

**EFFECT OF INTERNAL AUDIT CHARACTERISTICS ON AUDIT
EFFECTIVENESS IN SEMI AUTONOMOUS GOVERNMENT AGENCIES OF
KENYA**

BY

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DECLARATION

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for the award of the degree of Master of Commerce (Finance and Accounting).

I also declare that this dissertation contains no written material or published by other people except where due reference is made and author duly acknowledged.

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ABSTRACT

The study aimed to find out how internal audit features affect audit effectiveness in Kenya's semi-autonomous government institutions. The study's specific objectives were to determine the impact of internal audit characteristics on audit effectiveness, determine the impact of internal audit independence on audit effectiveness, determine the impact of internal audit management support on audit effectiveness, and explain how internal audit experience affects audit effectiveness in semi-autonomous governments. Nairobi County, which contains 81 semi-autonomous government agencies, was the target county in Kenya. The study used a descriptive research design, with 81 respondents (one internal auditor per institution) as the target population. Because of the population's manageability, the study employed census data. The information was gathered through closed questionnaires. The respondents were given the research equipment face to face. Data was evaluated using both descriptive and inferential statistics, such as means, standard deviations, frequencies, and percentages, as well as correlation and regression analysis. The study established that the internal auditors of Semi-Autonomous Government Agencies did agree that the internal auditor reports informs management's decision making; internal audit independence could only be achieved by allowing the internal audit department to perform its responsibilities free from any interference; for the internal audit department to be able to meet its responsibilities, the department must have or be able to attract persons with the required knowledge, skills and experience; the internal audit function helps expedite external audits and that for the internal auditors to be deemed experience, they must have a good understanding of the entity's system of internal controls. Further, the study results revealed a significant positive relationship between internal audit independence, internal audit management support, internal audit experience as well as independence of internal audit staff and the internal effectiveness in the Semi-Autonomous Government Agencies. The study concluded that internal audit independence, internal audit management support, internal audit experience played a significant role in enhancing the effectiveness of internal audit function in Semi-Autonomous Government Agencies. The study recommended that the heads of the internal audit function should be allowed unlimited access to desired records and information and should be supervised by audit committees. Further, Semi-Autonomous Government Agencies should ensure that the recommendations provided by the internal auditors are acted on. The study recommends that there is need for internal audit staff to undergo regular trainings and participate in the development programs to boost their skills and expertise.

Key words: Internal audit independence, internal audit management support, Internal audit experience

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ACRONYMS AND ABBREVIATIONS

| | |
|---------------|--|
| CIA | Chief Internal Auditor |
| IA | Internal Auditing |
| IAF | Internal Audit Function |
| IIA | Institute of Internal Auditors |
| ISPPIA | International Standards for the Professional Practice of Internal Auditing |
| SAGAS | Semi-Autonomous Government Agency |
| MoE | Ministry of Education |
| SOEs | State Owned Enterprises |

DEFINITION OF TERMS

| | |
|-------------------|--|
| Audit | A formal examination of a person's or company's financial records by an independent organization (Cohen et. al., 2002). |
| Internal auditing | It is a self-contained, unbiased assurance, as well as consulting activity adding value and improving an organization's processes by ensuring that risk management, regulatory, and governance systems are effective (Tapiwa, 2013). |
| Effectiveness: | This relates to the degree to which objectives are met and specified problems are resolved (Mihret and Yismaw, 2007). |
| Competence | Refers to a person's ability to operate in a wide range of situations based on their knowledge and skills (Zain et al., 2004). |
| Decentralized | Refers to the dispersal of the powers of administration, as well as duties in a smaller geographical area (Rondinelli, 1999). |
| Independence | Is the act of being self-sufficient; being freed from the control, influence of others, and determination by others (Zelege, 2007). |
| Experience | An auditor's capacity to comprehend auditing and have financial literacy, or the capacity to understand and grasp auditing, is referred to as experience (Bedard, 2012). |

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Effective internal audit refers to a contemporary concern for every organization because resources are scarce. The prudent use of said resources is therefore vital. Arena (2013) observes that internal audit is regarded as a function of the financial compliance, as well as being a tool that assists in the accounting departments with a focus on safeguarding organizations' assets. Besides, Coetzee and Erasmus (2018) notes that internal audit by understanding its position, positions, duties, and contributions to major internal and external audits, it is one of the most critical aspects of the businesses. Internal auditing has expanded in recent years to include more significant organizational tasks like as risk management and participation in internal control (Alzeban & Gwilliam, 2014). There is a lot of concern among company executives about how successful the internal audit departments are in strengthening governance processes, according to Alzeban and Gwillan (2014).

Incidents also exist in the Biblical rules and examples include the hazards of double ownerships of properties, having highly qualified, as well as truthful workers, limited access in the ownerships, as well as the departmental barriers (Gerson et al., 1998). In the Malaysian context, despite the fact that internal auditing has advanced rapidly in recent years, events in the recent years have revealed that in Malaysia the internal audit is still plagued by issues that jeopardize its effectiveness (Ahmad, Jusoff & Othman, 2009).

Internal audit independence positively affects internal audit effectiveness as revealed by Mahmoud and Sulaiman (2018). However, the subjectivity of audit does not show up in audit effectiveness. Management support for recruiting and training skilled and trained employees is described as having a greater relationship with internal audit effectiveness. Senior management has also had a direct influence on how well the audit is conducted within the organization (Eki, 2019).

Internal audit and effectiveness have also been a source of concern on the African continent. Resource constraints in the internal audit, lack of proper quality assurance, improvement programs, as well as lack of proper external quality assurance in an organization, according to Bongani and Karin (2017) remain important for the organizations. The participants in their research had mixed feelings about the efficacy of internal audit roles. Internal auditors lack technical credentials and, as a result, have a poor status. Internal auditors face many problems that management is unaware of. With respect to internal auditing in Ghana SOEs, Alhassan, Erasmus, and Fred (2018) looked at respondents' perceptions of the impact of factors such as competence, scale, relationships, required management support for internal auditing functions, and the independent internal auditors' efficacy. Internal audit effectiveness is most closely associated with management support, according to the study's results. Internal audit success depends on a variety of variables, such as the size of the unit, the individual competence of auditors, the independence of the audit team, as well as the working relationship between external and internal auditors.

According to Salim and Usang (2016), internal audit characteristics and management, both the company and the outcomes are positively and substantially

influenced by the audit relationship. They also concluded that internal and external auditing is unrelated to performance. Local governments have discovered that internal audit features and connections are critical to effective management and reporting. Freedom, objectivity, and the organization all depend on the auditor to do their work: audit on your technique, your company, and the objectivity of the auditor are all connected with the success of internal auditing (Hella and Mohamed, 2016). This research is valuable for the scholars and the accounting professionals interested in understanding those factors that influence internal audit and the efficacy growth.

While internal audit efficiency and management support are closely related to the audit's efficacy, organizational settings and auditee characteristics have a less direct impact on it (Mihret & Yismaw, 2007). Support by the management, perception and perspectives of the management, organizational independence, as well as competent and working internal audit are all vital to public sector growth, according to Kagaba and Mulyungi (2017). Internal auditing has a significant and beneficial effect on certain sub-variables, as shown by Kagaba (2017) and Mulyungi (2017). More often than not, independent variables may characterize the dependent one. The structure of internal audit must be altered, and the board of directors must receive a report from the internal audit manager (Audit committee). Internal audits should have management's backing. Audits should be performed separately and with the required auditing methods. Rather than seeing audits as fault finders, top management should accept audit results and fix errors.

In Kenya, a lot of concern has been expressed about auditing and effectiveness. There was a significant increase in the expertise of internal audit groups in Kenyan government ministries due to internal audit groups. Internal audit performance in Kenyan

government departments has been significantly impacted (Maina, 2018). He carried out research on the impact of management assistance on audit quality, looked at the impact of manager autonomy on audit quality, and assessed how audit committees impacted organizational effectiveness and county performance. However, the research determined that the most important variable was staff capacity and leadership, which was followed by supportive management.

Kenya created two tiers of government, the national and local, with the aim of allocating more resources to provide more services to the country's citizens (Ariga&Gathogo, 2016). The new county governments were provided with an abundance of resources to assist them in accomplishing their goals. They discovered via their investigation that the audit committee's independence and the efficacy of internal audit were strongly correlated. At the same time, there was a strong and obvious link between auditor effectiveness and efficiency. They discovered a statistically important and optimistic relationship between managing audit and effectiveness, as well as a systematizing audit.

Involve all three variables that we haven't addressed so far: They're all significant contributors to the three items that have been excluded and relevant to our discussion so far: consistency in the audit process, profession/educational engagement, and visibility (Njoroge, 2016). In addition, this research found that having a firm written policy shielded employees from outside retaliation when they reported in-formal enabled them from outside pressures when doing audit work, and this ensured that they were free to implement their policies without fear of being disciplined when doing audit work. It follows that

management is dependent on an in no small part on internal audit as shown by the previous examples, so it follows that we must conduct a comprehensive investigation.

1.1.1 Audit Effectiveness

Any corporation that receives and uses capital must be able to efficiently conduct audits. Marika and Giovanni assert that the internal audit team's characteristics, audit processes and practices, and business linkages all have an influence on the efficacy of internal auditing (2009). For example, a company's ability to better conduct internal audits is related to a higher ratio of internal auditors to workers, the Chief Audit Executive's membership in the Institute of Internal Auditors, and the organization's use of control risk assessment methodology.

Internal audit findings may or may not be relevant to external audit activities, but working together increases control efficiency and reduces waste (Martino &Regoliosi, 2019). External auditors utilize the work of internal auditors to enhance their own performance, according to Argento et al (2018). However, closer contact with internal auditors could jeopardize external auditors' independence and professionalism, leading to a lack of critical assessment and use of internal auditors' reports. Simultaneously, when using the internal audit reports, the external auditors should be aware of the impacts and the meanings derived from the audit quality they provide.

According to Alini et al (2018), organizations that have a minimum of three audit members in their committees have substantially less internal control failures than those with fewer than three members. State's colleges and universities, says Salihu (2015), lack effectiveness due of lack of independence, adequate staff and timely reporting. They're not independent. Also, according to Salihu (2015), the institution's internal control systems are

inefficient since management does not enforce some elements of the system, such as permission and approval, supervision, division of responsibilities, and personnel controls, as required by law. Internal audit mechanisms were only somewhat effective in handling LATF finances, according to Okioga et al (2019), and they needed to be improved.

In addition to the industry a business belongs to, there are other variables that affect how successful internal auditing is, including the independence, impartiality, and support of the firm's senior management. Internal audit (Brahim& Hella, 2016). It is apparent that proper resources must be allocated to ensure an effective audit function, treasurers should avoid management influence the auditing process, and they should all strive to maintain high competence, and the integrity of the function should be upheld, and if possible (Kanini, 2017).

1.1.2 Semi-Autonomous Government Agencies (SAGAs) in Kenya

In Kenya, semi-autonomous government agencies are public bodies that provide public products, and services and remain independent of the government, as well as having their revenue streams in addition to direct government financing (Institute of Internal Auditors, 2014). Internal auditors are employed by these organizations as formal process to promote the recruiting of internal audit personnel, daily training for internal auditors, and policy on resource allocation to the internal audit role is needed (Magero, 2019). These organizations are vital in the achievement of vision 2030 programs (GOK, 2007). Semi-autonomous agencies are independent of the government and perform functions such as regulation, service delivery, and policy execution. In contrast to government bureaucracy, agencies have less hierarchical and political influence on their everyday operations and have greater management flexibility.

Semi-autonomous government agencies in Kenya help in the regulation of other sub-sectors. Among the sub sectors where semi-autonomous government agencies include the Insurance Regulatory Authority, Capital Markets Authority and the Retired Benefits Authority. Furthermore, such Semi-autonomous government agencies generate revenue through the Kenya Revenue Authority. Additionally, other semi-autonomous government agencies such as the Kenya Institute of Administration develop capacity of public servants to facilitate better service delivery. All these functions as executed by the semi-autonomous government agencies make use of both internal and external auditors prior to the implementation of various policies that would impact on other sectors of the economy. Kenya Water Towers Agency (KWTA), Kenya Forestry Research Institute (KEFRI), Kenya Forest Service (KFS), National Environment Management Authority (NEMA), and the National Environmental Trust Fund (Net Fund) are examples of semi-autonomous government agencies in the ministry, according to the Government of Kenya (2013).

1.2 Statement of the Problem

The efficacy of internal audit is critical for every organization's success since it aids in improving performance, maximizing resources, and preventing the loss of those resources (Njoroge, 2016). It is crucial for public sector businesses' governance, risk management, and many other controls to be strengthened via internal auditing (Asare, 2009). Effective Internal Audit is based on risk management that helps in identification of risks, designing of control and governance process and to achieve this, independence, management support and experienced personnel are key (Ondiek, 2013). Effective internal

audit may thus assist in the identification and prevention of fraud and, as a result, minimize the negative effects of public servant misappropriation and waste (Magero&Wamiti, 2017).

Even with having enacted internal audit mechanisms in place, there is still an increase in public resource mismanagement and cases of fraud and corruption (Mihret &Yismaw, 2007). A recent example is IEBC (Feb 2015) and NYS (May, 2018) where Sh. 1.9 billion were lost as reported by the auditor general (Ondiek, 2013). It is through this that there is concern on the internal audit practice, controls and procedures to improve audit effectiveness in various institutions in the implementation of their respective mandates and plans (Barry and Stephen, 2006). In the public organizations, the internal auditors have the roles of ensuring that there is efficiency in the management of the finances and reduction of the losses in these organizations (Eden & Moriah, 2006). Kitijo (2014) found out that there were many factors hindering internal audit effectiveness in Shinyanga and cited lack of experience and poor relationship with the management as the major cause of ineffectiveness (Barry and Stephen, 2006).

Similarly, Niyonzima and Soetan (2018) in their study on auditors' characteristics and quality of financial information recommended that auditors should have both the technical and functional skills and appearance criteria and inform their decisions about the financial information's relevance, as well as human objectivity (Barry and Stephen, 2006). Though public funds have been misappropriated in the public sector, there have been very few studies on how these functions particularly that of independence, management support, and staff experience have affected system reliability. An article by Ondiek (2013) concludes that public sector banks should conduct further studies on financial results. In

this study, the goal is to find out whether internal audit characteristics have a bearing on audit effectiveness in semi-autonomous government agencies.

1.3 Research Objectives

1.3.1 General Objective

The study's goal was to find out how internal audit features affected audit effectiveness in semi-autonomous government organizations.

1.3.2 Specific Objectives

- i. To establish the effect of internal audit independence on audit effectiveness in Semi-Autonomous government agencies.
- ii. To ascertain the effect of internal audit management support on audit effectiveness in Semi-Autonomous government agencies.
- iii. To explain how internal audit experience affects audit effectiveness in Semi-Autonomous government agencies.

1.4 Research Hypothesis

H₀₁– Internal audit independence has no significant effect on audit effectiveness in Semi-Autonomous Government Agencies.

H₀₂– Internal audit management support has no significant effect on audit effectiveness in Semi-Autonomous Government Agencies.

H₀₃- Internal audit experience has no significant effect on audit effectiveness in Semi-Autonomous Government Agencies.

1.5 Significance of the Study

1.5.1 Semi-Autonomous Government Agencies

The Government of Kenya's Semi-Autonomous Agencies benefited from this research. The findings were relevant to the daily management of the SAGAs in terms of management of physical and financial resources. Consequently, SAGAs are anticipated to live up to their mandates due to prudent utilization and management of resources.

1.5.2 Auditors and Accountants

The study findings also helped auditors and management in their assignments on audit in the light of independence, management support and experience as audit characteristics. This helped improve the work of auditors. On the same breath, accountants who handle resources in SAGAs found the findings beneficial especially in the way they handle and manage resources.

1.5.3 Academicians and practitioners

Academics and internal audit practitioners will benefit from this research since it illustrates how essential internal auditors are as well as their capabilities. With this study, researchers were able to learn from this. Furthermore, the report would suggest areas for follow-up and expansion to further research.

1.6 Scope of the Study

The study focused on Semi-autonomous government agencies in Kenya within Nairobi County. Due to their nature of operations, these entities rely on work done by internal auditors as they implement their mandates. The target population included auditors in Semi-Autonomous Government Agencies of Nairobi County. The study focused on

three internal audit characteristics namely independence, experience and management support. It also focused on internal audit effectiveness.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Various scholars previously reviewed this study. Theoretical structure, operationalization of variables, and empirical analysis of frameworks will be reviewed in the chapter.

2.2 Theoretical Review

Three ideas guided this research, including agency theory, stewardship theory, and contingency theory.

2.2.1 Agency Theory

Barry and Stephen (2006) proposed the agency theory, which states that organizations are made up of administrators and their agents. Barry Mitnick and Stephen Ross were the first academics to expressly call for the creation of a theory of agency, as well as to start working on one. They did so separately and approximately at the same time. While the basic principles underlying both approaches are similar, Ross is in charge of the economic theory of agency's origins, while Mitnick is in charge of the institutional theory of agency. The approaches are perceived as complementary since they apply the same concepts but with different assumptions. In a nutshell, Ross characterized agency analysis as a compensation contracting issue, and agency was seen as a reward issue. In response to the critical imperfection of agency relationships, Mitnick came up with what has now been a common perspective that organizations are made from the agency and adjust to cope with agency: Since it doesn't pay to be perfect, the principal's desired behavior never

materializes. Society, on the other hand, develops organizations to deal with these flaws, manipulating or buffering them, adapting to them, or being chronically corrupted by them. As a result, in order to fully comprehend agency, we must look at both the incentives and the institutional frameworks (Barry, 2006).

In the context of internal audit, internal auditors are considered as agents and monitors for a variety of the internal audit users that include the board and audit committee. Agency problems could occur when the board or its audit committee is inefficient, and hence, the senior management is likely to be a powerful influence over the internal audit (Mihret & Yismaw, 2014). Internal auditors are often employed by senior management but are required to act as agents of the board and audit committee in evaluating the senior management's works (Alzeban, 2013). However, internal auditors may have varying motives to act against the board of directors' interests and its audit committee and these motives include financial rewards from managers, personal relationships with them, and the power of senior management in shaping the future position of internal auditors and their salaries. In such a work environment, internal auditors as agents may have an incentive to be bias with their reporting, and which leads to new concerns of the board and audit committee about their trust on the internal auditors' objectivity (Mohamed, 2016).

According to this theory, one of the most essential roles and duties of managers is to exert control over the activities and resources of the organization (Mohammad, 2013). When one entity acts as an agent for another, a reduction of value or wealth occurs, according to agency theory. This is the situation in a traditional company, where management, or the agent, is employed to run a business for the shareholders, or the principals in this case (Colbert & Jahera, 2017). The agents' job is to carry out

management's assigned tasks. The difference between the ownership and power, various risk preferences, asymmetry in the knowledge, as well as the moral hazards, according to Leepsa and Panda (2017) in their analysis of agency theory, cause conflict of interest, as well as the agency cost.

Audit role exists to keep track of management's activities and testify to management's results (Colbert &Jahera, 1988). They stated that the audit function's cost is an example of an agency cost, and they spoke about the audit function's role in agency relationships. When one person is hired to work on behalf of and in the best interests of another, such a relationship exists. Conflicts are bound to occur due to the inherent need to maximize one's own utility. Knowing about such future disputes will help to cut down on the cost of resolving them.

From the above and in the light of audit effectiveness, it is therefore observable that CEOs of organizations or top management will need to operate as managers and permit the internal auditors to do various assigned roles and responsibilities if resources are to be protected. Unless this is done, CEOs of organizations can take advantage of their powerful positions to maximize their personal economic utility. Besides, the role played by internal auditors as agents becomes critical in identifying areas that the management need to focus on for financial stability. Agency theory in this respect explains how to organize relationships where the managers determine the work while the internal auditors do the work. In this case, the internal auditors perform tasks on behalf of the management. It is also assumed that both the management and the agents may be motivated by self-interests which cause conflicts.

2.2.2 Stewardship Theory

Stewardship principle was postulated by Davis and Donaldson in 1989. The idea goes beyond economic self-interest and opportunism, claiming that people are often driven to help others and be compassionate and altruistic (Davis & Donaldson, 1997). According to Charumathi and Kota (2018), stewardship theory is a relatively recent idea that was introduced to justify management's rational behavior. It is chiefly connected to defining circumstances that are linked to the interests of the principal and the stewards (Davis & Donaldson, 1991 & 1993). Individuals are predisposed to become agents or stewards because of the situational factors and those factors that have psychological. The executive's choice to serve as a steward is influenced by a variety of factors. Organizations' work environments are just one aspect of the situational factors.

Furthermore, according to Hernandez (2012) and Davis et al. (1997), stewardship is defined as the "degree to which an entity voluntarily subjugates his or her own interests to engage in the long-term benefit of others." According to this theory, there exists lack of inherent conflict of interests in organizations that have been witnessed between the managers and the owners of the business (Donaldson, 1990), no inherent issue of executive control (Donaldson, 2008), and successful cooperation between the two sides, with the emphasis on the organization's objectives rather than self-interests (Slyke, 2007). According to this theory, the executive manager is primarily concerned with doing a good job and being a good steward of the company's properties. In terms of corporate governance, the steward defends the rights of owners or stakeholders and takes decisions on their behalf with the intention of establishing and sustaining a profitable business that benefits shareholders.

From the above, stewardship-oriented companies combine the CEO and chairperson roles under one executive, with a board made up entirely of in-house members. In this sense, the structure allows for intimate awareness of organizational processes as well as a firm commitment to success. In this situation, administrators of organizations must cooperate with their internal auditors in order for them to succeed (Karl and Thomas, 2019).

2.2.3 Contingency Theory

An Australian psychologist suggested the contingency theory of leadership (Fred, 1964). For the organization's performance, the theory stresses both the leader's personality and the circumstance in which the leader works. In this case personal attributes of managers and auditors plus their environment have a critical role in influencing success of the organization. In their research on small business leadership styles, Gelmar et al (2017) discovered that small business managers should carefully evaluate how they act in such circumstances in order to enhance employee engagement toward work and improve efficiency.

In both management and accounting, contingency has been accepted as a means of understanding different activities and processes in the organizations. Contingency is founded on the premise that effectiveness and appropriate management strategies or processes are defined in the context of the organization. Contextual factors could explain why different systems work well for different organizations (Ismail, Sapiei & Zainuddin, 2010). The authors emphasized the influence of contextual factors like the external climate, the use of modern technologies, available structures, existing cultures, scales and scalability, as well as the strategies applied on the structure of the organization and, as a

result, on audit effectiveness. The situations explained above point out that the environment in SAGAs will have impacts on the performance of the internal audit teams and management in their attempt to ensure audit effectiveness. In this case the role of management is to create a conducive working environment for auditors which will go along to enhance the effectiveness of audit.

According to the contingency theory, an organization must identify specific sets of decisions and actions which are associated with certain defined circumstances and demonstrate an appropriate matching (Islam & Hu, 2012). This theory lends credence to the argument that the corporate responsibilities and duties of an entity are not only restricted to shareholders but also extend to other stakeholders such as employees, creditors, prospective investors, governmental and professional bodies, customers and suppliers and whose interests also influence its performance (Badara & Saidin, 2014). Proponents of this theory point to its major premise that organizational strategies have to take account of the particular needs of the organization in any given situation and as situations change so must the strategies (Cameron, 2010). However, critiques of this theory point that the theory fails to adequately explain what should be done about a leader/situation mismatch in the workplace and that the theory also falls short in trying to explain why leaders with certain leadership styles are effective in some situations but not others (Howell, Windahl & Seidel, 2010).

The contingency approach to management, or theory, has numerous facets and consequences. For the time being, though, an overview and a few noteworthy points will have to do. While they are more closely related to Lewin's open system theory, contingent

theories do raise questions about the universal applicability suggested by some of the other theories previously examined. In a nutshell, according to contingency theories, effective management will take on various forms depending on the circumstances. There has been early study on contingency theory that shows factors like leadership style and job design are important to knowing what will lead to a successful overall management result, as well as involvement in decision-making and organizational structure.

2.3 Empirical Review

2.3.1 Internal audit independence and audit effectiveness

Kaboi et al. (2018) found that internal audit independence and authority are crucial principles that allow the system to operate without intervention while also offering useful guidance to management on the ongoing implementation of effective control policies. Internal audit independence and authority were found to be critical in the study (Warga, 2014). The research that utilized a case study of different audit activities found that the independence of internal audit should be taken into account while assessing the auditing process. It was discovered that internal audit independence has the most beneficial and substantial impact on the efficiency of internal audits, according to research by Kaboi et al (2018). As a result, they ordered county government officials to make sure that internal audit is free to obtain any audit material they need for their job and that it is independent of the department. As a consequence, this research highlights the significance of independence as an internal audit characteristic for audit effectiveness.

Alzeban and Gwilliam (2014) identified internal audit's independence as one of the key factors that influenced internal audit effectiveness. The authors noted that

independence exists when internal auditors are able to act with objectivity, impartiality and free from any conflict of interest. Similarly, in a study of factors that contributed to the effectiveness of internal audit in the Malaysian public sector, Shokiyah and Serjana (2014) established that there was a significant positive relationship between the internal auditors' independence and effectiveness of internal audits in the country's public sector.

According to Asaolu et al. (2016), independence of the IA function is fundamental to the reliability of its reports given that the assurance services provided by auditors derive their value and credibility from the fundamental assumptions of independence of mind and independence in appearance. budget and/or interfere with the internal audit plan. To safeguard the independence of the IA function, the audit committee must be invested with the authority to appoint, dismiss and assess the performance of the internal audit executive. The IA function should thus be treated and seen as credible (Goodson et al., 2012). According to the findings of a study by Rudhani et al. (2017), independence is absent when the IA function operates mainly to support the management, and when it has a weak relationship with the audit committee. Similarly, Sakour and Laila (2015) suggested three factors as impacting upon internal auditors' ability to be independent from the management, these being: their professional status, presence of a formal and informal communication network and the internal auditors' reporting position.

According to Dejnaronk et al. (2016), internal audit independence can be challenged by actions such as when the function is used as a stepping stone to other positions, when the Chief Executive Officer or Chief Finance Officer is empowered to approve the IA functions. Research done by Kuncara (2018) found a link between government internal auditor independence and a number of beneficial outcomes. The

author finds it unexpected that community cohesion has a favorable correlation with the efficacy of internal audits. Unfortunately, the author continues by claiming that personal attributes such as education and job experience have no impact on audit effectiveness. At the Technical University of Mombasa, Kimotho (2014) found that internal audit independence was important to increasing employee accountability, as well as productivity, by identifying the elements that affected internal audit independence and the different variables that threatened it.

As Kertali and Tahajuddin (2018) argue, successful internal audit departments need the input of independent auditors. Internal audit independence positively impacts audit efficiency, according to 2018 research conducted by the authors. When Ebissa (2015) looked at the factors affecting the performance and effectiveness of Ethiopian internal auditors, he discovered that organizational independence was the most significant predictor of those auditors' effectiveness, with a substantial positive impact. Internal auditors are more effective, according to the results, when they are given a charter by the government. As a consequence, officials in the public sector should make an additional effort to guarantee that internal auditors have organizational independence and that every sector has an internal audit charter.

Research that looked at the impact of competence and independence on internal audit efficiency discovered that independence had three key indicators: independent organizational, individual objectivity, and reporting (Usman, 2015). Internal auditors' competence, on the other hand, is bolstered by information, abilities, skills, qualifications, and experience, according to the author. He claims that increasing the independence of

internal auditors can increase audit effectiveness and thereby improve the efficiency of internal audit.

Cohen and Sayag (2010) when focusing on the effectiveness of internal auditing in Israeli organizations opined that where internal auditors are in receipt of incentives-based compensation, which includes reported earnings as one measure of performance, their objectivity and independence is likely to be hampered. Alzeban (2013) shared similar sentiments that IA function's independence is threatened as when reporting to senior management rather than the audit committee, internal auditors are usually unable to protect the organization against fraudulent activities of the management. Alshbiel and Al-Zeaud (2012) suggested that the independence of internal auditors is impaired when the management seeks to influence the internal audit planning process and when the management has the final say as to which internal controls are to be instituted and the selection and scope of the area of the entity that will be subject to audit.

The studies above show that independence, as an audit attribute, plays a critical role in increasing audit effectiveness.

2.3.2 Internal Audit Management Support and audit effectiveness

Support from organizational management is a critical audit feature that has an influence on the efficiency of the audit. Internal audit efficacy in Kenya's semi-autonomous government agencies was linked positively and substantively by Magero et al. (2019) in their study of the impacts of managerial support on internal audit effectiveness. Top management support, organizational independence, staff adequacy, competence, and the audit committee, according to Mwangi (2017), are critical determinant variables that management should not neglect. The study also discovered that the most influential

variable is staff adequacy and competence, followed by top management support. The study concluded that management should place a greater emphasis on the support provided to internal auditors and support internal audit by allocating adequate budgetary resources to the department and ensuring that internal auditors are recruited in the appropriate proportions in order to reduce the shortage of internal auditors in these organizations and improve their effectiveness and growth. Internal audit should be given more power by reducing interferences, providing documentation as needed and allowing them access to any office or documentation within the organization/departments, as well as encouraging cooperation between the audit committee and internal auditors, who are in charge of ensuring compliance.

Soh and Martinov-Bennie (2011) expressed the view that the success of the IA function strongly depends on the level of senior management's support for the internal auditing process especially in recognition of the function as being a critical and Internal auditing has been linked to financial efficiency, important activity as other major functions within the organization. In an investigation of factors influencing the effectiveness of internal audit in Kenya's public sector, Karanja (2011) asserted that without top management approval, support and encouragement, the IA function was likely to face failure and more so due to lack of adequate facilitation from the management to effectively execute its responsibilities. Mihret and Yismaw (2014) in their study of internal audit effectiveness in the Ethiopian public sector also found that having management's support implied that the internal audit function could have access to more resources for undertaking their tasks and meeting their responsibilities including hiring of competent internal audit staff and their continued training to improve their capabilities and efficiency.

According to research by Makerevi and Newman (2018), and both its confirmation and consultative functions have been beneficial in this regard. According to the authors, management should also make certain that its Internal Audit Functions (IAF) are fully resourced and financed. When it comes to effective company governance, internal audit is a must. However, its success is heavily reliant on the support of upper management (Ataribanam et al, 2017). There was a strong correlation between Management Support Services and Internal Audit outcomes, which means that internal auditors were unhappy with management's support services. In order to establish an Internal Auditor Charter, management must be ready to work with Internal Auditors while also giving adequate logistical support. Managers should see internal audit as a strategic business unit that adds value, according to their recommendations.

Alzeban and Gwilliam (2014) noted that the ISPPA has emphasized the importance of management's support in removing any limitations relating to access to adequate resources which impede the internal audit department's performance by asserting that the management has a responsibility of ensuring that the IA function is adequately facilitated for it to effectively meet its responsibilities. According to Bunango (2015), the senior administration's backing of the IA function gives an essential sign about the role and value of the internal audit to the organization. This backing helps to empower the internal audit office to effectively perform its undertakings and obligations. In a study to investigate the factors affecting the internal audit effectiveness in Tunisian organizations, Mohamed (2016) identified full implementation of the IA recommendations and adequate financing of the IA function as some of the indicators of positive management support for the IA function.

Additionally, researchers have found a statistically significant link between improved internal auditor performance and the composite dimensions of managerial support (Hussein & Seif, 2012). Changes in internal auditor efficiency are always related to help from upper management (monetary and immaterial incentives, as well as Professional development as a variable factor). To better understand how effective internal audits are in the public sector, a case study of an Ethiopian office was conducted by Shewamene (2014). The study found a strong link between management understanding and support of this function along with internal auditor organizational independence and a well-trained audit team. An approved IA charter, well-trained Internal Audit personnel, and management support all played a significant part in the author's research on the efficacy of public sector internal auditing.

On the other hand, a study conducted by Abebe, (2020), Internal auditing serves as the foundation of an organization's internal control system. Where there is a strong and effective Internal Audit Department, the organization's activities are strong and effective. In order to help a company, achieve its objectives, internal audit plays a critical role (Abebe, 2020). A statistically significant and positive connection exists between effective internal audit and successful internal audit, while the former has a statistically insignificant but positive relationship with management support and the latter with audit work performance. An important audit characteristic that has an effect on audit effectiveness is organizational management support. The efficacy of internal audit in Kenya's semi-autonomous government agencies was shown to have a positive and substantial connection with managerial support by Magero et al (2019).

According to Mwangi's of (2017), top management support, organizational independence, personnel adequacy, integrity, and the audit committee are significant determinant factors that must not be overlooked by management. The study also discovered that the most influential variable is staff adequacy and competence, followed by top management support. The study concluded that management should place a greater emphasis on the support provided to internal auditors and support internal audit by allocating adequate budgetary resources to the department and ensuring that internal auditors are recruited in the appropriate proportions in order to reduce the shortage of internal auditors in these organizations and improve their effectiveness and growth. Internal auditors are tasked with ensuring compliance, so the author suggests that management give them more control by reducing interferences, providing documentation as needed, and allowing them access to any office or documentation within the organization/departments. They should also work together with the audit committee to foster cooperation.

Additionally, researchers have shown a statistically significant link between the composite dimensions of management support and improved internal auditor performance (Hussein & Seif, 2012). The degree to which internal auditor efficiency changes is consistently linked to management support (monetary and immaterial incentives, as well as Professional development as aspects of the variable). Shewamene (2014) found a strong link between management understanding, support and organizational independence of internal auditors, as well as adequate and trained personnel for internal auditing in Ethiopian public sector organizations in their case study when studying the determinants of public sector internal audit effectiveness. Government internal audit efficacy was greatly

boosted by management backing together with well-trained Internal Audit personnel and an approved IA charter readily available, according to this author.

Organizational internal control systems are built on the principles of internal auditing. In organizations with a strong and efficient Internal Audit Department, activities are also strong and efficient. In order to help a company, reach its objectives, internal audit plays a critical role (Abebe, 2020). Internal audit success has been shown to be statistically significant and positively related to management support and audit productivity, whereas organizational independence of internal auditors has a statistically negligible but positive connection with successful internal audit.

2.3.3 Internal Auditors Experience and Audit Effectiveness

Reports have indicated that the experience of the employees in the internal audit departments is connected to the success in the results obtained from the audit (Bedard, 2012). The main responsibility of the internal audits on an organization is to ensure that the reporting and auditing are properly done and remain adequate in providing the expertise that are required (Lin, 2010). Expertise refers to an auditor's ability to comprehend auditing and to have financial literacy, or the ability to read and comprehend auditing. As a result, internal audit professionals should have comprehensive finance accounting expertise or advanced certification in accounting or finance (Daniel, 2012). Internal audit professional expertise has an effect on the function's results, according to Njoroge (2016), and audit personnel must be proficient and knowledgeable in the risk profiling issues, performance assessment concepts, financial analysis tools, as well as the techniques that are applied in the performance, knowledge and skills on the ICT and tech-based audit techniques, as well as those who have knowledge and memory of the objectives of the organization.

Drogalasa et al. (2017) discovered that audit effectiveness, auditor accountability, and auditor preparedness all had a positive and significant influence on fraud detection. As a result of these results, companies should make investments in internal audit procedures, training, and other initiatives aimed at reducing fraud in accounting. For example, Shamki and Thuriya (2017) found a strong link between the efficacy of internal audit in companies, current scope, and auditor experience in the Omani public sector when they looked at the effectiveness of internal audit, scope, and auditor experience.

Experience with corporate operations is essential to ensuring that companies fulfill their goals. Internal audit experience within an enterprise, likewise, leads to the achievement of the organization's objectives (Mu'azu & Saidin, 2013). This study found that the success of public sector internal auditors was influenced by their audit expertise. Furthermore, Muaz et al. studied the moderating effects of a productive audit committee on the internal audit market. They found that audit experience was positively associated with the organization's efficiency and effectiveness

2.4 Conceptual Framework

These variables may be visualized by using a conceptual framework, as illustrated below. Internal audit qualities like as independence, management support, and expertise are considered independent variables. The dependent variable, on the other hand, is the efficiency of internal audit. Audit effectiveness depends on the manipulation carried out on the independent variables. Audit effectiveness therefore, was informed what needs to be done on independence, management support and experience.

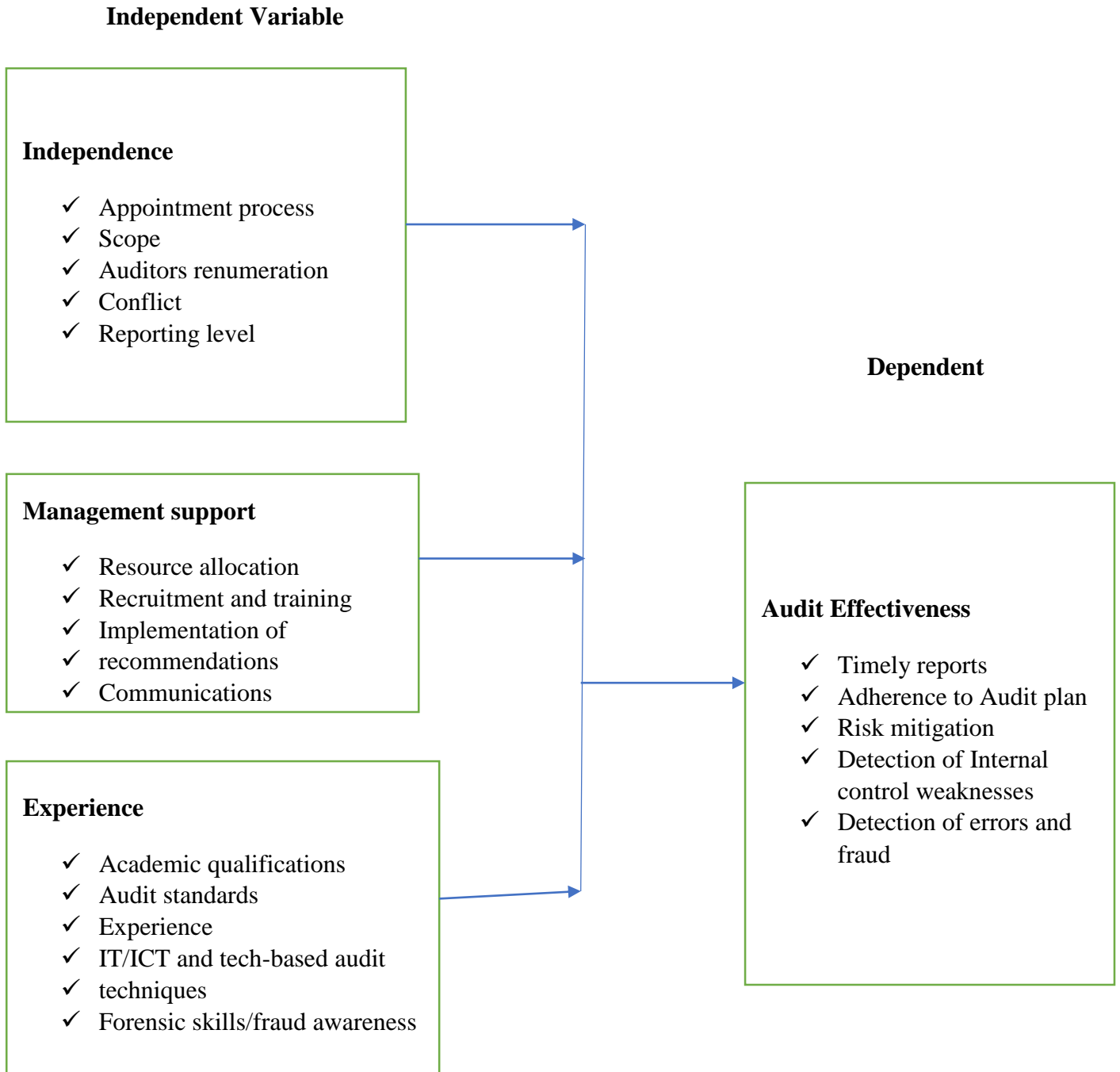


FIGURE 2. 1: Conceptual Framework

2.5 Operationalization of Variables

The study involved both independent and dependent variables. Whereas independent variable is internal audit characteristics which entails independence, management support and internal audit experience, the dependent variable is audit effectiveness. The table below gives details of the variables, their dimensions and measurements.

TABLE 2.1 Operationalization of Variables

| Variables | Dimension | Measurement |
|---------------------|--|--------------------|
| Independence | <ul style="list-style-type: none"> • CAE is fully involved in the appointment for an internal audit staff • Internal auditors have access to all operational activities, staff, properties, and transactions records without any limitations. • The functions and duties of internal auditors are well-defined and compensated according to their skills and service levels. • Internal auditors are properly insulated from any internal pressures, so they are able to produce conclusions and make suggestions which are impartial and incontestable. | Likert scale |

| | | |
|---------------------------|--|---------------------|
| | <ul style="list-style-type: none"> • Internal auditors have the freedom to report their opinions directly to the CEO, Audit committee or shareholders | |
| Management support | <ul style="list-style-type: none"> • Resource allocation to audit department. • Recruitment and training of internal auditors. • Implementation of internal audit recommendations. • Provision of working papers. • Communications with external auditors and employees • Size of audit staff and audit needs. | <p>Likert scale</p> |
| Experience | <ul style="list-style-type: none"> • Academic qualifications and Professionalism. • Knowledge and adherence to audit standards. • Experience -Length of work as auditors. • Internal auditor’s proficiency uses of IT/ICT and tech-based audit techniques | <p>Likert scale</p> |

- Internal auditors are proficient in forensic skills/fraud awareness detection skills
 - Timely finalization of audit reports
 - Internal audit adheres to audit plan
 - Internal audit improves the effectiveness of risk management and mitigation process.
 - Internal audit reviews the effectiveness and efficiency of internal control systems and detects its weaknesses
 - Internal audit analyzes the probability of fraud, assessing whether fraud will occur.
- Likert scale
-

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The research design designed for this project, the population targeted by the research, sampling methods, as well as the sampling procedures applied, applicable research instruments in the study, instrument validity, as well as the reliability that are applied in the study, data collection methods and procedures in the course of the study, as well as the data processing and analysis for the study have been covered in this chapter.

3.2 Research Design

In this study, the research design was descriptive. A descriptive design aims to discover what, where, how, and to what population (Cooper & Schindler, 2003). Descriptive research described the characteristics of study population (Creswell, 2013). Descriptive research design also helped provide unmistakable comprehension of effect of internal audit characteristics on audit effectiveness among SAGAs in the government of Kenya within Nairobi County. Nairobi county was the choice of this study because most of the institutions in this study, have their headquarters located within Nairobi County.

3.3 Target Population

The Semi-Autonomous Government Agencies in the Government of Kenya formed the population of this study. According to a Tentative list created based on the information from Kenya National Audit Office website as at February 2017 where audited government

reports are posted, the total number of Semi-Autonomous Government agencies is approximately 103 (Abang’a, 2017). However, Kenya National Audit Office website provided useful insight on the SAGAs of the Government of Kenya, within Nairobi County of 81 from various ministries as show in the table below;

TABLE 2.2 Target Population Distribution

| MINISTRY | No. of SAGAs |
|--|---------------------|
| The National Treasury and Planning | 6 |
| Ministry of Industry, Trade & Co-operatives | 2 |
| Ministry of Health | 6 |
| Ministry of Agriculture, Livestock, Fisheries and Irrigation | 15 |
| Ministry of Devolution and the ASALS | 1 |
| Ministry of Information, Communication and Technology (ICT) | 4 |
| Ministry of Education | 12 |
| Ministry of Labour and Social Protection | 5 |
| Ministry of Environment and Forestry | 5 |
| Ministry of Tourism and Wildlife | 7 |
| Ministry of Water and Sanitation | 8 |
| Ministry of Energy | 6 |
| Ministry of Public Service, Youth and Gender | 4 |
| Total | 81 |

3.4 Sampling and Sampling Techniques

The research was carried out in Nairobi County. The study used purposive sampling, which will be above thirty percent of the total number of SAGAs as recommendation by Kothari (2004). There was no sampling but the study involved one respondent who is the Senior audit per entity or institution in each of the eighty-one SAGAs.

3.5 Research Instruments

Primary data was utilized by the researcher. In order to gather primary data, the researcher administered closed questionnaires. The research questionnaires were distributed to the respondent's face to face. There was information on the audit effectiveness and audit independence contained in the instruments as well as internal audit management support and internal audit expertise. The surveys were designed so that respondents may indicate their degree of agreement with statements using a five-point Likert scale (Strongly Disagree-1, Disagree-2, Neutral-3, Agree-4 and Strongly Agree-5).

3.6 Validity and Reliability of Instruments

In ensuring that the instruments assess what they are meant to measure, questionnaires will be given to experts from KCA University for advice and confirmation. If an instrument successfully measured what it purported to measure, the variations between individual scores were considered to represent real variances in qualities being examined, according to experts' views on scale content validity (Kothari, 2004).

If a particular method, instrument (or technique) is used repeatedly by one research or multiple researches at the same time, reliability is defined as whether it will produce the

same results (Boit, Serem, & Wanyama, 2013). Using Cronbach's alpha coefficient, the questionnaire reliability was assessed. This questionnaire included sections on respondent profile, audit independence, management support for auditing, and audit effectiveness. The instrument's Cronbach's alpha coefficient was set at 0.7 (reliable) for the four parts of the questionnaire to evaluate the instrument's accuracy in eliciting the same responses every time it was used.

3.7 Data Collection Procedure

To get a study permission letter and a permit from the Ministry of Education's National Commission for Science, Technology, and Innovation (NACOSTI), the first step was to get a data collection letter from the faculty. After that, the researcher approached the eighty-one semi-autonomous government entities in Nairobi County and sought permission to gather data from them. Data in this research was generated using quantitative methods which entails the use of questionnaires. The researcher reported to the Director/ CEOs in each of the eighty-one SAGAs, introduced herself and asked permission to collect the data. A questionnaire was given to each institution by the researcher who then distributed them to senior auditors.

3.8 Data Processing and analysis

The analysis of data was based on the quantitative data analysis based on different questions. The exercise begun with data coding, entry and checking. Descriptive and inferential statistics were used to analyze the data.

The regression equation is in the form of:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where;

Y= Audit effectiveness

β_0 =Constant

X1 = Internal audit independence

X2 = Internal audit management support

X3 = Internal audit experience

ε = Disturbance term

$\beta_1, \beta_2, \beta_3$ are Beta coefficients

3.8.1 Model Specification Test

This model has been adopted from Abbot et al. (2003) and uses the logistic regression. Multiple regression and ordinary least square (OLS) analyses were performed to examine the relationship between the independent factors and the dependent variable.

3.8.2 Normality of residual test

The residuals must be normally distributed with a constant variance and a mean of zero, according to the Gauss Markov Theorem, in order for the regression analysis coefficients to be the best linear unbiased estimators. The normality of residuals was tested using a P-P map. The residuals should adopt a normal distribution if the plot is linear.

3.8.3 Heteroskedasticity test

Heteroskedasticity refers to an error term's variance that is not constant; this then makes the impact on the variables that are being modeled not to be effective.

Homoskedasticity, on the other hand, is beneficial to the model. The test is used depending on the panel regression model used: Modified Wald test for fixed effect models or Pooled LS, and likelihood ratio LR test for random effect models. If probability > Chi2, reject H0, which states that the model is homoscedastic.

3.8.4 Test for Multicollinearity

The phenomenon of strong correlation between independent variables is referred to as multicollinearity. This means that one variable can be used to estimate the outcomes of other variables. Multicollinearity has an impact on the outcome because it allows one to equate the effect of one variable to that of all others. Multicollinearity was evaluated using a correlation coefficient matrix, with r close to -1 or $+1$ indicating a problem with multicollinearity, and one of the variables will be omitted from the model. A correlation of 0.5 or less is considered appropriate.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

Methods and findings mentioned in the methodology chapter are covered in this section on data analysis. The chapter is split into many parts, starting with the questionnaire's response rate, the reliability and validity test, the respondents' background information, the explanatory factors, and the explanatory variable's explained value. Internal audit independence, Internal Audit Management support, and Internal Auditors experience are the independent factors. Internal audit efficiency in Kenya's Semi-Autonomous Government Agencies in Nairobi County is the dependent variable.

4.1.1 Response Rate

The study included 81 senior auditors from various Semi-Autonomous Government Agencies. Table 4.1 indicates that 65.43% of the 81 questionnaires given were completed and returned, resulting in a response rate of 53. Good response rates are defined as those of analysis and reporting of 50% or more, of 60% or greater, and of 70% and greater by Mugenda & Mugenda (2003), respectively. This response rate was adequate and representative.

TABLE 4.1 Response Rate

| | Frequency | Percent |
|--------------------|------------------|----------------|
| Responses received | 53 | 65.43 |
| No response | 28 | 34.57 |
| Total | 81 | 100 |

4.2 Reliability of the Research Instrument

Study constructs (variables) were assessed using reliability tests, which utilized a five-point Likert scale embedded in a questionnaire (measures intended purpose). Using Cronbach's Alpha coefficient analysis, the research was able to determine how trustworthy the study scale was by using a coefficient of 0.7 as the minimal criterion for making this determination (Taherdoost, 2016). Table 4.2 shows the results of the reliability test, which were good.

TABLE 4.2 Reliability Test Results

| Variables (Constructs) | Number of items | Cronbach Alpha |
|-----------------------------------|------------------------|-----------------------|
| Internal audit independence | 8 | 0.900 |
| Internal audit management support | 8 | 0.781 |
| Internal audit experience | 8 | 0.818 |
| Audit effectiveness | 8 | 0.778 |
| Overall | 32 | 0.819 |

4.3 Validity of the Research Instrument

Expert judgment was used in this work to demonstrate the validity of the research instrument's concept and content, too. To ensure that it properly captured the factors under investigation, the questionnaire was developed in collaboration with university supervisors and other specialists. The results of the pilot study are summarized in the following subsections.

To guarantee correctness, the concept validity was verified using Kaiser-Meyer-Olkin (KMO) tests, Bartlett's tests, and factor analysis with Varimax rotation. An appropriate number of items is used to assess sampling adequacy using KMO, which ranges from 0 - 1, with 1 denoting perfect result. A lower cut-off value of 0.5 is characterized as a better outcome for the total number of items utilized (Heale & Twycross 2015). As part of their analysis, researchers performed statistical tests to see if the study items were from a population with similar variance for each of the constructs. A construct validity analysis was performed, and the findings are shown in Table 4.3.

TABLE 4. 3 Kaiser-Meyer-Olkin and Bartlett's Test of Sphericity Results

| Variable | | Kaiser-Meyer-Olkin Measure Sampling Adequacy (KMO) | Bartlett's Test of Sphericity | | |
|-----------------------------|-------|--|-------------------------------|--------------------|---------|
| | | | Approx. Chi-Square | Degrees of freedom | p-value |
| Internal independence | audit | 0.641 | 128.550 | 16 | 0.000 |
| Internal management support | audit | 0.833 | 425.974 | 16 | 0.000 |
| Internal audit experience | | 0.795 | 236.867 | 16 | 0.000 |
| Audit effectiveness | | 0.648 | 99.959 | 16 | 0.000 |

(Source: Pilot study results)

4.4 Demographic Information

The study's goal was to get a sense of the people who participated in it were. This study's findings are summarized in the following sections.

4.4.1 Gender Distribution of the Respondents

The respondents were asked about their gender. Table 4.4 depicts responses as gathered from respondents.

TABLE 4.4 Gender of Respondents

| Category | Frequency | Percent |
|-----------------|------------------|----------------|
| Male | 30 | 56.60 |
| Female | 23 | 43.40 |
| Total | 53 | 100.0 |

Source: Field Data (2021)

Table 4.4 shows that 56.60% of respondents were men, while 43.40% were women. There was no gender bias in the research since both men and women participated, despite the fact that most of those who took part were men.

4.4.2 Age Distribution of the Respondents

The respondents were asked about their age. Table 4.5 depicts responses as gathered from respondents.

TABLE 4. 5 Age of Respondents

| Years | Frequency | Percent |
|--------------|------------------|----------------|
| 18-30yrs | 13 | 24.53 |
| 31-45yrs | 20 | 37.74 |
| 46-60yrs | 15 | 28.30 |
| above 60yrs | 5 | 9.43 |
| Total | 53 | 100.0 |

Source: Field Data (2021)

Table 4.5 above indicates that majority of the respondents were between 31-45 years at 37.74% followed by 28.30% were between 46-60yrs, 18-30yrs were at 24.53% and lastly above 60yrs were at 9.43%. This demonstrated that the respondents to the research came from a diverse range of age groups.

4.4.3 Education Level of the Respondents

The findings on the respondents' education level are as shown in table 4.6.

TABLE 4.6 Education Level of the Respondents

| Category | Frequency | Percent |
|-----------------|------------------|----------------|
| KCSE/KCE/KACE | 0 | 0.0 |
| Certificate | 0 | 0.0 |
| Diploma | 5 | 9.43 |
| Degree | 23 | 43.40 |
| Masters | 18 | 33.96 |
| PhD | 7 | 13.21 |

| | | |
|--------------|-----------|--------------|
| Total | 53 | 100.0 |
|--------------|-----------|--------------|

Source: Field Data (2021)

Table 4.6 above indicates that majority of the respondents are degree holders at 43.40% followed by 33.96% who were master’s holders, 13.21% PhD holders and lastly no respondent with Certificate or KCSE/KCE/KACE. It was also found out that most of the respondents’ area of specialization was Bachelor of Commerce accounting option and finance option. Most respondents had a strong academic background, which showed that internal audit effectiveness features in semi-autonomous government organizations were well-understood by them.

4.4.4 Membership of ICPAK

The findings on the respondents ‘membership of ICPAK’ is as shown in table 4.7.

TABLE 4.7 Membership of ICPAK

| Category | Frequency | Percent |
|-----------------|------------------|----------------|
| Yes | 45 | 84.90 |
| No | 8 | 15.09 |
| Total | 53 | 100.0 |

On the basis of the data in Table 4.7, 84.90% of respondents are ICPAK members, whereas 15.09% are not. So, respondents are well-informed on audit procedures, and thus can give more reliable information.

4.4.5 Duration Worked in Semi-Autonomous Government Agencies

The findings on duration worked in semi-autonomous government agencies are as presented in Table 4.8.

Table 4. 8 Duration Worked in Semi-Autonomous Government Agencies

| Year | Frequency | Percent |
|----------------|------------------|----------------|
| Below 5 years | 8 | 15.09 |
| 5 to 10 years | 10 | 18.87 |
| 10 to 15 years | 20 | 37.74 |
| Over 15 years | 15 | 28.30 |
| Total | 53 | 100.0 |

Source: Field Data (2021)

Table 4.8 above indicates that majority 37.74% of the respondents had worked in Semi-Autonomous Government Agencies for 10-15 years, 28.30% had worked for over 15 years, and 18.87% had worked for 5-10 years and lastly, 15.09% below 5years. The majority of respondents have worked in Semi-Autonomous Government Agencies for long enough to be able to provide useful information on the influence of internal audit characteristics on audit effectiveness in Semi-Autonomous Government Agencies, as shown by this result.

4.5 Audit Independence and Internal Audit Effectiveness

The study's initial goal was to see how independent internal audits affected the efficiency of audits in semi-autonomous government organizations. Internal audit

independence was assessed as a predictor of internal audit characteristics using a scale of 1-5 where 5 strongly agreed, 4 agree, 3 neutral, 2 disagree and 1 strongly disagree. The study's respondents agreed or disagreed with different assertions about internal audit independence. Table 4.9 displays the results.

TABLE 4. 9 Audit Independence

| Audit Independence | 5 | 4 | 3 | 2 | 1 | Mean | SDV |
|---|----------|----------|----------|----------|----------|-------------|------------|
| Internal auditors are appointed by the director of the institute. | 24.5% | 26.4% | 30.2% | 13.2% | 5.7% | 3.51 | 1.17 |
| The appointment of auditors is approved by the Council/Board of our institution. | 49.1% | 17% | 26.4% | 1.9% | 5.7% | 4.02 | 1.17 |
| The Directors of the institution defines the audit scope. | 28.3% | 26.4% | 28.3% | 5.7% | 11.3% | 3.55 | 1.28 |
| Internal auditors have unlimited access to all departments and transaction records in the organization. | 32.1% | 41.5% | 20.8% | 3.8% | 1.9% | 3.98 | 0.93 |
| Internal auditors are sufficiently immune from any internal pressure during audit. | 32.1% | 11.3% | 30.2% | 20.8% | 5.7% | 3.43 | 1.29 |
| Internal auditors make recommendations objectively without fear of reprisal. | 34% | 22.6% | 28.3% | 9.4% | 5.7% | 3.70 | 1.20 |
| The audit committee is appropriately structured to ensure its independence. | 49.1% | 15.1% | 15.1% | 5.7% | 15.1% | 3.77 | 1.49 |

| | | | | | | | |
|---|-------|-------|-------|-------|------|------|------|
| Internal audit scope is clearly determined by letter of engagement. | 22.6% | 45.3% | 15.1% | 13.2% | 3.8% | 3.70 | 1.08 |
|---|-------|-------|-------|-------|------|------|------|

| | | | | | | | |
|-----------------------|--|--|--|--|--|-------------|-------------|
| Composite Mean | | | | | | 3.71 | 1.20 |
|-----------------------|--|--|--|--|--|-------------|-------------|

Descriptive results in Table 4.9 shows that 30.2% of respondents partially agreed about Internal auditors are appointed by the director of the institute, 26.4% agreed while 24.5% strongly agreed with a (mean = 3.51 and S.D 1.17). The results also show the appointment of auditors is approved by the Council/Board of our institution, 1.9% disagreed, 26.4% partially agreed, 17.0% agreed while 49.1% strongly agreed with a (mean = 4.02 and S.D 1.17). On the directors of the institution defines the audit scope, 11.3% strongly disagreed, 5.7% disagreed, 28.3% partially agreed, 26.4% agreed while 28.3% strongly agreed with a (mean = 3.55 and S.D 1.28). On internal auditors have unlimited access to all departments and transaction records in the organization, 3.8% of respondents disagreed, 20.8% partially agreed, 41.5% agreed while 32.1% strongly agreed with a (mean = 3.98 and S.D 0.93).

Internal auditors are sufficiently immune from any internal pressure during audit, 20.8% of respondents disagreed, 30.2% partially agreed, 11.3% agreed while the 32.1% strongly agreed with a (mean = 3.43 and S.D 1.29). Internal auditors make recommendations objectively without fear of reprisal, 9.4% of the respondents disagreed, 28.3% partially agreed, 22.6% agreed and 34.0% agreed strongly with a (mean = 3.70 and S.D 1.20). The audit committee is appropriately structured to ensure its independence 5.7% of the respondents disagreed, 15.1% partially agreed, 15.1% agreed while 49.1% strongly agreed with a (mean = 3.77 and S.D 1.49). Lastly Internal audit scope is clearly determined by letter of engagement, 45.3% of respondents agreed while 22.6% strongly agreed with a

(mean = 3.70 and S.D 1.08). Respondents' responses were concentrated in the area around the mean, as indicated by the composite mean and standard deviation. According to the results, participants' responses were dispersed far from the mean, with a large standard deviation. This usually indicates that the majority of those polled were not on the same page. Independence of the auditor is what determines how much independence there is in the audit.

Kuncara (2018), who found that audit independence has a positive and significant connection with the efficiency of the federal government's internal audit program, this is a fact. Usman, (2015) Research that looked at the impact of competence and independence on internal audit efficiency discovered that independence had three key indicators: independent organizational, individual objectivity, and reporting. Studies by Huang & Han (2016) in Taiwan and Al-Twajry (2014) in Saudi Arabia found out that the audit independence abilities of internal auditors positively and significantly affected the functioning of the internal audit units.

4.6 Management Support and Internal Audit Effectiveness

This research sought to find out how internal audit management support impacted audit effectiveness in semi-autonomous government enterprises. The research assessed the respondents' degree of agreement with different assertions on internal audit management support as a predictor of internal audit characteristics using a scale of 1-5 where 5-strongly agree, 4-agree, 3-neutral, 2-disagree and 1-strongly disagree. Results are shown in Table 4.10 below.

TABLE 4.10 Management Support

| Management Support | 5 | 4 | 3 | 2 | 1 | Mean | SDV |
|--|----------|----------|----------|----------|----------|-------------|------------|
| Management supports the internal audit function by providing adequate money each year to ensure that its operations and work objectives are met. | 34% | 22.6% | 32.1% | 11.3% | 0% | 3.79 | 1.04 |
| The internal audit function receives sufficient funding from management to employ audit personnel. | 49.1% | 15.1% | 15.1% | 5.7% | 15.1% | 3.77 | 1.49 |
| Management has developed rules and procedures for the recruitment of Internal Audit personnel that are clear and well-defined. | 32.1% | 30.2% | 22.6% | 7.5% | 7.5% | 3.72 | 1.21 |
| Managers enable internal auditors to take part in skill-building programs to help them become better. | 30.2% | 24.5% | 26.4% | 9.4% | 9.4% | 3.57 | 1.28 |
| Internal auditors are supported by management to attend seminars and workshops. | 28.3% | 37.7% | 15.1% | 7.5% | 11.3% | 3.64 | 1.29 |
| Internal audit results are promptly accepted and implemented by management. | 22.6% | 45.3% | 15.1% | 13.2% | 3.8% | 3.70 | 1.08 |
| The management allows the exciting auditor to talk or share information with the incoming auditor. | 24.5% | 26.4% | 30.2% | 13.2% | 5.7% | 3.51 | 1.20 |
| The management does now know the size of audit staff. | 49.1% | 17% | 26.4% | 1.9% | 5.7% | 4.02 | 1.17 |

| | | |
|-----------------------|-------------|-------------|
| Composite Mean | 3.72 | 1.06 |
|-----------------------|-------------|-------------|

As shown in Table 4.10, 32.1% of respondents partly agreed that management should assist the internal audit function by providing enough money yearly to improve the accomplishment of the organization's operations and work goals. 22.6 % agreed, 34.0 % strongly agreed with the average (M=3.79, SD=1.04), the management allocates enough resources to internal audit function to hire audit staff 5.7% of the respondents disagreed, 15.1% partially agreed, 15.1% agreed while 49.1% strongly agreed with a mean of (M=3.77, SD=1.49), management has put-up well-established policies and regulations for recruitment of Internal Audit staff, 22.6% partially agreed, 30.2% agreed and 32.1% strongly agreed with a mean of (M=3.72, SD=1.21), Management allows internal auditors to participate in training and development programs in order to improve their skills with 9.4% of the respondents disagreed, 26.4% partially agreed, 24.5% agreed while 30.2% strongly agreed with a (M=3.57, SD=1.29), Internal auditors are supported by management to attend seminars and workshops, 7.5% of respondents disagreed, 15.1% partially agreed, 37.7% agreed while 28.3% strongly agreed with a mean of M=3.64, SD=1.29).

Management accepts and implements internal audit findings on time, 45.3% of respondents agreed while 22.6% strongly agreed with a (M=3.70, SD=1.08). The management allows the exiting auditor to talk or share information with the incoming auditor 30.2% of disagreed, 26.4% agreed while 24.5% strongly agreed with a (mean = 3.51 and S.D1.20). The management does now know the size of audit staff, 1.9% disagreed, 26.4% partially agreed, 17.0% agreed while 49.1% strongly agreed with a (mean = 4.02 and S.D1.17). Internal audit management support was measured using the composite mean

and standard deviation ($M=3.72$, $SD=1.06$), which showed a concentration of answers around the mean and agreement with most statements utilized. The results indicate that the answers were widely dispersed, with a large standard deviation. By definition, this implies the majority of those polled were not of the same opinion.

The findings concurred Mwangi (2017), concluded that management should place a greater emphasis on the support provided to internal auditors and support internal audit by allocating adequate budgetary resources to the department and ensuring that internal auditors are recruited in the appropriate proportions in order to reduce the shortage of internal auditors in these organizations and improve their effectiveness and growth. Also, according to Makerevi and Newman (2018)'s findings, management should make certain that its Internal Audit Functions (IAF) are fully resourced and financed. A strong internal audit program is essential for effective company governance, according to the authors. Similarly, Abebe, (2020), Internal auditing serves as the foundation of an organization's internal control system. Where there is a strong and effective Internal Audit Department, the organization's activities are strong and effective.

4.7 Internal Audit Experience and Internal Audit Effectiveness

The study's third goal was to determine whether or not the expertise of internal auditors in Semi-Autonomous government bodies impacts audit effectiveness. On a scale of 1-5, the respondents' degree of agreement with different assertions about internal audit experience was assessed as a predictor of internal audit characteristics. The responses ranged from 5-strongly agreeing to 1-strongly disagree. Table 4.11 displays the results.

TABLE 4.11 Internal Audit Experience

| Internal Audit Experience | 5 | 4 | 3 | 2 | 1 | Mean | SDV |
|--|----------|----------|----------|----------|----------|-------------|-------------|
| I have the necessary qualifications to be an auditor. | 56.6% | 17% | 13.2% | 9.4% | 3.8% | 4.13 | 1.19 |
| I have attended workshops and seminars on audit | 22.6% | 15.1% | 26.4% | 20.8% | 15.1% | 3.09 | 1.38 |
| The workshops and seminars that I have attended have improved my work as an auditor. | 26.4% | 50.9% | 9.4% | 7.5% | 5.7% | 3.85 | 1.08 |
| Auditing is characterized by so many challenges. | 41.5% | 7.5% | 9.4% | 3.8% | 37.7% | 3.11 | 1.83 |
| Audit standards are very clear to me. | 34% | 26.4% | 18.9% | 15.1% | 5.7% | 3.68 | 1.25 |
| There is need for more training in my work. | 20.8% | 9.4% | 24.5% | 26.4% | 18.9% | 2.87 | 1.40 |
| There is need for skill upgrading on forensic audit. | 28.3% | 26.4% | 28.3% | 5.7% | 11.3% | 3.55 | 1.28 |
| I have challenges in detecting frauds in financial statements. | 32.1% | 41.5% | 20.8% | 3.8% | 1.9% | 3.98 | 0.93 |
| Composite Mean | | | | | | 3.53 | 1.29 |

From the descriptive results in Table 4.11, 13.2% of respondents partially agreed about i have the necessary qualifications to be an auditor, 17.0% agreed while 56.6% strongly agreed with a (M=4.13, SD=1.19),I have attended workshops and seminars on audit review, 20.8% disagreed, 26.4% partially agreed, while 15.1% agreed and 22.6% strongly agreed with a (M=3.09, SD=1.38).The workshops and seminars that I have attended have improved my work as an auditor 5.7% of the respondents strongly disagreed, 7.5%

disagreed, 9.4% gave a partial agreement response, 50.9% agreed while 26.4% strongly agreed with a (M=3.85, SD=1.08). Auditing is characterized by so many challenges 37.7% strongly disagreed, 9.4% partially agreed, 7.5% agreed while 41.5% strongly agreed with a (M=3.11, SD=1.83). Audit standards are very clear to me 15.1% respondents disagreed, 18.9% partially agreed, 26.4% agreed and 34.0% strongly agreed with a (M=3.68, SD=1.25).

There is need for more training in my work 26.4% of respondents disagreed, 24.5% partially agreed, 9.4% agreed and 20.8% agreed strongly. There is need for skill upgrading on forensic audit, 11.3% strongly disagreed, 5.7% disagreed, 28.3% partially agreed, 26.4% agreed while 28.3% strongly agreed with a (mean = 3.55 and S.D 1.28). I have challenges in detecting frauds in financial statements, 3.8% of respondents disagreed, 20.8% partially agreed, 41.5% agreed while 32.1% strongly agreed with a (mean = 3.98 and S.D 0.93). Respondents agreed with almost all of the assertions based on the composite mean and standard deviation (M=3.53; SD=1.29). There was a wide spread of opinions since the standard deviation was very high. In most cases, this indicates that the majority of those who responded were not on the same page. Internal auditing expertise determines audit independence and its scope.

The findings agreed with Njoroge (2016), audit personnel must be proficient and knowledgeable in the risk profiling issues, performance assessment concepts, financial analysis tools, as well as the techniques that are applied in the performance, knowledge and skills on the ICT and tech-based audit techniques. Shamki and Thuraiya (2017) established a significant connection that exists between internal audit in the organizations and their effectiveness, existing scope in these organizations.

4.8 Audit Effectiveness

The study evaluated the respondents' opinion on various statements relating to the audit effectiveness using a scale of 1-5 where 5-strongly agree, 4-agree, 3-neutral, 2-disagree and 1-strongly disagree. The findings are as illustrated in Table 4.12.

TABLE 4.12 Audit Effectiveness

| Audit Effectiveness | 5 | 4 | 3 | 2 | 1 | Mean | SDV |
|--|----------|----------|----------|----------|----------|-------------|-------------|
| A accurate and fair picture of the institution's financial accounts is reflected in the reports that have been produced. | 67.9% | 9.4% | 15.1% | 5.7% | 1.9% | 4.36 | 1.06 |
| Internal audit establishes a follow-up process to ensure that corrective actions have been effectively implemented. | 34% | 32.1% | 17% | 17% | 0% | 3.83 | 1.09 |
| Internal audit provides suitable suggestions for improving the procedures of the institution under audit. | 60.4% | 20.8% | 5.7% | 9.4% | 3.8% | 4.25 | 1.16 |
| Internal audit reviews the reliability and integrity of financial information. | 43.4% | 9.4% | 24.5% | 11.3% | 11.3% | 3.62 | 1.43 |
| Internal audit improves the effectiveness of internal control processes to avoid fraud risks. | 28.3% | 5.7% | 22.6% | 20.8% | 22.6% | 2.96 | 1.53 |
| Internal audit improves the effectiveness of risk management process. | 32.1% | 15.1% | 26.4% | 17% | 9.4% | 3.43 | 1.35 |
| In the case of fraud, management fails to set an example and implement a zero-tolerance policy. | 56.6% | 17% | 13.2% | 9.4% | 3.8% | 4.13 | 1.19 |
| New employees are made aware of the institution's position of fraud. | 22.6% | 15.1% | 26.4% | 20.8% | 15.1% | 3.09 | 1.38 |
| Composite Mean | | | | | | 3.71 | 1.27 |

From descriptive results in Table 4.12, 15.1% partially agreed on the reports prepared reflect the true and fair view of the Institution's financial statements, 9.4% agreed, 67.9% strongly agreed. Internal audit establishes a follow-up process to ensure that corrective actions have been effectively implemented, 17.0% disagreed, 17.1% partially agreed, 32.1% agreed while 34.0% strongly agreed. Internal audit makes appropriate recommendations for improving the Institution processes, 5.7% partially agreed, 20.8% agreed while 60.4% strongly agreed. Internal audit reviews the reliability and integrity of financial information, 11.3% disagreed, 24.5% partially agreed, 9.4% agreed while 43.4% strongly agreed. Internal audit improves the effectiveness of internal control processes to avoid fraud risks 20.8% of respondents disagreed, 22.6% partially agreed, 5.7% agreed while 28.3% strongly agreed. Internal audit improves the effectiveness of risk management process, 15.1% of the respondents agreed while 32.1% strongly agreed. 13.2% of respondents partially agreed about management does not set an example and enforce a zero-tolerance approach on fraud issues, 17.0% agreed while 56.6% strongly agreed with a (M=4.13, SD=1.19), new employees are made aware of the institution's position of fraud, 20.8% disagreed, 26.4% partially agreed, while 15.1% agreed and 22.6% strongly agreed with a (M=3.09, SD=1.38). The composite mean was 3.71 which imply that there is audit effectiveness among in Semi-Autonomous Government Agencies.

4.9 Inferential Statistics

In this section, the study infers the sample findings to the study population through correlation analysis and linear regression analysis and the findings are as shown below.

4.9.1 Diagnostic tests

Prior to doing the regression analysis, the researcher ran a number of diagnostic tests, including normality, homoscedasticity, multicollinearity, and ANOVA. To ensure that the study data fulfilled the particular assumptions behind the regression analysis, these tests were crucial to the researcher. The tests' outcomes are detailed in the section below:

Tests of Normality

The Shapiro-Wilk test was used to examine residuals and error terms. This research has a p value of 5% significance. It was assumed that normalcy existed for p 0.05 while departure from normality was assumed for p 0.05. According to Table 4.13, the normalcy tests showed the following results.

TABLE 4.13 Tests of Normality

| Variable Construct | Shapiro-Wilk test | | |
|--|-------------------|----|---------|
| | Statistic | Df | p-value |
| 1. Internal audit independence [X ₁] | .105 | 53 | .200* |
| 2. Internal audit management support [X ₂] | .109 | 53 | .169 |
| 3. Internal audit experience [X ₃] | .116 | 53 | .074 |
| 4. Audit effectiveness [Y] | .154 | 53 | .190 |

Table 4.13 indicates that the significant results for the Shapiro-Wilk tests were 0.200 for internal audit independence, 0.169 for internal audit management support, 0.074 for internal audit experience and 0.190 for audit effectiveness. The null hypothesis that the data originated from a normally distributed population was rejected due to higher p-values

for the research variables in the Shapiro-Wilk tests. The findings of the examinations indicate a high degree of normality.

Homoscedasticity Tests

Homoscedasticity is a condition in which the variability of one variable is the same no matter what the value of a third variable is (Bera & Jarque, 2012). Using the Breusch-Pagan/cook-Weisberg test, researcher looked at homoscedasticity. The null hypothesis is that the error variances are all equal in the Breusch-Pagan/Cook-Weisberg test, whereas the alternative hypothesis is that the error variances are a multiplicative function of one or more factors. When the value of "Prob > Chi-squared" exceeds 0.05, homoscedasticity is apparent (Bera & Jarque, 2012). Table 4.14 displays the homoscedasticity test findings.

TABLE 4.14 Breusch-Pagan/Cook-Weisberg Test for Homoscedasticity

| |
|---|
| Ho: Constant variance |
| Variables: fitted values of audit effectiveness |
| chi2(1) = 740.27 |
| Prob > chi2 = 0.0000 |

There is no homoscedasticity, according to the null hypothesis. The research relied on a 5% threshold of significance. The null hypothesis is rejected since the significance value is less than 0.05. That is why there are heteroscedastic data series for all of the predictor factors.

Multicollinearity Tests

To find out whether the independent variables were closely related a multicollinearity test was done. Multicollinearity leads to unstable coefficient estimates in

regression models, which can lead to exaggerated standard errors for the coefficients. This is the major issue. The research used the Variance Inflation Factor (VIF) to look for problems with collinearity. The existence of multicollinearity is indicated by independent variables with VIF more than 10 or a tolerance value less than 0.1, according to Brien (2007). To see the results of the collinearity test, look at Table 4.15.

TABLE 4.15 Multicollinearity test using Variance Inflated Factor (VIF)

| Variable | Tolerance (1/VIF) | VIF |
|-----------------------------------|--------------------------|------------|
| Internal audit independence | .396 | 2.525 |
| Internal audit management support | .211 | 4.733 |
| Internal audit experience | .609 | 1.641 |

These findings show that there was no collinearity among the independent variables because the tolerance values for all three variables are greater than or equal to 0.10 and the VIF values are lower than or equal to 10. Therefore, all of the independent variables were incorporated into the multiple linear regression model.

4.9.2. Correlation Analysis

Using a correlation analysis, we can see how well internal audit qualities (such as independence, management support, and experience) correlate with audit effectiveness.

Table 4.16 below for the findings of the analysis.

TABLE 4.16 Correlation Analysis

| | | Internal independence | audit internal management support | audit internal experience | audit |
|-----------------------------|---------------------|-----------------------|-----------------------------------|---------------------------|-------|
| | | 1 | | | |
| Internal independence | Pearson Correlation | | | | |
| | audit | | | | |
| | Sig. (2-tailed) | | | | |
| | N | 53 | | | |
| internal management support | Pearson Correlation | .756** | 1 | | |
| | audit | | | | |
| | Sig. (2-tailed) | .000 | | | |
| | N | 53 | 53 | | |
| internal experience | Pearson Correlation | .504** | .579** | 1 | |
| | audit | | | | |
| | Sig. (2-tailed) | .000 | .000 | | |
| | N | 53 | 53 | 53 | |
| Audit effectiveness | Pearson Correlation | .647** | .728** | .524** | |
| | audit | | | | |
| | Sig. (2-tailed) | .000 | .000 | .000 | |
| | N | 53 | 53 | 53 | |

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

Table 4.16 shows that all associations were positive and significant (p-value=0.001), indicating that internal audit characteristics are linked to audit effectiveness in semi-autonomous government organizations. $r = 0.728$, $p\text{-value} = 0.000 < 0.05$) was found

to exist between internal audit management support and audit efficiency. This implied that increase in internal audit management support would results to increase in audit effectiveness in semi-autonomous government agencies. The connection between internal audit independence and audit effectiveness was then examined ($r= 0.647$, $p\text{-value} = 0.000 < 0.05$). So a rise in semi-autonomous government entities' internal audit independence would equate to an improvement in audit effectiveness.

The weakest link is between internal audit experience and audit effectiveness ($r= 0.524$, $p\text{-value} = 0.000 < 0.05$), suggesting a statistically significant moderate positive connection between internal audit experience and audit effectiveness.

4.9.3 Regression Analysis

The connection between the research variables was examined using a regression analysis. Internal audit independence, internal audit management support, and internal audit experience were regressed against a dependent variable for the research (audit effectiveness). The results are as summarized below;

TABLE 4.17 Model Summary

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|--------------|---------------------|-----------------|--------------------------|-----------------------------------|
| 1 | .8658a ^a | 0.7496 | 0.7371 | .7149 |

a. Predictors: (Constant), Internal audit independence, internal audit management support, internal audit experience

b. Dependent Variable: audit effectiveness

TABLE 4.18 ANOVA (Analysis of Variance)

| Model | Sum of Squares | Df | Mean Square | F | Sig. |
|--------------|-----------------------|-----------|--------------------|----------|-------------------|
| Regression | 29.958 | 3 | 7.490 | 16.000 | .000 ^b |
| Residual | 22.482 | 49 | .468 | | |
| Total | 52.440 | 52 | | | |

a. Dependent Variable: Audit effectiveness

b. Predictors: (Constant), Internal audit independence, internal audit management support, internal audit experience

Analysis of Variance (ANOVA) is a set of computations that reveals the degree of variability present within a regression model and serves as a foundation for tests of statistical significance. It's important to note that the "F" column offers a statistic for testing the hypothesis that all $\beta = 0$ against the null hypothesis that $\beta = 0$ (Weisberg, 2005).

Additionally, the ANOVA findings in table 4.18 indicate a strong F-statistic (F=16.000, significant at p.001), supporting the model's fit. The model was statistically significant.

Basing on the findings in Table 4.19, the study observed that the internal audit characteristics had a significant partial influence in predicting audit effectiveness as indicated by the significant unstandardized beta coefficients: internal audit independence had $\beta = 0.204$, $t = 2.519$, p-value = $0.001 < 0.05$, internal audit experience had $\beta = 0.112$, $t = 8.615$, p-value = $0.000 < 0.05$ whereas internal audit management support had $\beta = 0.427$, $t = 3.028$, p-value = $0.002 < 0.05$ which was considered significant at 5% level of significance. The constant was found to be insignificant, that is, $\beta = -0.286$, $t = -0.605$, p-value = $0.548 > 0.05$; this indicates that apart from the three internal audit characteristics (internal audit independence, internal audit management support, internal audit experience), there are other variables, not included in the model, that could possibly

influence audit effectiveness in semi-autonomous government agencies, thus paving way for further research to be done in this area.

TABLE 4.19 Regression Coefficients

| Model | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|-----------------------------------|------------------------------------|-------------------|----------------------------------|----------|-------------|
| | B | Std. Error | Beta | | |
| (Constant) | -.286 | .473 | | -.605 | 0.548 |
| Internal audit independence | 0.204 | 0.081 | 0.170 | 2.519 | 0.001 |
| Internal audit management support | 0.427 | 0.141 | 0.364 | 3.028 | 0.003 |
| Internal audit experience | 0.112 | 0.013 | 0.104 | 8.615 | 0.000 |

a. Dependent Variable: audit effectiveness in semi-autonomous government agencies

Multiple Linear Regression model equation that was used to predict the audit effectiveness in semi-autonomous government agencies when given the Stakeholder engagement (Project conceptualization, Project implementation, Monitoring and evaluation and Risk management) was:

$$AE = -0.286 + 0.204IAI + 0.427IAM + 0.112IAE$$

Where;

AE = Audit effectiveness

IAI = Internal audit independence

IAM = Internal audit management support

IAE = Internal audit experience

The first hypothesis of the study sought to examine the significance of the causal and effect relationship between Internal audit independence and audit effectiveness in Semi-Autonomous Government Agencies. The researcher sought to test for the following hypothesis;

H₀₁: Internal audit independence has no significant effect on audit effectiveness in Semi-Autonomous Government Agencies

Basing on the results indicated in Table 4.19, the regression Coefficient results showed that $\beta = 0.204$, $p = 0.001 < 0.05$; therefore, internal audit independence had a statistically significant influence on the audit effectiveness in semi-autonomous government agencies. This shows that a 20.4% increase in audit effectiveness in Semi-Autonomous Government Agencies would be expected from a unit increase in internal audit independence. This study's findings confirm the significance of semi-autonomous government agency internal audit features in maintaining audit independence. The findings show that internal audit independence is a critical feature of internal audits. Internal audit independence was shown to have a favorable and substantial impact on internal audit effectiveness, as previously reported by Kaboi et al (2018). Internal audit independence has a favorable influence on audit effectiveness, according to Kertali and Tahajuddin (2018), who conducted the original research.

Research done by Kuncara (2018) found a link between government internal auditor independence and a number of beneficial outcomes. The author finds it unexpected that community cohesion has a favorable correlation with the efficacy of internal audits. Unfortunately, the author continues by claiming that personal attributes such as education and job experience have no impact on audit effectiveness. At the Technical University of Mombasa, Kimotho (2014) found that internal audit independence was important to increasing employee accountability, as well as productivity, by identifying the elements that affected internal audit independence and the different variables that threatened it. As

Kertali and Tahajuddin (2018) argue, successful internal audit departments need the input of independent auditors. Internal audit independence positively impacts audit efficiency, according to 2018 research conducted by the authors.

Using the second hypothesis, researcher attempted to determine the importance of the link between internal audit management support and audit effectiveness in semi-autonomous government organizations. The hypothesis was:

H₀₂: Internal audit management support has no significant effect on audit effectiveness in Semi-Autonomous Government Agencies.

The regression Coefficient results showed that $\beta = 0.427$, $p = 0.003 < 0.05$; therefore, Internal audit management support had a statistically significant influence on the audit effectiveness in semi-autonomous government agencies. This indicates that a unit improvement in the internal audit management support was likely to result to an improvement in the audit effectiveness in semi-autonomous government agencies by 42.7%. Given the above findings, the study notes that, it is crucial to have the management view the internal audit unit as a strategic business unit that creates value and provide it with the resources it requires. The results are contradicting Abebe, (2020) study that found internal audit management support did not have any association with audit effectiveness. However, the findings are in line with those of Hussein and Seif (2012), who found a strong link between improved performance of internal auditors and the composite dimensions of managerial support. According to the results, Magero et al (2019) found that in Kenya's semi-autonomous government agencies, managerial support had a positive and substantial connection with internal audit effectiveness.

To better understand how effective internal audits are in the public sector, a case study of an Ethiopian office was conducted by Shewamene (2014). The study found a strong link between management understanding and support of this function along with internal auditor organizational independence and a well-trained audit team. An approved IA charter, well-trained Internal Audit personnel, and management support all played a significant part in the author's research on the efficacy of public sector internal auditing. On the other hand, a study conducted by Abebe, (2020), Internal auditing serves as the foundation of an organization's internal control system. Where there is a strong and effective Internal Audit Department, the organization's activities are strong and effective. In order to help a company, achieve its objectives, internal audit plays a critical role.

It was hypothesized in the third hypothesis that internal audit experience has a causative and consequential connection with audit effectiveness in Semi-Autonomous. The researcher sought to test for the following hypothesis;

H₀₃: Internal audit experience has no significant effect on audit effectiveness in Semi-Autonomous Government Agencies.

The regression Coefficient results showed that $\beta = 0.112$, $p = 0.000 < 0.05$; hence Internal audit experience had a statistically significant influence on the audit effectiveness. This implies that a unit improvement in the internal audit experience was likely to result to an improvement in the audit effectiveness in Semi-Autonomous Government Agencies by 11.2%. The above findings demonstrate that audit effectiveness in Semi-Autonomous Government Agencies is positively influenced by internal audit experience. The study findings affirm that the experience of the employees in the internal audit departments is

connected to the success in the results obtained from the audit. The findings agree with Drogalasa et al. (2017), found that audit effectiveness, auditor accountability, and auditor preparations all have a positive and important impact on fraud detection. However, the results contradict, Shamki and Thuraiya (2017) established a negative significant connection that exists between internal audit in the organizations and their effectiveness. The results are also in variance Muaz et al. (2015), where audit experience was positively associated with the organization's efficiency and effectiveness.

This study found that the success of public sector internal auditors was influenced by their audit expertise. Furthermore, Muaz et al. studied the moderating effects of a productive audit committee on the internal audit market. They found that audit experience was positively associated with the organization's efficiency and effectiveness.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

Summary of results, discussion, conclusions, and suggestions are presented in this chapter based on the study's goals. Further study is recommended in this chapter. We studied how internal audit features affected audit effectiveness in government organizations with some degree of autonomy.

5.2 Summary

This section summarizes the study's major results and discusses them in light of the study's goals.

5.2.1 Audit Independence and Internal Audit Effectiveness

The study findings showed that the senior auditors of Semi-Autonomous government agencies agreed that audit independence result into audit effectiveness and can be achieved through auditors who are approved by the Council/Board of our institution. Internal auditors are sufficiently immune from any internal pressure during audit; the audit independence is enhanced where the internal auditors have unlimited access to desired records, information, staffs and departments; Internal auditors make recommendations objectively without fear of reprisal; the audit committee is appropriately structured to ensure its independence and internal audit scope is clearly determined by letter of engagement. It was found out that there is a significant positive relationship between audit independence and internal audit independence.

5.2.2 Management Support and Internal Audit Effectiveness

There was agreement among the study respondents that the information contained in internal audit reports informs management's decision-making. Management provides adequate resources to the internal audit function, including funding for the hiring of auditors. Management backs the internal audit function by allocating adequate funds annually to help it meet operational and work plan goals. Management also has established well-defined policies. However, the senior auditors of Semi-Autonomous government agencies disagreed with the management allows the exiting auditor to talk or share information with the incoming auditor. It was found out that there is a significant positive relationship between internal audit independence and management support.

5.2.3 Internal Audit Experience and Internal Audit Effectiveness

The study findings showed that the senior audits of Semi-Autonomous government agencies agreed that internal audit experience result into audit effectiveness and can be achieved through having the necessary qualifications to be an auditor and the audit standards are very clear to senior auditors. It was also established that auditors' have challenges in detecting frauds in financial statements. The workshops and seminars that I have attended have improved my work as an auditor. The auditors disagreed with auditing is characterized by so many challenges. It was found out that there is a significant positive relationship between that internal audit experience and internal audit independence.

Internal audit independence, internal audit management support, and semi-autonomous government agency experience all had beta values of 0.204, 0.427 and 0.112 (all with $p < 0.05$), indicating a strong positive connection between the three variables.

5.3 Conclusions

5.3.1 Audit Independence and Internal Audit Effectiveness

It was found out that there is a significant positive relationship between internal audit independence. Therefore, the study concludes that there is positive relationship between audit independence and audit internal effectiveness. Furthermore, it was shown that in Semi-Autonomous government agencies, independence of internal audit personnel had a substantial positive connection with efficacy of the internal audit function.

5.3.2 Management Support and Internal Audit Effectiveness

It was found out that there is a significant positive relationship between management support and audit independence. Therefore, the study concludes that there is positive relationship between management support and internal audit independence. Therefore, management ought to support internal audit function by providing adequate money yearly to improve the accomplishment of its operations and work plans.

5.3.3 Internal Audit Experience and Internal Audit Effectiveness

It was found out that there is a significant positive relationship between internal audit experience and internal effectiveness. Therefore, the study concludes that there is positive relationship between internal audit experience and internal effectiveness. Internal audit experience implied that the internal auditors have the necessary qualifications to be an auditor and understand the audit standards for executing the internal audit function responsibilities.

5.4 Limitations of the Study

The current study utilized primary data that was obtained from the senior internal auditors in the Semi-Autonomous government agencies using self-reporting questionnaires. Some of the questionnaires were incompletely filled and had missing data and therefore were not included in the final analysis. Questionnaires' efficiency as a data collecting tool also hinged on respondents' honesty and desire to cooperate, neither of which the researcher could guarantee.

The study subject also lacked literature from local sources, forcing the researcher to do a literature evaluation that drew mostly from sources in other nations. Respondents fear to disclose viable information due to intimidation from the government because the research put effort to explain that the data is solely purpose for academic use but not trusted.

5.5 Recommendations

Internal audit effectiveness in Semi-Autonomous government agencies was shown to be positively associated with staff independence, and the research advises that department heads in such organizations guarantee that the internal audit function is free of interference. For this to be achieved, the internal audit function should be allowed unlimited access to desired records and information and should be supervised by audit committees.

To increase efficiency, independence, and effectiveness of the internal audit function in Semi-Autonomous government agencies, the researcher recommends that management ought to develop sound framework and policies for the appointment of

internal audit staff. Additionally, Semi-Autonomous Government Agencies should make certain that the suggestions and opinions given by internal auditors are implemented.

Internal Audit Experience in Semi-Autonomous Government Agencies was shown to be positively correlated with Internal Audit Effectiveness. This research shows that internal audit personnel should regularly attend training sessions and take part in development programs to improve their abilities, knowledge and skills in fraud detection. In addition, management should make certain that the internal audit function has enough funding to do its responsibilities without being hampered by a lack of resources.

5.6 Suggested Areas for Further Research

According to the study's results and conclusions, more research into the role of government agencies' internal audit functions is suggested. This is due to the fact that the Government has set up mechanisms to ensure internal audit function is conducted in all the government agencies, yet the agencies fail to comply with the auditing standards leading to misuse and embezzlement of the public funds.

In addition, because this research concentrated on the impact of audit independence, management support, and audit experience, further studies are suggested to identify other variables that influence the efficacy of government agencies' internal audits. Similar investigations should be conducted in the county governmental agencies that have subsequently been created, as well as the semi-autonomous agency outside the county of Nairobi.

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APPENDICES

Appendix I: Questionnaire

Data collected in this survey is intended for academic purposes only and will be used in partial fulfillment of a Masters Research project to examine the “effect of internal audit characteristics on audit effectiveness in semi-autonomous government agencies”. All information gathered will be handled with the strictest of confidentiality. There are 5 sections.

SECTION A: DEMOGRAPHICS

Tick the most appropriate that applies to you (✓)

1. GENDER

MALE

FEMALE

2. AGE

18-30yrs

31-45yrs

46-60yrs

above

60yrs

3. Highest level of education

KCSE/KCE/KACE

Certificate

Diploma

Degree

Masters

PhD

4. What is your area of specialization?

(E.g., Bachelor of Commerce)

.....
.....

5. Are you a member of ICPAK?

Yes

No

6. How long have you served as an internal auditor?

Below 5 years

5 to 10 years

10 to 15 years

Over 15 years

SECTION B: AUDIT INDEPENDENCE

Tick (✓) the most appropriate that describes the situation in your institution using the scale provided; 5=Strongly Agree, 4=Agree, 3=Partially Agree, 2=Disagree and 1= Strongly Disagree.

SECTION C: MANAGEMENT SUPPORT

| ITEMS | Strongly Agree | Agree | Partially Agree | Disagree | Strongly Disagree |
|---|----------------|-------|-----------------|----------|----------------------|
| 1. Internal auditors are appointed by the director of the institute. | | | | | |
| 2. The appointment of auditors is approved by the Council/Board of our institution. | | | | | |
| 3. The Directors of the institution defines the audit scope. | | | | | |
| 4. Internal auditors have unlimited access to all departments and | | | | | |

| | | | | | |
|--|--|--|--|--|--|
| <p>transaction records in the organization.</p> | | | | | |
| <p>5. Internal auditors are sufficiently immune from any internal pressure during audit.</p> | | | | | |
| <p>6. Internal auditors make recommendations objectively without fear of reprisal.</p> | | | | | |
| <p>7. The audit committee is appropriately structured to ensure its independence.</p> | | | | | |

| | | | | | |
|--|--|--|--|--|--|
| 8. Internal audit scope is clearly determined by letter of engagement. | | | | | |
|--|--|--|--|--|--|

Tick (√) the most appropriate that describes the situation in your institution using the scale provided; 5=Strongly Agree, 4=Agree, 3=Partially Agree, 2=Disagree and 1= Strongly Disagree

| ITEMS | Strongly Agree | Agree | Partially Agree | Disagree | Strongly Disagree |
|---|----------------|-------|-----------------|----------|-------------------|
| 1. Management supports the internal audit function by providing adequate money each year to ensure that its operations and work objectives are met. | | | | | |

| | | | | | |
|--|--|--|--|--|--|
| <p>2. The internal audit function receives sufficient funding from management to employ audit personnel.</p> | | | | | |
| <p>3. Management has developed rules and procedures for the recruitment of Internal Audit personnel that are clear and well-defined.</p> | | | | | |
| <p>4. Managers enable internal auditors to take part in skill-building</p> | | | | | |

| | | | | | |
|--|--|--|--|--|--|
| <p>programs to help them become better.</p> | | | | | |
| <p>5. Internal auditors are supported by management to attend seminars and workshops.</p> | | | | | |
| <p>6. Internal audit results are promptly accepted and implemented by management.</p> | | | | | |
| <p>7. The management allows the exciting auditor to talk or share information with the</p> | | | | | |

| | | | | | |
|--|--|--|--|--|--|
| incoming auditor. | | | | | |
| 8. The management does now know the size of audit staff. | | | | | |

SECTION D: AUDIT EXPERIENCE

Tick (√) the most appropriate that describes the situation in your institution using the scale provided; 5=Strongly Agree, 4=Agree, 3=Partially Agree, 2=Disagree and 1= Strongly Disagree

| ITEMS | Strongly Agree | Agree | Partially Agree | Disagree | Strongly Disagree |
|--|----------------|-------|-----------------|----------|-------------------|
| Academic qualifications and Professionalism. | | | | | |
| 1. I have the necessary qualifications to be an auditor. | | | | | |

| | | | | | |
|---|--|--|--|--|--|
| 2. I have attended workshops and seminars on audit. | | | | | |
| 3. The workshops and seminars that I have attended have improved my work as an auditor. | | | | | |
| 4. Auditing is characterized by so many challenges. | | | | | |
| 5. Audit standards are very clear to me. | | | | | |
| 6. There is need for more training in my work. | | | | | |
| 7. There is need for skill upgrading on forensic audit. | | | | | |
| 8. I have challenges in detecting frauds in financial statements. | | | | | |

SECTION E: AUDIT EFFECTIVENESS

Tick (√) the most appropriate that describes the situation in your institution using the scale provided; 5=Strongly Agree, 4=Agree, 3=Partially Agree, 2=Disagree and 1= Strongly Disagree

| ITEMS | Strongly Agree | Agree | Partially Agree | Disagree | Strongly Disagree |
|---|----------------|-------|-----------------|----------|-------------------|
| Timely finalization of audit reports. | | | | | |
| 1. A accurate and fair picture of the institution's financial accounts is reflected in the reports that have been produced. | | | | | |
| 2. Internal audit establishes a follow-up process to ensure that | | | | | |

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|--|--|--|--|--|--|
| corrective actions have been effectively implemented. | | | | | |
| 3. Internal audit provides suitable suggestions for improving the procedures of the institution under audit. | | | | | |
| 4. Internal audit reviews the reliability and integrity of financial information. | | | | | |
| 5. Internal audit improves the effectiveness of internal control | | | | | |

| | | | | | |
|---|--|--|--|--|--|
| processes to avoid fraud risks. | | | | | |
| 6. Internal audit improves the effectiveness of risk management process. | | | | | |
| 7. In the case of fraud, management fails to set an example and implement a zero-tolerance policy. | | | | | |
| 8. New employees are made aware of the institution's | | | | | |

| | | | | | |
|-----------------------|--|--|--|--|--|
| position of fraud. | | | | | |
|-----------------------|--|--|--|--|--|

THANK YOU

Appendix ii: SAGA

| MINISTRY | No. | SAGAs |
|---|-----|--|
| The National Treasury and Planning | 6 | <ol style="list-style-type: none"> 1. The Kenya Institute for Public Policy Research and Analysis (KIPPRA) 2. The National Government Constituencies Development Fund (NG-CDF) 3. Vision 2030 Delivery Secretariat (VDS) 4. Kenya National Bureau of Statistics (KNBS) 5. New Partnership for Africa's Development (NEPAD) 6. National Council for Population and Development (NCPD) |
| Ministry of Industry, Trade & Co-operatives | 2 | <ol style="list-style-type: none"> 1. Export promotion council 2. Anti-counterfeit Kenya |
| Ministry of Health | 6 | <ol style="list-style-type: none"> 1. Kenya Medical Research Institute (KEMRI) 2. Kenya Medical Training College (KMTC) Kenya Medical Supplies Authority (KEMSA) 3. Moi Teaching and Referral Hospital (MTRH) 4. National AIDS Control Council (NACC) 5. National Hospital Insurance Fund (NHIF). 6. Kenyatta National Hospital (KNH) |

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| Ministry of Agriculture, Livestock, Fisheries and Irrigation | 15 | <ol style="list-style-type: none"> 1. Nyayo Tea Zones Development Corporation 2. South Nyanza Sugar Company 3. Agro Chemical and Food Company 4. Agricultural Development Corporation 5. Kenya Meat Commission (KMC) 6. Kenya Veterinary Vaccines Production Institute (KEVEVAPI) 7. Agriculture, Fisheries and Food Authority (AFFA) 8. Kenya Plant Health Inspectorate Service (KePHIS) 9. Pest Control Products Board 10. Kenya Dairy Board (KDB) 11. Kenya Veterinary Board (KVB) 12. AHITI Kabete 13. Kenya Tsetse and Trypanosomiasis Eradication Council (KENTTEC) 14. Kenya Agricultural and Livestock Research Organization (KALRO) 15. Kenya Marine Fisheries Research Institute (KMFRI) |
| Ministry of Devolution and the ASALS | 1 | <ol style="list-style-type: none"> 1. NYS |

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| Ministry of Information, Communication and Technology (ICT) | 4 | <ol style="list-style-type: none"> 1. Kenya Broadcasting Corporation (KBC) 2. Kenya Yearbook Editorial Board 3. Kenya Institute of Mass Communications 4. Media Council of Kenya. |
| Ministry of Education | 12 | <ol style="list-style-type: none"> 1. Kenya Institute of Curriculum Development 2. KEMI- Kenya Education Management Institute 3. KNEC- Kenya National Examinations Council 4. KISE- Kenya Institute of Special Education 5. SEPU- Kenya School Equipment Production Unit Jomo Kenyatta Foundation 6. KLB- Kenya Literature Bureau 7. ICDTA- Institute for Capacity Development of Teachers in Africa 8. KNATCOM- Kenya National Commission (KNATCOM) for UNESCO 9. HELB- Higher Education Loans Board 10. IHE- Institutions of Education and Training 11. CUE- Commission for University Education 12. NACOSTI- National Commission for Science, Technology and Innovation |

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| Ministry of Labour and Social Protection | 5 | <ol style="list-style-type: none"> 1. National Employment Authority (NEA) 2. National Council for Children Services (NCCS) 3. Child Welfare Society of Kenya (CWSK). 4. National Council for Persons with Disabilities (NCPWD) 5. National Industrial Training Authority (NITA) |
| Ministry of Environment and Forestry | 5 | <ol style="list-style-type: none"> 1. Kenya Wildlife Service (KWS) 2. Kenya Forest Research Institute (KEFRI) 3. Wildlife Clubs of Kenya (WCK) 4. NEEMA 5. Kenya Forest Service (KFS) |
| Ministry of Tourism and Wildlife | 7 | <ol style="list-style-type: none"> 1. Kenya Tourist Board 2. Kenya Tourist Dev. Corporation 3. Kenya Utalii College 4. Catering & Tourism Devt Levy Trustees KICC 5. TTF 6. Bomas of Kenya 7. HRA |
| Ministry of Water and Sanitation | 8 | <ol style="list-style-type: none"> 1. Water Appeals Board (WAB) 2. Water Services Trust Fund (WSTF) 3. Water Services Boards (WSBs) 4. National Water Conservation and Pipeline Corporation (NWCPC) |

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| | | <ol style="list-style-type: none"> 5. Kenya Water Institute (KEWI) 6. Water Resources Management Authority (WRMA) 7. National Irrigation Board (NIB) 8. Water Services Regulatory Board (WASREB) |
| Ministry of Energy | 6 | <ol style="list-style-type: none"> 1. Kenya Power and Lighting Company (KPLC) 2. Kenya Electricity Transmission Company (KETRACO) 3. Energy and Petroleum Regulatory Authority (EPRA) 4. Rural Electrification and Renewable Energy Corporation (REREC) 5. Geothermal Development Company (GDC) 6. Kenya Electricity Generating Company (KenGen) |
| Ministry of Public Service, Youth and Gender | 4 | <ol style="list-style-type: none"> 1. National Government Affirmative Action Fund (NGAAF) 2. Women Enterprise Fund (WEF) 3. Anti-Female Genital Mutilation (FGM) Board. 4. Uwezo Fund |