten minutes to complete. Kindly answer all the questions.

The research results will be used for academic purposes only and will be treated with utmost confidentiality. No one, except the institution will have access to these records. Should you require a copy of the findings, kindly indicate so at the end of the questionnaire. Your cooperation will be appreciated.

Yours sincerely,

Jemimah Ninsiima
(Ph. D Candidate)

JUNE 2017

1. GENERAL INFORMATION

1.1 Your highest education qualification

- Advanced Certificate of Education
- Diploma
- Bachelor's degree
- Post-graduate diploma
- Master's degree
- Doctorate

1.2 Your working experience

- _____ Less than 5 years
- _____ 6 – 10 years
- _____ 11 – 15 years
- _____ 16 years and more

1.3 Ministry of.....

1.4 Current position in the ministry.....

2. IMPLEMENTATION OF INTERNAL AUDIT RECOMMENDATIONS

The items contained in this part of the questionnaire are designed to solicit your perception about the level of implementation of internal audit recommendations in your ministry. Please, tick against a response that best describes your point of view

2.1 To what extent do you agree with the statement that the actions usually taken by the ministry management adequately address the recommendations contained in internal audit reports?

- _____ Strongly disagree
- _____ Disagree
- _____ Nether disagree nor agree
- _____ Agree
- _____ Strongly agree

2.2 To what extent do you agree with the statement, that there is timely implementation of internal audit recommendations by the ministry management?

- _____ Strongly disagree
- _____ Disagree
- _____ Nether disagree nor agree
- _____ Agree
- _____ Strongly agree

2.3 To what extent do you agree with the statement, that the fraction of internal audit recommendations that are actually implemented by the ministry management in a given auditing cycle is sufficiently large?

- _____ Strongly disagree
- _____ Disagree
- _____ Nether disagree nor agree
- _____ Agree

_____Strongly agree

3. PROCESS OF IMPLEMENTING INTERNAL AUDIT RECOMMENDATIONS

The items in this part of the questionnaire are designed to elicit your perception about the process of implementation of internal audit recommendations in your ministry. Please, tick against a response that best represents your point of view.

To what extent do you agree with the following statements concerning the process of implementation of internal audit recommendations in your ministry?

3.1 The responsibility of implementing internal audit recommendations is usually assigned to particular members of staff in the ministry.

_____Strongly disagree

_____Disagree

_____Nether disagree nor agree

_____Agree

_____Strongly agree

3.2 The ministry always has an action plan for implementation of internal audit recommendations which clearly outlines roles and responsibilities for the implementation of each recommendation.

_____Strongly disagree

_____Disagree

_____Nether disagree nor agree

_____Agree

_____Strongly agree

3.3 The ministry has clear mechanisms to monitor and report on the implementation of internal audit recommendations.

_____Strongly disagree

_____Disagree

_____Nether disagree nor agree

_____Agree

_____Strongly agree

3.4 The ministry usually allocates sufficient resources to implement internal audit recommendations.

_____Strongly disagree

- Disagree
- Nether disagree nor agree
- Agree
- Strongly agree

3.5 The ministry sets realistic and achievable time frames and targets for implementing internal audit recommendations.

- Strongly disagree
- Disagree
- Nether disagree nor agree
- Agree
- Strongly agree

3.6 The Accounting Officer of the ministry and the Minister usually have a role in the planning and monitoring of the implementation of internal audit recommendations.

- Strongly disagree
- Disagree
- Nether disagree nor agree
- Agree
- Strongly agree

3.7 Members of staff in the ministry are informed about the outcomes of the internal audit and invited to give feedback on how best to implement the recommendations.

- Strongly disagree
- Disagree
- Nether disagree nor agree
- Agree
- Strongly agree

3.8 The ministry regularly reviews and monitors the plan for implementing internal audit recommendations and makes amendments, where necessary, to maintain relevance and appropriateness.

- Strongly disagree
- Disagree
- Nether disagree nor agree
- Agree
- Strongly agree

3.9 There are regular reports indicating progress and actions taken to address issues raised in the audit reports until implementation is complete.

- Strongly disagree
- Disagree
- Nether disagree nor agree

- Agree
- Strongly agree

4. FACTORS IN THE IMPLEMENTATION OF INTERNAL AUDIT RECOMMENDATIONS

The items in this part of the questionnaire are designed to elicit your perception about the factors affecting the implementation of internal audit recommendations in your ministry. Please, tick against a response that best represents your point of view.

4.1 The ministry management fully appreciates the role of the internal audit unit and adequately supports its activities.

- Strongly disagree
- Disagree
- Nether disagree nor agree
- Agree
- Strongly agree

4.2 The ministry has a system in place that accurately tracks progress and records the actions of managers responsible for progressing action against timeframes.

- Strongly disagree
- Disagree
- Nether disagree nor agree
- Agree
- Strongly agree

4.3 The implementation of internal audit recommendations in the ministry is usually guided by development of a clear plan in consultation with the internal audit unit and AC clearly specifying responsibilities and timeframes for addressing the required action.

- Strongly disagree
- Disagree
- Nether disagree nor agree
- Agree
- Strongly agree

4.4 There is sufficient frequency of meetings between the AC and the internal auditors in the ministry.

- Strongly disagree
- Disagree
- Nether disagree nor agree
- Agree
- Strongly agree

4.5 The activity of the members of the AC are fully guided by the principle of independence.

_____ Strongly disagree

_____ Disagree

_____ Nether disagree nor agree

_____ Agree

_____ Strongly agree

4.6 The audit-related activities and decisions of the Department of Internal Audit are independent of management and other departments.

_____ Strongly disagree

_____ Disagree

_____ Nether disagree nor agree

_____ Agree

_____ Strongly agree

4.7 The ministry's department of Internal Audit sufficiently monitors management's implementation of internal audit recommendations

_____ Strongly disagree

_____ Disagree

_____ Nether disagree nor agree

_____ Agree

_____ Strongly agree

4.8 I am satisfied with the performance of the AC in as far as tabling audit reports and providing advice to the management on significant matters.

_____ Strongly disagree

_____ Disagree

_____ Nether disagree nor agree

_____ Agree

_____ Strongly agree

4.9 The AC meets regularly to consider issues in relation to the ministry's risk, control and compliance issues including implementation of internal audit recommendations.

_____ Strongly disagree

_____ Disagree

_____ Nether disagree nor agree

_____ Agree

_____ Strongly agree

4.10 In your view, what do you consider to be the major five challenges to the successful implementation of internal audit recommendations in the ministry?

-

“

4.11 What can be done to ensure successful implementation of internal audit recommendations in the ministry?

5. OBSTACLES IN THE IMPLEMENTATION OF INTERNAL AUDIT RECOMMENDATIONS

The items in this part of the questionnaire are designed to elicit your perception about the obstacles to effective response to internal audit findings in your ministry. Please, tick against a response that best represents your point of view.

5.1 Competence of staff affects implementation of internal audit recommendations.

- Strongly disagree
- Disagree
- Nether disagree nor agree
- Agree
- Strongly agree

5.2 Response to internal audit recommendations is dependent on attitude of management and staff.

- Strongly disagree
- Disagree
- Nether disagree nor agree
- Agree

_____ Strongly agree

5.3 Personal beliefs influence response to internal audit recommendations.

_____ Strongly disagree

_____ Disagree

_____ Nether disagree nor agree

_____ Agree

_____ Strongly agree

5.4 Implementation of internal audit recommendations depend on other ministries and development agencies

_____ Strongly disagree

_____ Disagree

_____ Nether disagree nor agree

_____ Agree

_____ Strongly agree

5.5 Internal audit recommendations are implemented because of general public perceptions.

_____ Strongly disagree

_____ Disagree

_____ Nether disagree nor agree

_____ Agree

_____ Strongly agree

5.6 There is political influence in responding to internal audit recommendations.

_____ Strongly disagree

_____ Disagree

_____ Nether disagree nor agree

_____ Agree

_____ Strongly agree

**ASSESSING ADEQUACY AND TIMELINESS OF IMPLEMENTATION OF INTERNAL
AUDIT RECOMMENDATIONS IN GOVERNMENT MINISTRIES**

ADEQUACY OF IMPLEMENTATION

Scale for measuring adequacy of implementation internal audit recommendations

Category of implementation	Measures of implementation

Adequate implementation	<ul style="list-style-type: none"> Action taken meets the intent of the recommendation, and sufficient evidence is provided to demonstrate action
Partial implementation	<ol style="list-style-type: none"> Action taken is less extensive than recommended There is a process or procedure to address the issue; however, action taken is not complete at time of assessment
No adequate implementation	<ul style="list-style-type: none"> No supporting evidence that action has been taken Action taken does not address recommendation

Name of Ministry:

Adequacy of Implementation of Internal Audit Recommendations

Category of implementation	Financial Year	
	2014/2015	2015/2016
Adequate implementation		
Partial implementation		
No adequate implementation		
Total number of recommendations		

TIMELINESS OF IMPLEMENTATION OF INTERNAL AUDIT RECOMMENDATIONS

Timeliness of Implementation of Internal Audit Recommendations

Recommendations	Financial Year	
	2014/2015	2015/2016
Estimated number of days for implementing recommendations		
Actual number of days taken to implement recommendations		
No. of recommendations closed on or before the original estimated implementation date		

No. of recommendations closed after the original estimated implementation date		
--------------------------------------------------------------------------------	--	--



FACULTY OF ECONOMIC SCIENCES AND INFORMATION TECHNOLOGY

ETHICS CLEARANCE DOCUMENT

Dissertation (M)	
Thesis (PhD)	X
Article	
Hons	

SUPERVISOR				
Study Leader / Promoter / Author(s)	Prof P Lucouw			
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Name	JEMIMAH NINSIIMA			
Student / Staff Number				
Registered Title of Dissertation or Thesis or Project Title of Article	Effective response to internal audit findings in Government of Uganda departments: An empirical model			
School	Accounting	X	Economics	Information Technology
ETHICAL CLEARANCE				
Ethics clearance number	ECONIT-2016-069			
Date (of Ethics Sub Committee Meeting)	11 July 2016			


.....
CHAIRPERSON, ETHICS COMMITTEE

19 July 2016
DATE


.....
RESEARCH DIRECTOR

19 July 2016
DATE

INTERVIEW GUIDE

JUNE 2017

Category of Respondents: Accounting Officer, Chief Internal Auditor, and Chairperson AC

1. How can you describe the role of your office in the implementation of internal audit recommendations?
2. The Internal Audit Department is mandated to conduct regular internal audits in the ministry, write reports covering their findings and recommendations. How do you assess the level of independence of the Audit department?
3. In your opinion, how would you describe the level of implementation of internal audit recommendations particularly in terms of adequacy and timeliness?
4. In your opinion, what are the factors affecting the successful implementation of internal audit recommendations in the ministry?
5. From the mentioned factors, please name three that are critical to successful implementation of internal audit recommendations in the ministry.
6. Have you observed any difficulties in implementing internal audit recommendations in the ministry? If yes, explain the difficulties.
7. What are your suggestions for ensuring successful implementation of internal audit recommendations in your ministry?
8. How do you compare the capacity of your ministry with that of other ministries in implementing internal audit recommendations?

LETTER OF CERTIFICATION

Dear Sir/Madam,

RE: Confirmation of Editing the PHD Thesis

This is to certify that I have edited Jemimah Ninsiima's PHD Thesis titled 'A model for effective response to internal audit findings in Ugandan government departments'.

In the course of editing, the following were taken care of;

- Correcting grammatical, spellings, phrases, punctuation and other language errors.
- Ensuring consistency in style and formatting of the Thesis.
- Checking for coherence of the content.
- Checking figures and tables to ensure they are correctly numbered, positioned, titled and have matching information to the content.
- Ensuring that references are consistent in a systematic style.
- Raising queries and comments where need be.

Yours faithfully,

Agaba Catherine

Editor at Fountain Publishers, Kampala

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