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**Master's Thesis of Public Administration**

**Assessing the Effectiveness of Internal Audit  
in the Civil Service of Ghana**

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# **Assessing the Effectiveness of Internal Audit in the Civil Service of Ghana**

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## **Abstract**

# **Assessing the Effectiveness of Internal Audit in the Civil Service of Ghana**

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The value of placed on internal auditing in the Civil Service has assumed much prominence in recent years mainly due to governments' quest to sanitize public spending, ensure the judicious utilization of public resources, as well as citizens' desire to see an efficient Civil Service, rid of corrupt practices. However, for the internal audit function to achieve this, it needs to be critically appraised to ensure that it plays its rightful role within the operations of public sector organizations.

The research work evaluates the efficacy of internal auditing in the Civil Service of Ghana. The research sought to assess effectiveness of internal auditing, investigate the drivers that impact efficacy of internal audit, and recommend actionable measures to improve the functions of internal auditing in the Civil Service. The study explores the independence of internal audit, competence of internal audit, and top management support as factors that impact the effectiveness of internal audit in the Civil Service. To achieve this, the study employs the casual survey design, specifically using a mixed approach involving qualitative and quantitative methods. The main data was collected by administering 120 usable questionnaires through online platforms. In analyzing

the data collected, the study adopted the Ordinary Least Square (OLS) linear regression model to establish the association between internal audit effectiveness and the study's three independent variables i.e. internal audit independence, competence of internal audit, and top management support for internal audit.

The findings of the study show that independence of internal audit, competence of internal audit, and top management support for internal audit all significantly predict internal audit effectiveness in the Civil Service of Ghana.

Founded on the findings, the research work recommended that freedom of internal auditors be enhanced, internal auditors' competence be improved, greater senior management support be secured for internal audit activities, and the working environment and conditions for internal auditors be improved in order to boost internal audit effectiveness in the Civil Service of Ghana.

**Keywords:** Internal Audit, Internal audit effectiveness, Internal audit independence, Competence of internal audit, Civil Service of Ghana.

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# **Chapter 1. Introduction**

## **1.1 Study Background**

Internal auditing is a management function whose primary goal is to track internal control systems and adherence to pecuniary activities in respect of an organization. As a management function, it is important not only for private organizations, but public ones as well (Mustika, 2015). Internal auditors undertake autonomous reviews of the activities undertaken in organizations with the goal of enhancing hierarchical execution of the organizations' activities (Ali, 2018). Internal audit enables organizations attain their organizational objectives and fulfil their core mandate by instituting well-planned mechanisms for assessing and enhancing operational outcomes, corporate change, and efficient control tools for improving administrative efficiency (Ali, 2018). The enhanced focus and scope of internal audit's activities places it at a prime location in every organization's corporate structure for implementing administrative controls and checking operational or consumption excesses (Li et al., 2018). Internal auditors advise senior management to enable them successfully run organizations in achieving their corporate goals (Cai & Jon, 2018). This makes internal audit an integral part of every organization's structure.

Essentially, internal auditors assist in protecting organizational resources and provide critical records asset usage in organizations, as well as an evaluation of whether the assets are utilized in meeting organizational objectives or for unrelated purposes (Testa et al., 2018). Over the years, internal auditing and evaluation has become indispensable within the general framework of administration and control. To this extent, questions regarding how effectively internal audit is performing its function have risen to the fore (Sunyoto et al., 2018). Very few enquiries however, have been undertaken into the viability of internet audit operations (Chen et al., 2017). Internal audit viability pertains to the extent (counting quality) that marked targets of audits are attained (Shamki & Alhajri, 2017), and the degree to which internal audit offices meet their goals (Mihret & Yismaw, 2007).

The valuable role internal auditing plays in the civil service has assumed much prominence in recent years mainly due to governments' quest to sanitize public spending, ensure the judicious utilization of public resources, as well as citizens' desire to see an efficient civil service, rid of corrupt practices. The growing calls on governments to be accountable in its management of public funds as well as providing viable, economical, and efficient service delivery has resulted in the enhanced attention given to internal audit function in the public sphere. Ample evidence abounds that gives credence that a robust internal audit function is key in providing confidence in governance and accountability processes of public institutions by regularly assessment of how effective and efficient the control, governance and risk environment are within the organization (Asare, 2009). For internal audit to be able to achieve this however, it needs to be critically appraised to ensure that it is playing its rightful role within the operations of public sector organizations. Only then can it be considered to be fulfilling its watchdog role in promoting efficiency in public sector service delivery.

## **1.2 Problem Statement**

In Ghana, internal audit is an essential aspect of financial reforms carried out in the public service. The Government of Ghana has consciously over the years embarked on various attempts to stem the rising tide of mismanagement of public funds and infractions of pecuniary laws and regulations. These efforts resulted in the creation of Internal Audit Agency by an Act in 2003, with its objective being to strengthen internal controls so as to eliminate or reduce inaccuracies of financial records and misappropriation of public resources to the barest minimum. Notwithstanding the presence of internal audit units in all Ministries, these public service institutions continues to be riddled with financial infractions and irregularities. The general consensus in Ghana is that, the public sector and in particular the Civil Service is characterized by poor corporate governance culture, bad management, bribery and corruption, distressed assets and liability management, and lack of supervision (Ofori & Lu, 2018).

A cursory scrutiny of certified audit reports of MDAs as presented by the Auditor-General to Parliament over the last five years shows an alarming spate of breaches in the custody and management of funds provided to Civil Service organizations. The 2018 Auditor-General's report showed that, the financial impact owing to weaknesses and irregularities in taxation, cash handling, payroll, procurement and contracting for the period amounted to GH¢5,196,081,899.94 equivalent to US\$893,558,790.62 in today's terms. This amount exceeded the figure reported in the Auditor-General's report for 2017 which showed that infractions in contract administration, unhealthy cash management practices, procurement irregularities as well as tax irregularities and unauthorized payments, cost the public purse an amount of GH¢892,396,375.19 equivalent to US\$153,463,444.40. In addition, the Auditor-General of Ghana raised questions the effective practice of internal audit within public service organizations by casting doubts about its independence. Essentially, the internal audit function in Civil Service institutions have been abused that internal auditors' reports nationwide are compromised due to independence issues (Asamoah, 2019).

Furthermore, an inquiry by the Committee charged with oversight responsibility over public accounts in Parliament referencing the Auditor-General's Report, brought to bear various instances of administrative infractions specifically citing MDAs and other para-statal as the major culprits (Asiedu & Deffor, 2017). These infractions largely manifests itself in huge budget deficits, poor living standard, bad performance of the economy and high transaction costs. Contrary to anecdotal evidence of the significant role of the practice of internal audit in civil service organizations in curbing improprieties in the handling of the resources of taxpayers, these instances to a large extent, is a scathing indictment on the internal audit function and rightfully so, led to many questioning whether internal audit is functioning effectively in the public sector. It thus, follows as a consequence of these damning evidence and rhetoric that we undertake an empirical studies of the factors that impact the effective functioning of internal auditing geared towards finding ways to building and strengthening its practice in the Civil Service of Ghana.

Plethora of evidence show how crucial the internal audit function is within an organizations. Its significance ranges from provision of assurance services which involves engagement of auditees to systematically obtain information and objectively evaluate them through to helping boards and politicians exercise their oversight role, attain their goals of transparency and efficient utilization of public resources (Jóhannesdóttir et al. 2018).

Despite the uniform agreement by most scholars of the worth of internal audit within public institutions, there is limited or inadequate prior empirical studies of the factors mitigating against the effective function of internal audit especially in developing countries (Arena & Azzone, 2009; Mihret & Yismaw, 2007) and more specifically Ghana. In addition to the limited literature on this phenomenon, existing literature on inhibiting factors to internal auditing practice in public service does so through the lenses of external auditors with little or no attention paid to other stakeholders inclusive of internal auditors themselves.

### **1.3 Purpose of the Study**

The study focuses its lenses on assessing internal audit effectiveness in the Civil Service of Ghana, along with the factors that inhibits its effectiveness. It will do this by examining not just internal audit effectiveness, but internal audit independence, competency of internal audit and top management support for internal audit in the Civil Service as well.

### **1.4 Objectives of the Study**

#### **1.4.1 *General Objectives***

On the whole, the research aims at assessing internal audit effectiveness within the Civil Service of Ghana, and the factors that impact the internal audit function.

#### **1.4.2 *Specific Objectives***

Precisely, the ensuing objects will be pursued by the study:

- Probe internal auditing effectiveness in the Ghana Civil Service

- Scrutinize the drivers that influence the efficacy of internal audit within the Civil Service
- Recommend measures to improve internal audit effectiveness in the Civil Service.

This study will therefore examine three variables which are independence of internal audit, competency of internal audit and top management support, and how they impact the effectiveness of internal audit within the Civil Service of Ghana.

## **1.5 Research Questions**

The work is undergirded by the queries below:

- How effective is internal auditing in the Ghana Civil Service?
- Which factors impact effectiveness of internal audit in the Civil Service?
- In what ways can internal audit effectiveness be improved in the Civil Service?

Answering these questions will assist in meeting the study's objectives regarding internal audit effectiveness in Ghana.

## **1.6 Significance of the Study**

These include the Head of Civil Service, Internal Audit Agency, heads various Ministries, central government, internal auditors, external auditors, regulatory bodies for the accounting profession, and the public. Furthermore, the study will also throw more light on the internal audit function and the factors that impede its effective functioning. The findings of the study will encourage the Civil Service Board to accord greater value to the activities of internal audit, and institute swift reforms to enable the internal audit function execute its role properly in the Civil Service. Finally, it will further extant works on effectiveness of internal audit more broadly, and developing countries in particular while assisting researchers in conducting further studies in the area of internal auditing to identify related study topics through the recommendations that will be given.

## **1.7 Limitations of the Study**

The impediments envisaged to impact this work numerous and varied. The critical one is time constraints. The study is being undertaken within a limited time frame, which impacts the time available for various parts of the work such as collection data, management, and analysis along with its reporting. Secondly, the challenges brought on by the novel coronavirus spreading on the African continent in general, and in Ghana in particular, served to affect the readiness of answerers to partake in the research work. This notwithstanding, they agreed to provide data for the study. Finally, very little prior research exists on internal audit effectiveness in Ghana, making it a new domain for current researchers interested in studying the phenomenon here in Ghana. To that extent, there was very little past data for the study findings to be compared with.

## **1.8 Organization of the Study**

The work is structured in five (5) parts. The first part discusses the basic underpinnings of the research, problem statement, purpose and scope of the study, study objectives, research questions, significance, and limitations. Chapter two undertakes a review of theoretical and experiential studies on the efficacy of internal audit and the study variables i.e. independence, competency and senior management support for internal audit. Chapter three sets out the research methodology including study design, population, sample size and techniques, data management and analyses techniques, and ethical protocols, among others. Presentation of the results based on data analysis captured in the fourth chapter. Demographic analysis and the findings in respect of internal audit effectiveness, independence of internal audit, competency of internal audit and top management support for internal audit in the Civil Service is also presented in this chapter. Analysis of the factors impacting internal audit effectiveness are also presented. Chapter five ends the study by summarizing findings and drawing conclusions based on the findings and proffering actionable recommendations.



## **Chapter 2. Literature Review**

### **2.0 Introduction**

In this section details of relevant writings will be reviewed; evaluating the drivers that impact effective practice of internal audit in the Civil Service of Ghana. The review focuses on; the exploration of the history and concept of internal auditing as well as how the independence, competence and top management support has impacted the efficacy of internal audit practice.

### **2.1 History and Concept of Internal Audit**

Internal audit has had an eventful history which can be traced to the Mesopotamian enlightenment when people saw the need to protect and safeguard the properties of the state as well as their personal properties (Nordin, 2003; Dumitrescu, 2004). The twentieth century saw a proliferation of large, dispersed, complex corporations with increased demand for corporate governance structures to make organisations more accountable. This precipitated the accelerated development of IA practice and its critical input in the achievement of organizational goals. In keeping with this, the Institute of Internal Auditors (IIA), the international professional arm mandated with issuance of standards and the professionalization internal audit was established in 1941. Since its establishment, the IIA has seen to the steady extension of the sphere of internal audit functions and the certification of its professional practice. IIA issued its first Statement of Responsibilities in 1947, followed it up in 1968 with the issuance of its Ethics Code and completed the cycle with its Practice Standards in 1979.

Internal auditing in times past, was perceived to be solely restricted to ensuring that proper financial records of transactions were kept by an organization, assets were safeguarded through instituted asset management systems, and compliance with policies, procedures and statutory requirements were adhered to. That notwithstanding, internal auditing has metamorphosed to become a significant factor in the corporate environment in the last two decades. These changes has seen the concept of internal auditing widened in terms of definition,

scope and procedure. Asare (2009) argues that present internal auditing coverage encapsulates financial issues as well as value for money preposition, risk assessment, and effectiveness of governance and managerial processes.

IIA (1978) in its earliest beginning defined internal auditing as “an independent appraisal function established within an organization to examine and evaluate its activities as a service to the organization.” In its recent definition and in keeping with meeting the changing demands placed on internal auditing in respect of its functions, it has now defined internal auditing to factor the broad gamut of requirements and expectations as “an independent, objective assurance and consulting activity designed to add value and improve an organization’s operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes” (IIA, 2004). An attestation of the rapidly changing phase the profession of internal auditing has undergone over the years from emphasizing on how accountable past transactions were to improving operations of future outcomes to help auditors function more effectively and efficiently within the organizational setting (Nagy & Cenker, 2002; Goodwin, 2004; Stern, 1994). These evolutionary phases of the functions of internal auditing is illustrated in Table 2.1 which was adopted from the work of Pickett (2004):

**Table 2.1 Evolution of Internal Audit**

1. Check accounting records	1950
2. Assess compliance	1960
3. Examine procedures	1970
4. Evaluate controls	1980
5. Report on system of internal control	1990
6. Assess risk management	2000
7. Facilitate risk management	2001
8. Assure risk/ control	2002
9. Add value	2003
10. ?	2004

Source: Pickett (2004).

Importance of internal audit in management of institutions; not only public service, but in private sector is poignantly captured in the statement below:

*“Internal audit is a cornerstone for good governance in the public sector”*

(Goodson, Mory & Lapointe, 2012).

Internal audit concerns reviewing financial records in determining their fidelity and adherence with necessary statutory requirements, professional accounting standards, and internal policies (Badar, 2012). Internal auditors are an extra layer of assurance of effective financial control in public sector organizations in auditing all financial transactions and examining accounting records pertaining to the entity with the goal of detecting fraud and rectifying anomalies. Internal audit is a vital cog of internal control mechanisms. Ultimately, its goal is to maximize organizational value and enhance operational efficiency (Vokshi, 2015). Enofe et al, (2013) state that internal audit enables public sector managers fulfil their accountability obligations towards their citizens. Fundamentally, the worth of internal auditing in the civil service has heightened over the periods due to the increasing size and complexity of civil service

institutions. IA has become a major determining factor of the value of internal control in civil service institutions. It has contributed immensely in enhancing public sector management (Okechukwu & Kida, 2011).

## **2.2 Internal Audit Effectiveness**

Internal audit effectiveness can be defined as “risk based concept that helps the organization to achieve its objectives by positively influencing the quality of corporate governance” (Lenz et al., 2018). This implies that, for internal audit to be considered as an integral component in the governance and risk management process, it should be able to deal with any bottlenecks that inhibits its effectiveness. Chambers (1992) contends that effectiveness is ‘doing the right thing.’ In his perspective, Dittenhofer (2001) avers that effectiveness is what matters most to an organization in that pursuing efficiency in ineffectual venture is fruitless. That is, immaterial sections of an organization can be adequately audited. Lenz et al. (2018), in exploring the concept of effectiveness in performance auditing, drew inspiration from (ISSAI 3000) which considered effectiveness as a ‘goal-attainment concept’, implying that effectiveness focuses on the links among objectives, outputs and results.

The IIA (2016) asserts that an effective internal audit is one in which decision makers in an organization are receptive confront difficulties head-on and take advantage of opportune moments to adapt to new ideas for improvement. Goodwin and Teck (2001) re-iterates the Institutes point when it argues that integral to corporate governance is when an effective internal audit department serves as a conduit to assist institutional heads and corporate Boards in the attainment of their objectives. They also opine that if errors are well detected or prevented, then internal auditing is effective. Furthermore, an effective internal auditing function is one that assures both senior officers and the Audit Committee through reliance of the internal control processes and assessment of risk exposures of the organization aimed towards the attainment of overall goal (Marks, 2013). Dittenhofer (2001) argues that effectiveness is the ability to achieve ones’ objectives and goals. Similarly Shoommuangpak & Ussahawanitchakit (2009) defined internal audit effectiveness “as achieving

audit's objective by gathering sufficient and appropriate audit evidence to give a reasonable opinion regarding the compliance of the financial statements with generally accepted accounting principles." Sawyer (1995) intimated that internal auditor's assignment is effective only when anomalies detected are consequently rectified and does not recur. Van Gansberghe (2005) stresses the need for a proper and fit evaluation of the potency of internal audit function in the public sector to gauge its level of contribution towards the delivery of service in an effective and efficient manner. Government of Ghana being mindful of the important role played by internal audit in the public sector demonstrated its resolve as part of the public sector reform agenda to enact the Public Financial Management Act 2016 (Act 912) which among other things requires internal audit units and departments in public institutions to report on their organization's operations and financial administration in order to streamline the efficient administration of public funds and resources.

Additionally, Mihret et al, (2010) avers the need to scrutinize the efficacy of internal auditing is borne out of its value-adding potential to an organization. This position is ably supported by researchers such as (Dellai & Omri, 2016; Gros, Koch et al, 2016; Roth, 2003). ALshbiel (2017) contends that an effective internal audit is mirrored by quality performance of firms and as such urges its examination to help organizations improve their performances. Further, Cohen & Sayag (2010) stated the importance in identifying the institutional mechanisms that propels internal audit effectiveness due to the continual changing nature in respect of its role in the organization.

The review of prior studies on this topic showed a dichotomous approach adopted by various researchers to analyzing or examining internal audit effectiveness. The first group categorized internal audit effectiveness based on its ability to maximize auditees' satisfaction (Barrett, 1986; Frigo, 2002; Ziegenfuss, 2000; Cohen & Sayag, 2010). Simply put, it measured auditees' satisfaction with internal audit activities against pre-determined global standards extracted from the features of the functions of internal audit White (1976). On the other hand, other studies used an indirect measure to observe

internal audit effectiveness. In particular, Sawyer (1995) proposed five standards in which internal audit efficacy can be gauged – professional competency; scope of internal audit function; managing IA units; interdependence; and performance. This position was further expanded by Arena and Azzone (2009) when they posited that effective internal audit should hinge on multiplicity of indicators which includes the level of acceptance and action taken on the recommendations of internal audit; adherence to universal professional standards in tandem with the requirements of IIA; relevant applicable laws and regulations in a particular jurisdiction; internal audit charter and mission; as well as audit plans agreed upon by the internal audit unit. This position is supported by the works of Van Gansberghe (2005); Mihret and Yismaw (2007). It is instructive to note that other scholars have taken a rather non-metric approach to measuring effectiveness of internal audit by intimating how difficult it is in reality compute. They contend that, its determination is purely contingent on subjective assessments placed on the activities of internal audit by management and stakeholders (Ransan, 1955; Schneider, 1984; Albrecht et al., 1988; Dittenhofer, 2001).

## **2.3 Theoretical Review**

Exploring recent literature, shows that no one single theory has been applied to explain and understand internal auditing and its effectiveness (see Endaya & Hanefah, 2013; ICAEW, 2005; Dittenhofer, 2001, Al-Twaijry, Brierley & Gwilliam, 2003, Ahmad, 2015). Endaya and Hanefah, 2013 opines that not much attention has been given to theories in the study of internal auditing effectiveness to form a theoretical framework for internal auditing effectiveness. Some of the theories adopted in previous studies have been discussed below.

### ***2.3.1 Agency Theory***

An agency relationship comes to being when a principal engages another person to undertake certain assignment on his behalf (ICAEW, 2005). The exercise of this relationship often results in dissention between the principal and the agent

with regards to their desires and goals as well as the cost of monitoring the efforts of the agent (Fama, 1980; Jensen & Meckling, 1976; Eisenhardt, 1989).

Agency theory is vital in corporate governance literature in terms of its description of the conflictual relationship that exists between self-seeking managers and owners (Laiho, 2011). Jensen & Meckling (1976) identifies two costs associated with agency theory regarding: monitoring costs and bonding costs and contends that internal audit is a bonding cost because the agents provide assurance against organizational lapses by examining internal control systems and operational activities of the functions of appointed officers (Jensen & Meckling, 1976).

Advocates of the agency theory espouses that, viewed in respect of the functions of internal auditing, it provides a basis for the resolution of the most basal deficiency of the principal-agent relationship as it considers internal auditing as the link between both parties. ICAEW (2005) empirically suggests that agency theory situates internal audit a monitoring scheme which functions to tackle information asymmetry issues and self-serving inclinations of agents by providing a watchdog role that aligns the interest of agents to the objective function of owners.

Application of the agency theory therefore imposes a moral imperative on internal auditors to be effective in the discharge of their responsibility and report unambiguously and fairly on the operations of the organization to the Board and Audit Committee irrespective of being under employment of senior management (Endaya & Hanefah, 2013). This moral injunction, they deduce emanates from the risk of internal auditors being compromised by senior management through financial rewards which can impair their judgment.

### ***2.3.2 Institutional Theory***

The institutional theory looks at organizational structures and practices that shapes the actions of actors (Zucker, 1987; (Mihret et al., 2010; Endaya & Hanefah, 2013). It acknowledges the various forces that impact individuals as well as organizational behavior in the pursuit of its objectives. A cursory review

of prior studies in internal audit effectiveness points to the institutional theory as the most commonly adopted theoretical framework to explain internal audit effectiveness (Al-Twaijry et al., 2003; Ahmad, 2015; Mihret et al., 2010).

In iterating the need for the establishment of internal audit and how governments can promote its development. Al-Twaijry et al. (2003) used institutional theory as the underlying theory to back their findings. Similarly, Arena and Azzone (2007), in their study of 364 Italian companies adopted the institutional theory to explain the impact of organization support on the effective functioning of internal auditing. Empirical works cited from these studies tend to suggest it is a valid theory to make sense of internal audit effectiveness and explains why it has been employed in both developed and developing regions (Endaya & Hanefah, 2013).

The institutional theory is premised on how particularly the institutional environment shapes internal arrangements and how best organizations can be adaptable to constant changing nature of the environment (Meyer, 2006). The theory imposes obligations on internal audit to be adept and professionally competent to meet the requirements of the organization (Mihret et al., 2010). The theory, as has been found in several empirical studies on internal audit effectiveness stresses the contextual perception of peoples understanding of internal auditing and how it impacts their functioning (Al-Twaijry et al.; Arena & Azzone, 2007, Ahmad, 2015). The criticism with the institutional theory stems from the fact that, it lacks sufficient information on internalities that impacts internal audit and its effectiveness (Ahmad, 2015).

### ***2.3.3 Linking Theories of the Study***

That notwithstanding, this study adopts a blend of theories based on most of the literature reviewed to build a theoretical framework to explain internal auditing effectiveness and the choice of the factors that impact it. Consequently, the study employs both agency and institutional theories to explain the choice of the independent variables and how it impacts the effectiveness of internal audit as was adopted in other studies (Yaqi et al.; Yamak & Suer, 2005; Christopher et al).

The blend of the theories allows for extensive consideration of not only the economic paradigm regarding internal audit effectiveness but also an examination of how the social and behavioural perspectives culminates in the ineffectual performance of internal auditing.

## **2.4 Factors that Affect Internal Audit Effectiveness**

Upon review of empirical studies by other authors on internal audit effectiveness, it was evident that many factors impede the effectiveness of internal audit mostly informed by how they are managed within the organizational settings. This section discusses the outcomes of the review of literature regarding some significant inhibiting factors of internal auditing effectiveness in the public sector.

### ***2.4.1 Internal Audit Independence***

Internal audit independence is freedom from situations that threaten internal auditors' capacity to fulfil their tasks in an unprejudiced manner (Salehi, 2016). Belay (2007) opines that independence of internal audit refers to freedom from management interference in the performance of the work of internal auditors. Alzeban & Gwilliam (2014) contend that independence is a key driver for an effective internal audit and as such should have a high degree of autonomy when discharging its functions. Audit independence is achieved when Heads of internal audit are not restricted in the reporting of their functions hierarchically within the organization which consequently leads to the fulfilment of their responsibilities (IIA, 2016). The IIA in the issuance of their multiple attributes standards and associated practice advisories stated in Standard 1130 that “the

need to adequately disclose to appropriate parties any impairment of independence” and explains impairment to imply “organizational independence and individual objectivity which includes, but not limited to, personal conflict of interest, scope limitations, restrictions on access to records, personnel, and properties, and resource limitations, such as funding.” Standard 1110.A1 on the other hand simply avers that “internal audit activity must be free from interference in determining the scope of internal auditing, performing work, and communicating results” (IIA, 2016).

Dejnaronk et al. (2016), in their studies defined audit independence as “freedom from conditions that threaten the ability of the IA activity to carry out IA responsibilities in an unbiased manner”. The provision of safeguarding tools in Internal Audit Departments is essential to allow the internal auditor conduct its internal audit function independently (D’Onza et al., 2015). Independence is the foundation on which internal auditors build credibility and establishes reliability of their report and as such internal auditors ought not to be seen as independent in appearance but also as fact (Wodajo, 2019). Internal audit derives its worth and integrity from the basic tenet of fairness which underpins the professional practice of internal auditing (Stewart and Subramanian, 2010; Wines, 2012). The capability of the Head of internal audit determines through their own initiative which assignments to carry out, and the freedom to report findings based on appraisals and evaluations of the system of operation without being unduly compromised is a function of effectiveness of auditing.

An internal audit function lacking independence loses its ability to provide perspectives for the organization in dealing with growing challenges (Yee et al., 2008). Alzeban & Gwilliam (2014) notes that, audit activities ought to be sufficiently insulated from those it intends to evaluate in order to negate any form of interference and give credence to its objectivity and independence in the performance of their work. Cohen & Sayag (2010) contends that, not only is internal audit independence a significant factor of internal audit effectiveness, but also influences achievement of audit effectiveness.

Audit professionals and governance experts in recent times have stressed the need to have an independent and objective internal audit function as a prerequisite for audit quality irrespective of their employment status (Dellai & Omri, 2016). Alizadeh (2011) indicates that institutional objectivity and independence of the internal audit function are among the most critical pointers of effective internal audit. Onumah and Krah (2012) intimated that political meddling impedes the effective discharge of internal audit functions. Furthermore, Sawyer (1988) contends that independence of internal auditors allows them to state their opinions devoid of bias and which will consequently result in the internal audit function being effective.

#### ***2.4.2 Competence of Internal Audit***

Industry players and standard-setters advocates that internal audit assessments ought to be performed proficiently and adherence to due professional care. This requires internal auditors to be equipped with appropriate skill set, expertise and adroitness intrinsic to carrying out personal obligations. Standard 1210 of the International Standards for the Professional Practice of Internal Auditing (ISPPIA) refers to competence as a collective term encompassing knowledge, dexterity, and the capacity required of internal auditors to effectively undertake their professional duties (IIA, 2016). The Standard argues that a competent internal audit must be abreast with ongoing activities, present developments, and new concerns, to enable it proffer proper course of action.

Van Gansberghe, (2005) suggests that the competence of internal auditors is an essential driver of effectiveness in internal audit function. Al-Twajry et al., (2003) have opined that an adequately competent internal audit function in respect of education, know-how, adroitness, and professional capacities has a positive bearing on the effective functioning of internal audit. Mousa (2005) considered capability and due-diligence in the form of competence as significant factors of internal audit effectiveness in line with the stipulations by ISPPIA. Similarly, Arena and Azzone, (2009) noted that members' communication positively influences audit results and as such competence is a vital element to gauge how effectiveness the internal audit function is.

Competence of the IA department is a frequently evaluated driver of prevailing literature on internal audit effectiveness appearing in about 59% of the thirty-seven primary studies conducted. Some studies relate competence staff size of the internal audit unit as well as the professional credentials and capacity enhancement programs they have undergone in the preceding year (Nurdiono & Gamayuni, 2018). Auditors' competency contributes to the ability of the auditors to perform their functions in a systematic and discipline way which ultimately leads to improvement in the efficacy of the internal audit activity. Mihret & Yismaw (2007), noted that internal audit offices are constantly challenged by deficient technical staff and high rate of attrition limiting their ability to offer value-added service to management. Additionally, Unegbu & Kida (2011), stated that the effective discharge of the internal audit function in the public sector hinged on the unit having adequate staffing with the required competencies. Brierley et al., (2001, 2003) in their studies of internal audit distinguished mediocre internal audit staff as a factor hindering the effective functioning.

### ***2.4.3 Top Management Support for Internal Audit***

The decisive nature of the interaction and connection between management and internal auditors is one that cannot be overemphasized (Ahmad et. al., 2009; Mihret & Yismaw, 2007; Arena & Azzone, 2009; Hung & Han, 1998; Cohen & Sayag, 2010). Owing to the fact that internal auditors work closely in tandem with management of organization's in the conduct of their day to day dealings, it necessary to obtain support and be perceived favourably in the eyes of management if the internal audit function can effectively achieve its objective functions. Top management support is defined in terms of how senior management responds and acts upon the recommendations to audit findings and their responsiveness to the issues raised by the audit committee. Alzeban & Gwilliam (2014) notes that it is essential for top level management to endeavor to understand and exhibit unwavering support for the internal audit activity to signal to the entirety of the organization, critical role it plays towards the realization of its objectives. Also, Sayag (2014) in assessing key drivers of

internal audit in the Israeli public institutions, noted that management backing demonstrated in the form of ensuring continuous training and development programs are available to internal audit staff, sufficient priority is given to the strategic planning of audit work within a given period was central to the efficacy of internal audit activity. Though internal auditors can have substantial level of freedom and immunity, they might be incapable of discharging their duties without the appropriate management backing (Al-Twajjry et al, 2003).

Management backing is key to facilitate effective discharge of the obligations of internal audit (Baheri et al., 2017; Halimah et al., 2012). Onumah and Krah (2012) in their work on the barriers and catalysts of internal audit effectiveness in the public sector, observed that one key factor that worked against the effective administration of internal audit was the lack of management support.

Furthermore, Brierley et al., (2001) also charged that, to have the desired effect in terms of ensuring appropriate steps are taken to rectify anomalies detected and raised in the recommendations of internal auditors, there should be unencumbered access to the highest levels of management.

Professionals and standard setters are in agreement that, in every worthwhile venture, for internal audit to be considered as effective, it is imperative for high-level leaders to offer backing and commitment to the work of internal audit through actionable steps to implement recommendations and act upon advice given. ISPPIA in recognizing the significant role of senior management in the effective discharge of the work of internal audit mandates the Head of Internal Audit to involve senior executives in internal audit plan and incorporate their inputs accordingly (IIA, 2016, ISPPIA, Standard 2010.A1). It also emphasizes the collaborative role that is needed to be observed in terms of the rate and details of reporting by the Head of Internal Audit and the major stakeholders in the organization represented by top management and the Board. The Standard intimates that, the rate and details of reporting should be based on the quality of information being shared and seriousness expected of management and Board to effect remedial actions within a timely manner (IIA, 2016, ISPPIA, Standard 2060).

The success of internal audit function depends substantially on management's appreciation for internal audit and accepting that, the internal audit process is a crucial and relevant activity as any other process within the organization. Various studies points to the fact that without management support, the internal audit process are likely to be restricted. Ali et al., (2007) report in their work which covered internal audit units in Malaysia's Central and Local Governments' concluded that, the effectiveness of the internal audit function were closely tied to the way these institutions were managed and their interdependence in respect of their contractual obligations. According to Albercht, et al., (1988) four factors contribute to enhancement of internal audit function, one of which is top management support. In his study, Abu-Azza (2012) contends that senior management backing serves as morale booster for internal auditors and indicated that this motivation is manifested through the provision of education and training programs to Internal Auditors; adequate budgetary allocation to internal audit; bonuses and recompense to staff of internal audit; acceptance and implementation of recommendations. Fernandez & Rainey (2006) asserts that high-level management backing and desire to adapt to current trends is essential to the sustenance and competitiveness of the organization, as top managers can obtain the buy-in of all stakeholders to embark on necessary changes as per the recommendations of internal audit.

## **Chapter 3. Research Methodology**

### **3.0 Introduction**

Part three explains the methods deployed to explore factors that impact how effective internal audit is practiced in Civil Service institutions in Ghana. Various headings that are discussed include study design, study population, the sample and sampling techniques, conceptual framework and study hypothesis, data collection procedure and ethical considerations, data management and analysis, and validity and reliability and ethical factors. The chapter concludes with the profile of the study organizations.

### **3.1 Study Design**

This research work employs casual survey research design (Zikmund, 1997) in assessing the internal audit effectiveness in the Civil Service. Survey design assists with examining variables with the aim of finding the relationships among the variables (Cavana et al., 2001). Specifically, the mixed methods approach to research will be employed involving both quantitative and qualitative approaches. Quantitative research involves complex experiments with many variables and treatment (Creswe2009). This will allow for a numerical representation of trends, viewpoints or beliefs of respondents, in order to infer from the selected sample to the entire population. The quantitative approach will allow for the independence of internal audit, competency of internal audit, top management support and internal audit effectiveness within the Civil Service of Ghana to be measured to indicate their individual and collective impact on the dependent variable. The qualitative aspect will focus on exploring and unearthing the factors and challenges impacting internal audit effectiveness in the Civil Service.

### **3.2 Study Population**

The study population comprises all internal auditors working in various Internal Audit Units in the Ministries, Departments and Agencies (MDAs) of the Ghana civil service. In all, more than 300 internal auditors work within the internal audit units located in the MDAs.

### 3.3 Sample Size and Sampling Technique

To ascertain the sample size, this study employed Krejcie & Morgan (1970) formula as expressed below:

$$n = \frac{X^2 \times N \times P \times (1 - P)}{(ME^2 \times (N - 1)) + (X^2 \times P \times (1 - P))}$$

Where:

*n* = expected sample size

*X*<sup>2</sup> = chi-square at a defined confidence level of 1 degree of freedom

*N* = population size

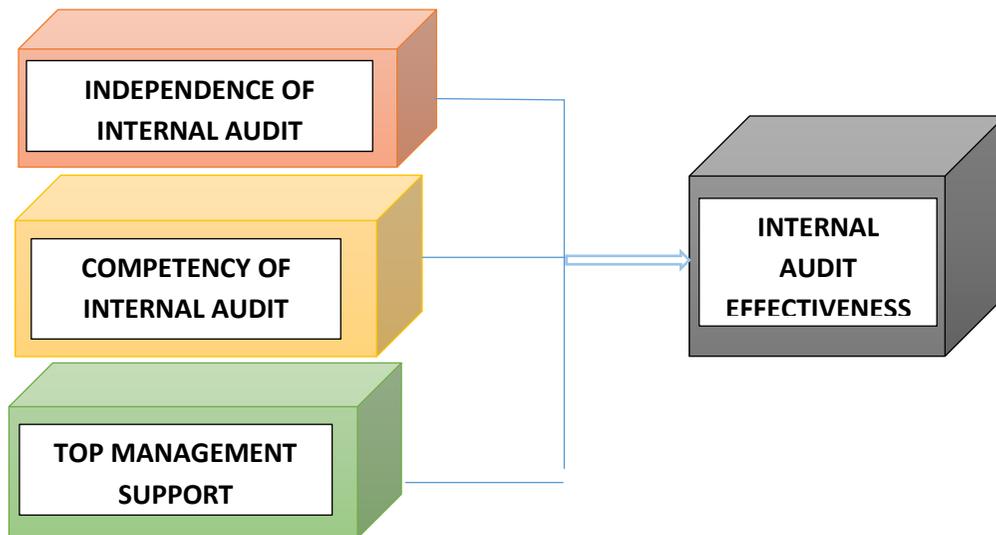
*P* = population proportion (.50)

*ME* = Margin of Error

This formula allowed an appropriate set of respondents to be selected for the work. The sample size of 169 was arrived at after applying a 5% margin of error at a 95% confidence level using a population size of 300 and a population proportion of 0.50. The respondents for the study were selected using a purposive sampling technique. Purposive sampling enables respondents with a peculiar characteristic to be selected in providing data for the study. Since a particular demographic i.e. internal auditors, is of interest to the researcher in this study, the purposive sampling technique becomes relevant in enabling the researcher select internal auditors in the various MDAs for participation in the study.

### 3.4 Conceptual Framework and Study Hypotheses

The conceptual framework outlined below which was proposed by Baharud-din et al., (2014) was adopted in assessing internal audit effectiveness in this study. The framework depicts the three (3) independent variables i.e. independence of internal audit, competency of internal audit and top management support for internal audit, as conceptualized and how it impacts the dependent variable i.e. internal audit effectiveness.



Source: Baharud-din et al. (2014)

Based on the Conceptual Framework, three hypotheses were set out for pursuit, which are:

***H1: Internal Audit independence is significantly related to internal audit effectiveness***

Independence has been shown to be important in promoting audit effectiveness (Yee et al., 2008; Alizadeh (2011). Not only is independence a driver of effective internal audit (Cohen & Sayag, 2010), but a prerequisite for audit quality as well (Dellai & Omri, 2016). Internal auditors are therefore required to have sufficient independence from those being audited in order to conduct their work without interference (Alzeban & Gwilliam, 2014). Consequently, this study hypothesizes that internal audit independence has an effect on audit effectiveness.

***H2: Internal Audit competence is significantly related to internal audit effectiveness***

Competence of internal auditors has been indicated as an essential determinant of internal audit effectiveness (Van Gansberghe, 2005). Competent internal auditors

have been shown to have a positive bearing on the efficacy of the internal audit function (Al-Twajjry et al., 2003). Proficiency and due care have been indicated as significant factors of internal audit effectiveness (Mousa, 2005). This is especially true for the public sector (Unegbu & Kida, 2011). To this extent, competence is hypothesized to significantly impact internal audit effectiveness in this study.

***H3: Top management support is significantly related to internal audit effectiveness***

Senior management support for the internal audit function has been shown to be indispensable for audit effectiveness (Alzeban & Gwilliam, 2014). Even if internal auditors have independence and autonomy but lack management support, they may still be ineffective in performing their duties (Al-Twajjry et al, 2003). Management support is therefore critical in facilitating the effective discharge of the internal audit function (Halimah et al., 2012). This study finally hypothesizes that top management support significantly impacts internal audit effectiveness.

### **3.5 Data Collection Instrument**

Questionnaires were used to collect the study data. The questionnaire will solicit data on demographic characteristics of respondents as well as their knowledge of the effectiveness of internal audit in the civil service. The questionnaires will be self-administered by respondents using an online survey platform on their phones, tablets or PCs. Specifically, the questionnaires developed by Musah et al., (2018), Huong (2018), Gebre (2018), Dellai & Omri (2016), and Salehi (2016) will be employed in this study. These questionnaires were used by these authors mentioned above in assessing the four variables of interest in this study; which are independence of internal audit, competency of internal audit, top management support and internal audit effectiveness. They have therefore been validated and are suitable for use in this study as well.

### **3.6 Data Collection Procedure and Ethical Consideration**

Preceding the commencement of collecting data, respondents will be given an overview of the study and its objectives. Respondents' consent will then be sought prior to data collection. They will also be assured that no personally identifiable information will be collected on them, and any data collected will be used for academic purposes only. This will provide anonymity for respondents and ultimately ensure their protection.

### **3.7 Data Management and Analysis**

Data collected will be analyzed in different ways. Descriptive statistical analysis will be performed on the demographic data of respondents to undertake a profile analysis. This analysis will present the age, sex, educational background and other bio-data of respondents using tables. Regression will be undertaken in determining the association between the variables of interest for the study. The Statistics and Data (STATA) software as well as IBM SPSS Version 21 will be used in performing the statistical analyses. Qualitative data will be analyzed using content and thematic analysis to identify themes and insights in the responses. This will be presented in augmenting the quantitative data.

### **3.8 Model Specification**

Rationalizing the choice of model for your study is essential since every model is designed for different purposes. Multiple regression is expressed in three variants. The first variant is the standard form examines link between group of independent variables and a dependent variable. The sequential multiple regression seeks to establish an association between a dependent variable a set of independent variables after controlling for the effect another independent variable has on the dependent variable. Stepwise regression model is suitable for studies that seeks to observe sub-categories of the independent variables that strongly relates to a dependent variable.

With this background and mindful of the objectives of the study, the standard multiple regression is used in assessing the impact of the independent variables. In order to be

able to observe the impact, the independent variables were inputted into the model simultaneously. The strength of the relationship between the variables of interest is estimated as multiple R and R<sup>2</sup>. In order to ascertain whether the link between the independent variables and the dependent variable can be generalized to the population based on the sample, an F-test is employed. In respect of establishing the individual effect of the independent variables on the dependent variable, the study conducts an A-test to ensure if the ordinary least square assumptions are met. The assumptions underpinning the OLS are:

**Linearity:** the association between a set of independent variables and dependent variables is linear.

**Homoscedasticity:** equal variances for independent variables and dependent variables data values.

**Absence of collinearity or multicollinearity:** Two or more independent variables are not correlated.

**Normal distribution:** independent variables and dependent variables data are distributed normally.

To determine if the OLS approach provides the finest approximates, the assumptions must be met. Consequently, in testing the study's hypotheses, the ordinary least square regression model expressed below is applied to identify the effect of the independent variables on the dependent variable:

$$IAE = \alpha + b_1IND + b_2COMP + b_3MSUP + \epsilon_i$$

Where:

*IAE is the Dependent Variable*

*$\alpha$  is the constant term*

*IND represents Internal Audit Independence*

*COMP represents Internal Audit Competence*

*MSUP represents Management Support, and*

*E<sub>i</sub> is the error term*

The analyses will be performed using the IBM SPSS Version 21 software.

### **3.9 Validity and Reliability of the Data Collection**

#### **Instrument**

Undertaking a validity and reliability test is needed to ensure that analysis conducted are accurate on the basis of the accuracy of the data collection instrument. The research instruments were taken through series of checks on the details and soundness of the questionnaire. Upon completion of the content and face validity checks, the questionnaires were pre-tested using a small sample of the sample population to collect data through a pilot study to assess the encounter on the field and establish the reliability of the results of the data collection instrument.

### **3.10 Profile of Study Organizations**

The primary organizations to be studied are the Internal Audit Agency and the Ghana Civil Service.

#### ***3.10.1 Internal Audit Agency***

As part of the public sector financial reforms of Ghana and the quest to ensure the judicious utilization of public resources, the Internal Audit Agency was established by Act 658 in 2003 to serve as “a central agency with the mandate to co-ordinate, facilitate, monitor and supervise internal audit activities as well as providing quality assurance for internal audit practices and technical performances within Ministries, Departments and Agencies (MDAs).” Section 16 (1) of the Internal Audit Agency Act provides that “each MDA shall have an Internal Audit Unit (IAU) which shall constitute a part of the MDA.” Additionally, the Public Financial Management Act, 2016 (Act 921) corroborates this by stipulating in Section 83 (1) that “a covered entity shall have an Internal Audit Unit.” The reporting lines for Heads of Internal Audit Units is expressed in the PFM Act which requires the heads of internal audit to report

administratively to the Principal Spending Officer, and functionally to the Audit Committee.

The functions of the Internal Audit Agency as enshrined in the Internal Audit Agency Act, Act 658 includes among other things:

1. “Setting standards and procedures for the conduct of internal audit activities in the MDAs and MMDAs.
2. Ensuring that:
  - i. financial, managerial and operating information reported internally and externally is accurate, reliable and timely;
  - ii. the financial activities of MDAs and MMDAs are in compliance with laws, policies, plans, standards and procedures;
  - iii. national resources are adequately safeguarded;
  - iv. national resources are used economically, effectively and efficiently;
  - v. plans, goals and objectives of MDAs and MMDAs are achieved; and
  - vi. Risks are adequately managed in the MDAs and MMDAs.
3. Functioning to:
  - i. promote economy, efficiency and effectiveness in the administration of government programmes and operations;
  - ii. prepare plans to be approved by the Board for the development and maintenance of an efficient internal audit for the MDAs and MMDAs;
  - iii. facilitate the prevention and detection of fraud; and
  - iv. provide a means for keeping the MDAs and MMDAs fully and currently informed about problems and deficiencies related to the administration of their programmes and operations and the necessity for appropriate corrective action.

4. Monitoring, undertaking inspections, and evaluating the internal auditing of the MDAs and MMDAs.”

Officers of the Internal Audit Agency are then placed within Ministries, Departments and Agencies (MDAs) to provide internal audit services to these covered agencies.

### ***3.10.2 Ghana Civil Service***

The Civil Services’ history dates to the inception of the Colonial Service in the then Gold Coast. It was set up to aid British imperialists administer the native territories consisting the Gold Coast colony of the time, with the core functions of imposing and collecting taxes, through to exploiting the natural resources as well as maintaining law and order of the colony. The Civil Service was then further developed by the efforts of the Governor, Sir Gordon Guggisburg, who strove to recruit more indigenous persons into the Service.

The legislative backing to the create a formalized Civil Service as well as Ministries, Departments and Agencies was granted by the Constituent Assembly through the Civil Service Act, 1960 (CA.5). The Civil Service Act, 1960 (CA.5), 1960, was later complemented by the Civil Service (Interim) Regulations, 1960 (LI. 47) to further strengthen the structures and operations of the Civil Service. These laws were replaced by the Civil Service Law, 1993 (PNDCL 327) which merged the Civil Service with the Public Services of Ghana, and indicated civil service to be service in a central or local government office. The Local Government Act (Act 462) and Local Government Service Act (Act 656) were then passed to decouple the Local Government Service from the Civil Service, and to govern local government administration in Ghana (Office of the Head of the Civil Service, 2020). Since then, the civil service has grown to become a key institution in the national government machinery in Ghana. Currently, the Civil Service gains its legitimacy from Article 190(1) (a) of the 1992 Constitution, with the object of assisting government in the formulation and implementation of government policies for the development of the country (Office of the Head of the Civil Service, 2018).

# Chapter 4. Data Analysis and Discussion

## 4.0 Introduction

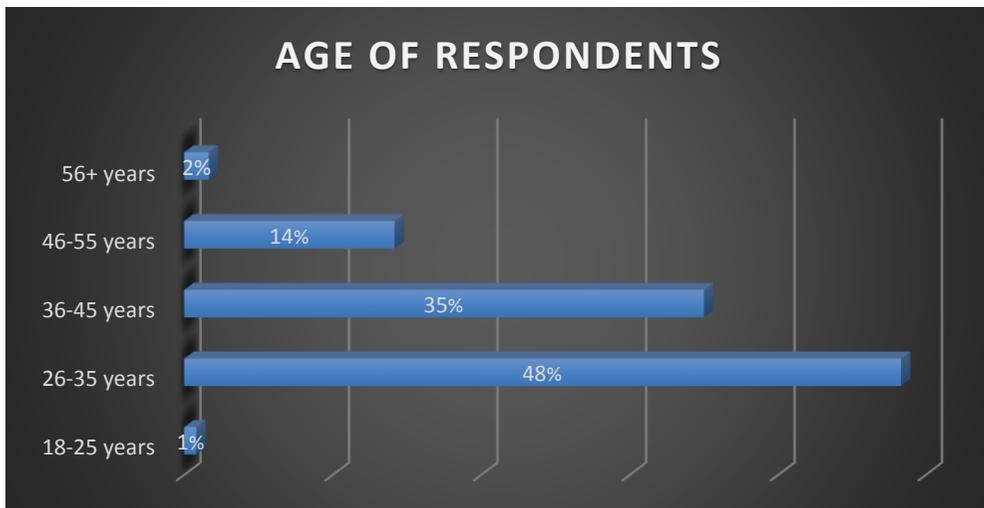
This chapter presents data analyzed and the discussions that follows from it in relation to the factors that impact internal audit effectiveness in the Civil Service of Ghana. About a hundred and forty (140) questionnaires were distributed to the target participants out of which a hundred and twenty (120) useable questionnaires were received eventually. The survey response rate can be considered as adequate since Babbie (2007) asserts that survey response rate exceeding 75% is sufficient for inferences. There are two layers of analyses are performed in this study, namely; qualitative statistics and quantitative statistics.

### 4.1 Demographic Information

#### 4.1.1 Age

Ages of respondents varied and fell within different age categories. The results show that 1% of respondents were between the ages of 18-25 years with 48% aged 26 to 35 years. Furthermore, respondents aged 36-45 represented 35% of respondents while those aged 46-55 years constituted 14% of the sample with those aged 56 years or more representing 2%. (Figure 4. 1).

*Figure 4. 1 Age Distribution of Respondents*

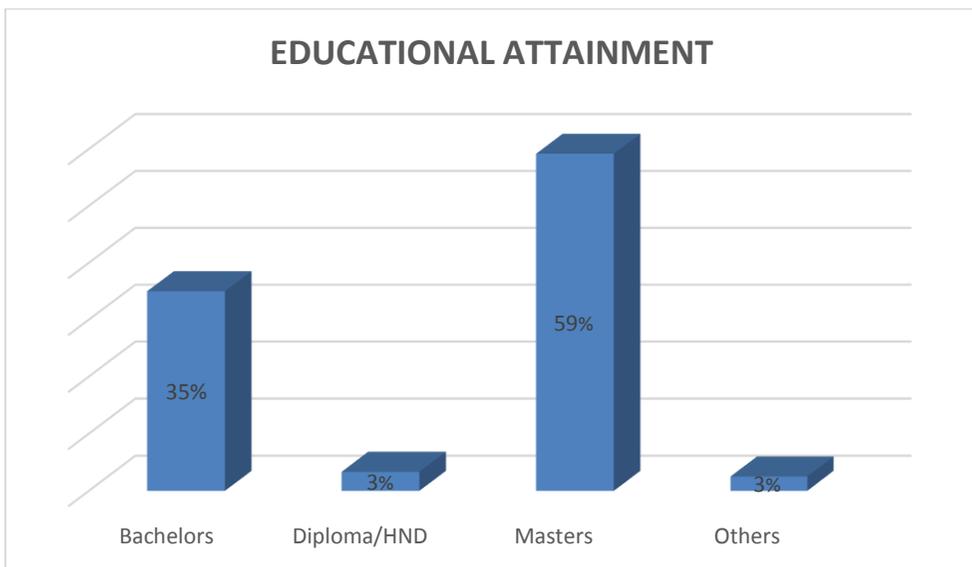


Source: Field Data, 2020

#### 4.1.2 Educational Attainment

The analysis of respondents' educational attainment depicts 35% of respondents as holding Bachelor's degrees with 3% holding Diplomas/HNDs, 59% having Masters Degrees, and 3% holding other qualifications (오류! 참조 원본을 찾을 수 없습니다.).

Figure 4. 2 Educational Attainment

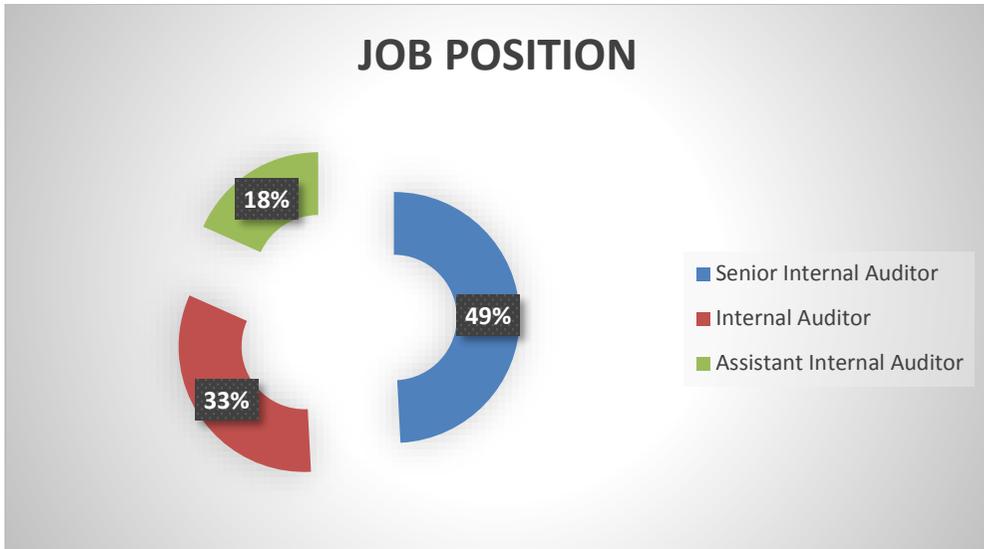


Source: Field Data, 2020

#### 4.1.3 Position in Organization

The respondents' positions in their organizations shows that 49% of respondents were senior internal auditors or of a similar grade, 33% were internal auditors and 18% were assistant internal auditors (Figure 4. 3).

Figure 4. 3 Position in Organization

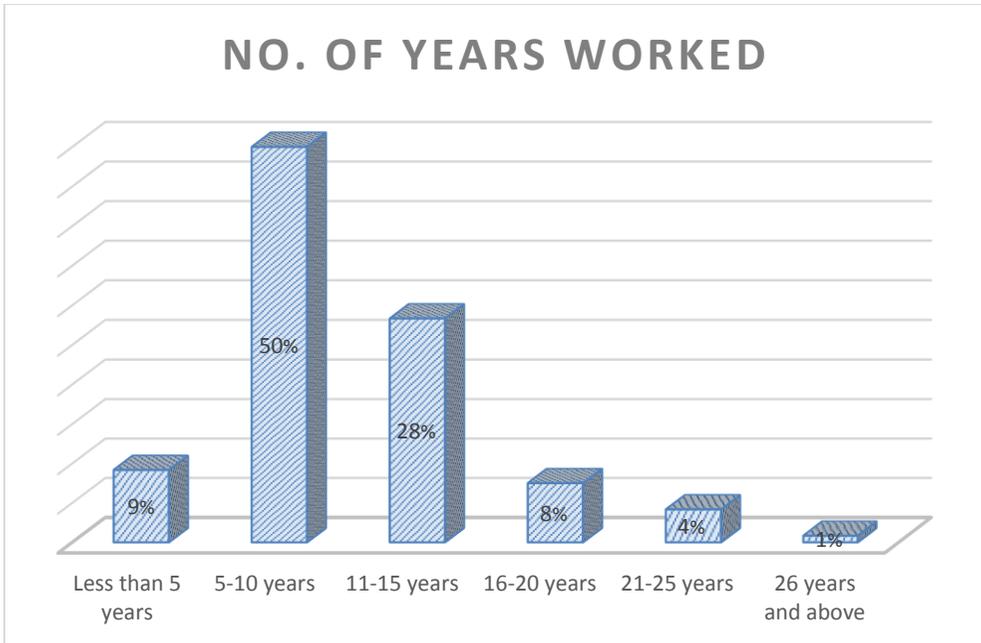


**Source: Field Data, 2020**

#### ***4.1.4 Number of Years in Service***

Respondents had worked as internal auditors for different durations. The analysis shows that 9% of respondents had worked as internal auditors for less than 5 years with 50% having a work tenure from five years to 10 years. Twenty-eight percent (28%) of respondents had worked for 11-15 years, 8% had been employed for 16-20 years, 4% had worked for 21-25 years, and 1% had been working for more than 26 years (**Figure 4. 4**)

**Figure 4. 4 No. of Years in Service**

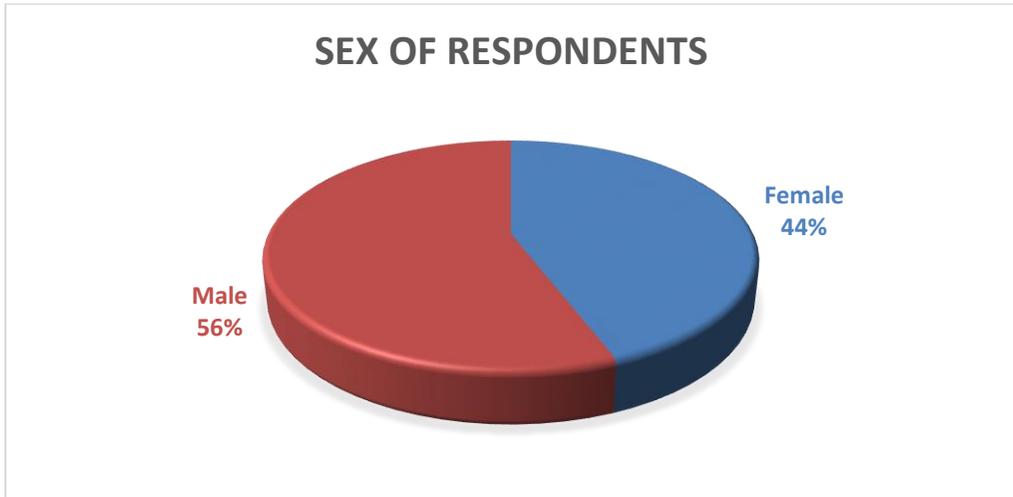


**Source: Field Data, 2020**

#### ***4.1.5 Sex of Respondents***

Figure 4. 45 depicts the sex of respondents. The results revealed that 56% of respondents were male compared to 44% for female.

**Figure 4.5**      *Sex of Respondents*



**Source: Field Data, 2020**

The sections that follow present the analysis of data and the results of respondents' responses on the constructs/variables assessed in this study i.e. Independence of Internal Audit, Competence of Internal Audit, Top Management Support and Internal Audit Effectiveness. In the narrative, only frequencies for the highest and lowest points for each question item under each construct are discussed. The table however presents the distribution for all points of the Likert scale for questions under each construct i.e. Strongly Disagree (SD), Disagree (D), Not Sure (NS), Agree (A) and Strongly Agree (SA).

## **4.2 Descriptive Statistics of Variables**

### ***4.2.1 Independence of Internal Audit***

Table 4.2 presents the results on the independence of internal audit. Regarding the issue of internal auditors being sufficiently free to perform their professional obligations and duties, most respondents (39.17%) disagreed with the assertion while very few (2.50%) strongly agreed. Also, most respondents (44.17%) strongly agreed that head of internal audit reports to a level within the organization that allows the internal audit unit to fulfill its responsibilities while 2.50%) strongly disagreed.

Regarding the head of internal audit having direct contact to the board or highest official, most respondents (72.50%) strongly agreed while no respondent (0.00%) strongly disagreed. Similarly, most respondents (25.83%) disagreed that the internal audit department has direct contact with senior management other than the finance director while the least respondents (13.33%) agreed. Furthermore, tensions were sometimes reported as arising between internal auditors and units they audit by most respondents (72.50%) compared to no registration of strong disagreement (0.00%) with this assertion. Similarly, most respondents (59.17%) strongly disagreed that internal auditors are not often frustrated by the administration in doing their work compared to very few (3.33%) who agreed. Again, most respondents (28.33%) were not sure if internal audit staff have free access to all departments and workers in the organization as against the fewest (10.83%) who strongly agreed. On the question of top managerial staff endorsing the appointment and replacement of the head of internal auditing, most respondents (43.33%) agreed while very few respondents (5.83%) strongly disagreed. Finally, very few respondents (5.83%) strongly agreed that internal audit staff are not asked to perform non-audit functions with the highest (49.17%) strongly disagreeing.

**Table 4.2 Independence of Internal Audit**

<b>Independence of Internal Audit</b>		<b><u>1 (SD)</u></b>	<b><u>2 (D)</u></b>	<b><u>3 (NS)</u></b>	<b><u>4 (A)</u></b>	<b><u>5 (SA)</u></b>
1	Internal auditors are sufficiently free to perform their professional obligations and duties	24.17%	39.17%	24.17%	10.00%	2.50%
2	The head of internal audit reports to a level within the organization that allows the internal audit unit to fulfill its responsibilities	2.50%	3.33%	11.67%	38.33%	44.17%

<b>Independence of Internal Audit</b>		<b><u>1 (SD)</u></b>	<b><u>2 (D)</u></b>	<b><u>3 (NS)</u></b>	<b><u>4 (A)</u></b>	<b><u>5 (SA)</u></b>
3	The head of internal audit has direct contact to the board or highest official	0.00%	1.67%	1.67%	24.17%	72.50%
4	The internal audit department has direct contact with senior management other than the finance director	20.83%	25.83%	24.17%	13.33%	15.83%
5	Tensions sometimes arise between internal auditors and units they audit	0.00%	4.17%	4.17%	19.17%	72.50%
6	Internal auditors are not often frustrated by the administration in doing their work	59.17%	23.33%	10.00%	3.33%	4.17%
7	Internal audit staff have free access to all departments and workers in the organization	18.33%	25.83%	28.33%	16.67%	10.83%
8	The top managerial staff endorses the appointment and replacement of the head of internal auditing	5.83%	9.17%	27.50%	43.33%	14.17%
9	Internal audit staff are not asked to perform non-audit functions	49.17%	15.83%	22.50%	6.67%	5.83%

**Source: Field Data, 2020**

#### ***4.2.2 Competence of Internal Audit***

The second construct assessed was competence of internal audit. The first item in the construct concerned internal auditors in respondents' outfits having adequate professional knowledge, and to this most respondents (34.17%) disagreed while the least (13.33%) strongly agreed. Also, most respondents (35.00%) disagreed that

internal auditors in their outfit are proficient in risk-based internal auditing while 5.00% strongly agreed. Again, a majority of respondents (31.67%) disagreed that internal auditors in their outfit are proficient in control, assessment and risk analysis techniques while 4.17% strongly agreed. Furthermore, regarding the existence of adequate communication between internal auditors and auditees, most respondents (41.67%) agreed while very few (5.00%) strongly disagreed. Also, internal auditors in my outfit undergoing continuous training and development saw majority of respondents (51.67%) strongly disagreeing and the least (5.83%) agreeing and strongly agreeing respectively. Finally, most respondents (51.67%) agreed that internal auditors in their outfit had adequate education no respondent (0.00%) strongly disagreed.

**Table 4.3      Competence of Internal Audit**

<b>Competence of Internal Audit</b>		<b><u>1 (SD)</u></b>	<b><u>2 (D)</u></b>	<b><u>3 (NS)</u></b>	<b><u>4 (A)</u></b>	<b><u>5 (SA)</u></b>
1	Internal auditors in my outfit have adequate professional knowledge	20.83%	34.17%	15.83%	15.83%	13.33%
2	Internal auditors in my outfit are proficient in risk-based internal auditing	15.83%	35.00%	25.83%	18.33%	5.00%
3	Internal auditors in my outfit are proficient in control, assessment and risk analysis techniques	15.83%	31.67%	25.83%	22.50%	4.17%
4	There is adequate communication between internal auditors and auditees	5.00%	10.00%	30.00%	41.67%	13.33%
5	Internal auditors in my outfit undergo continuous training and development	51.67%	25.83%	10.83%	5.83%	5.83%

6	Internal auditors in my outfit have adequate education	0.00%	0.83%	1.67%	51.67%	45.83%
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Source: Field Data, 2020

### 4.2.3 Top Management Support

Top management support was the next construct investigated. The first item was that senior management supports internal audit to perform its obligations, and to this 29.17% disagreed and 4.17% strongly agreed. On the issue of senior management being involved in the internal audit plan/arrangement, 31.67% of respondents were not sure while 6.67% strongly agreed. Concerning internal audit providing senior management with sufficient, reliable and relevant reports about the work they perform and recommendations made, most respondents (29.17%) strongly agreed with the least (9.17%) strongly disagreeing. Similarly, most respondents (47.50%) strongly disagreed that the response to internal audit reports by the senior management is reasonable compared to 5.83% who strongly agreed. Also, majority of respondents (55.83%) strongly disagreed that the internal audit department is large enough to successfully carry out its duties and responsibilities with 5.00% not being sure. Last, 71.67% strongly disagreed that internal audit department has sufficient budget/funds to successfully perform its duties and responsibilities while 3.33% strongly agreed.

**Table 4. 4 Top Management Support**

Top Management Support		<u>1 (SD)</u>	<u>2 (D)</u>	<u>3 (NS)</u>	<u>4 (A)</u>	<u>5 (SA)</u>
1	Senior management supports internal audit to perform its obligations	25.00%	29.17%	26.67%	15.00%	4.17%
2	Senior management are involved in the internal audit plan/arrangement	16.67%	23.33%	31.67%	21.67%	6.67%

3	Internal audit provides senior management with sufficient, reliable and relevant reports about the work they perform and recommendations made	9.17%	13.33%	20.83%	27.50%	29.17%
4	The response to internal audit reports by the senior management is reasonable	47.50%	23.33%	10.83%	12.50%	5.83%
5	Internal audit department is large enough to successfully carry out its duties and responsibilities	55.83%	20.00%	5.00%	7.50%	11.67%
6	Internal audit department has sufficient budget/funds to successfully perform its duties and responsibilities	71.67%	13.33%	10.00%	1.67%	3.33%

**Source: Field Data, 2020**

#### ***4.2.4 Internal Audit Effectiveness***

The effectiveness of the internal audit function was then assessed (Table 4.5). Regarding, the presence of internal audit enhancing better performance in the organization, most respondents (30.83%) agreed while 8.33%) strongly disagreed. In the same vein, majority of respondents (26.67%) disagreed that internal audit reviews organizational programmes to determine whether results are consistent with objectives and goals while 15.00% strongly disagreed. Again, majority of respondents (32.50%) agreed that internal audit determines the adequacy and effectiveness of the organization's internal control systems while 6.67%) strongly disagreed. On internal audit making recommendations for the improvement of internal control systems, majority (35.83%) strongly agreed while the lowest (3.33%)

strongly disagreed. Similarly, internal audit reviewing the accuracy and reliability of financial reports had most respondents (25.83%) strongly agreeing with the lowest number (12.50%) agreeing. Further, on internal audit reviewing compliance with procedures, policies, and plans, majority of respondents (35.83%) agreed while little (4.17%) strongly disagreed. For internal audit reviewing compliance with external laws and regulations, most respondents (35.83%) agreed with the least (1.67%) strongly disagreeing.

**Table 4.5**      *Internal Audit Effectiveness*

<b>Internal Audit Effectiveness</b>		<b><u>1 (SD)</u></b>	<b><u>2 (D)</u></b>	<b><u>3 (NS)</u></b>	<b><u>4 (A)</u></b>	<b><u>5 (SA)</u></b>
1	Internal audit enhances better performance in the organization	8.33%	20.83%	16.67%	30.83%	23.33%
2	Internal audits reviews organizational programmes to determine whether results are consistent with objectives and goals	15.00%	26.67%	20.00%	22.50%	15.83%
3	Internal audit determines the adequacy and effectiveness of the organization's internal control systems	6.67%	23.33%	13.33%	32.50%	24.17%
4	Internal audit makes recommendations for the improvement of internal control systems	3.33%	6.67%	21.67%	32.50%	35.83%
5	Internal audit reviews the accuracy and reliability of financial reports	25.83%	22.50%	23.33%	12.50%	15.83%

6	Internal audit reviews compliance with procedures, policies, and plans	4.17%	14.17%	15.00%	35.83%	30.83%
7	Internal audit reviews compliance with external laws and regulations	1.67%	5.83%	25.83%	35.83%	30.83%
8	Internal audit reviews the economical and effective use of the organization's resources	33.33%	20.00%	15.00%	16.67%	15.00%
9	Internal audit reviews and enhances the viability of risk management	29.17%	26.67%	11.67%	20.00%	12.50%
10	Internal audit enhances the organization's efficiency	4.17%	15.00%	23.33%	32.50%	25.00%
11	Internal audit develops appropriate annual audit plans	0.83%	5.00%	34.17%	34.17%	25.83%
12	Recommendations in the internal audit report are implemented in a timely manner	58.33%	19.17%	10.00%	9.17%	3.33%
13	Internal audit does adequate follow-ups to ensure remedial action is taken and is effective	17.50%	28.33%	28.33%	15.00%	10.83%

**Source: Field Data, 2020**

Furthermore, most respondents (33.33%) strongly disagreed that internal audit reviews the economical and effective use of the organization's resources with 15.00%

not being sure and strongly agreeing respectively. Again, 29.17% of respondents strongly disagreed that internal audit reviews and enhances the viability of risk management while 11.67% were not sure. Majority of respondents (32.50%) agreed that internal audit enhances the organization's efficiency while only 4.17% strongly disagreed. On the issue of internal audit developing appropriate annual audit plans, 34.17% were not sure and agreed respectively as against 0.83% who strongly disagreed. Regarding the timely implementation of recommendations in the internal audit report, majority of respondents (58.33%) strongly disagreed with the least number (3.33%) strongly disagreeing. Lastly, 28.33% of respondents respectively disagreed and were not sure that internal audit does adequate follow-ups to ensure remedial action is taken and is effective compared to only 10.83% who strongly agreed.

### **4.3 Effect of Independent Variables on Dependent Variable**

The effect of Independence of Internal Audit, Competence of Internal Audit and Top Management Support on Internal Audit Effectiveness was then assessed. The Table 4.6 shows the results of this analysis. The analysis reported an adjusted R-squared of 0.7919, implying about 79% of the variation in the dependent variable is explained by the independent variables. From Table 4.6, it can be observed that Independence of Internal Audit was significant ( $p=0.052$ ) in predicting Internal Audit Effectiveness, though this significance can be said to be slightly weak due to being on the borderline. The implication is that a unit increase in Independence of Internal Audit would increase Internal Audit Effectiveness by 0.32 units. Competence of Internal Audit was also significant ( $p=0.000$ ) in predicting Internal Audit Effectiveness. Consequently, a unit increase in Competence of Internal Audit would increase Internal Audit Effectiveness by 0.45 units. Finally, Top Management Support was also significant ( $p=0.000$ ) in predicting Internal Audit Effectiveness, implying that a unit increase in Top Management Support would increase Internal Audit Effectiveness by 0.52 units.

**Table 4.6 Effect of Independence of Internal Audit, Competence of Internal Audit and Top Management Support on Internal Audit Effectiveness in the Civil Service of Ghana.**

Internal Audit Effectiveness	Coeff.	Std. Err.	P-values	[95% Conf. Interval]	
Independence of Internal Audit	.3202769	.1631295	0.052	-.0028216	.6433754
Competence of Internal Audit	.4529849	.0947269	0.000	.2653664	.6406035
Top Management Support	.5279151	.0855609	0.000	.3584509	.6973793
Cons	-.4487065	.381811	0.242	-1.204931	.3075183

**Adj. R-squared = 0.7919**

**Source: Field Data, 2020**

Consequently in this study, all the independent variables i.e. Independence of Internal Audit, Competence of Internal Audit and Top Management Support were found to predict Internal Audit Effectiveness in the Ghana Civil Service. The findings of the study therefore fully support the study's hypotheses.

#### **4.4 Analysis of Qualitative Responses**

In addition to the survey questions that were posed, respondents were asked to state in their own opinion what they construed as factors that impacted the effectiveness of internal audit at their organizational level, the coping mechanisms they deployed to navigate those challenges, identify factors they believed were likely to impact internal auditing effectiveness in the future and how those factors can be circumvented. Table 4.7 summarizes the themes that frequently surfaced from their responses followed by brief narrative on them.

**Table 4.7: Summary of Qualitative Responses**

Factors Impacting Internal Audit Effectiveness	Coping Mechanisms Adopted	Likely Future Factors to Impact Internal Audit Effectiveness	Possible Remedial Actions
Limited budgetary allocation	Use of personal resources in furtherance of audit objectives	Artificial Intelligence and Digitization	Build the capacity of internal auditors to take advantage of the benefits presented by AI and Digitization
Lack of management support	Constantly engaging management to re-orient their perception about Internal Auditing	Poor remuneration compared to similar profession within the Civil Service	Improve remuneration and incentive packages for Internal Auditors
Political Interference	Using the Audit Committee to attend to issues of highly political nature	Failure to invest in emerging technologies	Equip internal audit to take advantage of emerging technologies
Absence of specific budget line for Internal Audit Units / Departments	Constantly working within allocated budget to achieve audit results	High rate of attrition among internal auditors.	Reform internal audit structure to be able to retain highly skilled workers.

#### ***4.4.1 Factors Impacting Internal Audit Effectiveness in Organizations***

The factors which impact internal audit effectiveness in the various organizations respondents worked in were also investigated. Specifically, respondents were asked *“In your view, which factors do you think impact internal audit effectiveness in your organization?”* The major themes which emerged from respondents’ responses were problems with internal audits’ budgets such as insufficient, inaccessible or delayed budgetary allocations, poor managerial support, political interference in the work of internal auditors and poor conditions of service. In essence, while some respondents said there was lack of management support, others said there was limited budgetary allocation and delays in release of budget for internal audit functions, poor working conditions and poor structuring of the internal audit class in the Civil Service, and insufficient staff strength in audit departments. There were also little opportunities for local and international training, low salaries, as well as interference by political actors, intimidation and little cooperation from staff.

#### ***4.4.2 Strategies in Dealing with Challenges to Internal Audit Effectiveness***

Respondents were then asked to indicate how they managed the challenges that threatened their internal audit effectiveness over the years. The specific question posed was *“Over the years, how have you dealt with the challenges to internal audit effectiveness?”* The major themes from the responses were educating staff and management by engaging and having discussions with them on the need for internal audit, involving management and staff in developing annual audit plans, and working through internal Audit Committees and the Internal Audit Agency to address serious problems involving management. It therefore came up from the responses that some respondents adopted strategies such as consistently speaking to all actors to

understand the nature of internal audit and how it contributes to the success of the organization, involving management/auditees from the development of annual audit plan to its implementation, and holding discussions on the challenges encountered with the Audit Committee and the Internal Audit Agency. Another critical set of strategies were to work through the Audit Committee (AC) to secure the buy-in of management and make funds readily available for audit work, and discussing with management and key stakeholders on the relevance of making all information readily available to internal audit.

#### ***4.4.3 Factors Likely to Impact Internal Audit Effectiveness in the Future***

The factors which could impact internal audit effectiveness moving forward was investigated among respondents. In exploring this, the question asked was *“In your view, which factors do you see impacting internal audit effectiveness in the near future?”* The major themes from the responses were lack of independence and objectivity, advancement in Information Communication Technology (ICT) and Artificial Intelligence (AI), and poor remuneration and conditions of service. To this end, respondents indicated that there was inadequate motivation for internal auditors as well as poor remuneration compared to similar professions in the Civil Service, lack of resources to conduct audit activities and no independence and objectivity, the advent of data analytics, artificial intelligence and digitization, and retention of highly skilled staff. Consequently, the future effectiveness of internal audit in the Civil Service of Ghana will be affected if proper measures are not put in place to rectify the challenges.

#### ***4.4.4 Remedial Actions to Tackle the Future Factors***

The strategies which could be employed in mitigating the effect of the factors which could impact internal audit effectiveness in the future were investigated. In responding to the question *“How can these future factors be mitigated?”*, the major themes which came up from the responses were introducing proper structure and compensation package, orienting senior management and staff on the role of internal

audit, promoting independence of internal auditors, and training internal auditors on new and emerging technologies. In this regard, respondents said that the strategies to be employed should include reforming the internal audit function and building capacity of internal auditors through continuous training, investing in emerging technologies and training and development on these technologies, ensuring better conditions of service for internal auditors, as well as recruiting qualified and competent personnel into internal audit units and departments.

## **4.5 Discussion of Findings**

The findings of this present study find support in the literature. First, the study hypothesized that internal audit independence is significantly related to internal audit effectiveness. This hypothesis was accepted from the results of the study's findings and is supported in the literature. Independence has been shown to be important in promoting audit effectiveness (Yee et al., 2008; Alizadeh (2011). Not only is independence a determinant of internal audit effectiveness (Cohen & Sayag, 2010), but a prerequisite for audit quality as well (Dellai & Omri, 2016). Internal auditors are therefore required to have sufficient independence from those being audited in order to conduct their work without interference (Alzeban & Gwilliam, 2014).

The study also found that competence of internal audit was significant in predicting internal audit effectiveness. In the literature as well, this finding is extensively supported. Competence of internal auditors has been indicated as an essential determinant of internal audit effectiveness (Van Gansberghe, 2005). Competent internal auditors have been shown to have a positive bearing on the effectiveness of internal audit (Al-Twaijry et al., 2003). Proficiency and due care have been indicated as significant factors of internal audit effectiveness (Mousa, 2005). Competence is highly needed in areas such as the public sector to ensure greater efficiency (Unegbu & Kida, 2011).

Finally, top management support was also found to be significant in predicting internal audit effectiveness. In the literature as well, similar results are found. Senior management support for the internal audit function has been shown to be

indispensable for audit effectiveness (Alzeban & Gwilliam, 2014). Even if internal auditors have independence and autonomy but lack management support, they may still be ineffective in performing their duties (Al-Twajry et al, 2003). Management support is therefore critical in facilitating the effective discharge of the internal audit function (Baheri et al., 2017; Halimah et al., 2012).

# **Chapter 5. Summary of Findings, Conclusions and Recommendations**

## **5.0 Introduction**

This chapter presents the summary of the study, conclusions and recommendations on assessment of the effectiveness of internal audit in the Civil Service of Ghana using survey data. Besides, areas for future studies are presented in the study.

## **5.1 Summary of findings**

The study assessed the effectiveness of internal audit in the Ghana Civil Service. The objectives of the study were to examine internal auditing effectiveness in the Ghana Civil Service, investigate the factors that impact effectiveness of internal audit in the Civil Service, and proffer prescriptive measures to improve internal audit effectiveness in the Civil Service.

The findings of the study show that the study's independent variables i.e. Independence of Internal Audit, Competence of Internal Audit and Top Management Support all predict Internal Audit Effectiveness in the Ghana civil service. Specifically, independence of internal audit was found to be significant in predicting internal audit effectiveness in the civil service ( $p = 0.052$ , coeff. = .3202769). Also, competence of internal audit was found to be a predictor of internal audit effectiveness in the civil service ( $p = 0.000$ , coeff. = .4529849). Finally, Top Management Support was also found to have a significant effect on internal audit effectiveness ( $p = 0.000$ , coeff. = .5279151).

The results of this study therefore go to support those of researchers such as Dellai & Omri (2016) and Alizadeh (2011) who found that independence of internal audit is a necessary factor in ensuring effectiveness of internal audit. In the same vein, the study's findings support those of Van Gansberghe, (2005), Al-Twajry et al., (2003), Mousa (2005) as well as Arena and Azzone, (2009), Mihret & Yismaw (2007), Unegbu & Kida (2011) and Brierley et al., (2001, 2003) who find competence of internal audit as a significant predictor of

internal audit effectiveness. Finally, the findings of this present study align with those researchers such as Alzeban & Gwilliam (2014), Al-Twajry et al., (2003), Baheri et al., (2017), Halimah et al., (2012) and Ali et al., (2007) who all find a significant association between top management support and internal audit effectiveness.

## **5.2 Conclusions**

This study has shown that independence of internal audit, competence of internal audit and top management support all significantly impact internal audit effectiveness in the Ghana civil service.

It becomes imperative then to further explore other variables which can also impact internal audit effectiveness in order to ensure that maximum value is derived from the internal audit function. The onus therefore lies on management of civil service institutions to improve the independence, competence and managerial support for internal auditors in the discharge of their functions. This will ultimately boost the efficiency, output and productivity of internal auditors.

## **5.3 Policy Recommendations**

The following recommendations deriving from the study's findings are made for consideration:

### **➤ Enhance Independence of Internal Auditors**

Independence of internal audit showed to be a notable predictor of the efficacy of internal audit. This implies that ensuring internal auditors are independent will contribute greatly to enhancing effectiveness of their audit work. From the qualitative data as well, respondents indicated that “*budget constraint, being independent and objective*” as well as “*political interference*” and “*lack of independence*” were important factors that hindered their ability to be effective at their jobs. It is therefore recommended that management of the civil service institute policies and standard operating procedures (SOPs) that will improve the independence internal auditors enjoy. Securing the independence of internal auditors will improve their output and efficiency in their work outcomes.

### **➤ Improve Competence of Internal Auditors**

Competency of internal auditors was depicted to be a significant predictor of internal audit effectiveness. It is therefore recommended that steps be taken to further improve the competence of internal auditors in the civil service. This can be done can be categorized into two levels; (1) the institutional level, and (2) the individual level.

- ***Institutional Level***

Management of the civil service should institute In-Service Training and Continuing Professional Development programmes for internal auditors to boost their competence. This will go a long way to progressively increase their skill set and equip them with the capacity to become more effective at their jobs.

- ***Individual Level***

At the individual level, internal auditors themselves can take courses in accounting and forensic auditing, as well as enrolling on professional certifications such as the Association of Chartered Certified Accountants (ACCA), and the Institute of Chartered Accounts, Ghana (ICA), among others. They can also seize the opportunity to pursue academic qualifications such as Bachelor's degrees and Master of Business Administration (MBAs) degrees in Accounting.

Building on the competence and capacity of internal auditors will therefore improve their effectiveness at work.

- **Engender Greater Top Management Support for Internal Auditing Activities**

Top Management Support was also found to be a significant predictor of internal audit effectiveness. This implies a supportive management will bring out the greatest effectiveness in the work of internal auditors. Considering the fact that internal auditors are spread out across several Ministries, Departments and Agencies (MDAs) in the civil service, it is recommended that management of the Ghana civil service as well as user agencies in which internal auditors work i.e. MDAs provide all the support internal auditors need to function effectively. They can do this by ensuring greater access of audit committees to

management as well as taking a personal interest in the work of internal auditors. This will aid in greatly facilitating the work of auditors and ultimately improving their effectiveness.

➤ **Improve Working Environment and Conditions for Internal Auditors**

Respondents hinted at several factors which impeded their effectiveness and output, most of which concerned the environment they were working in and their conditions of service. Some of these factors include “*poor remuneration compared to similar professions in the civil service*”, “*lack of adequate recognition of the role of internal auditor*”, “*artificial Intelligence, digitization and retention of highly skilled staff*”, as well as “*inadequate motivation. Internal auditors are poorly remunerated hence not motivated enough to remain in the profession. The audit division has the highest attrition rate in my organization.*”

Based on the foregoing, it is recommended that the resources and conducive environment internal auditors need in order to function effectively be provided to them. Furthermore, their conditions of service should be improved in order to motivate them to give off their best. As was succinctly put by one respondent, management of the civil service should provide “*adequate remuneration to retain the staff with the required competence.*” This is a sure way to improve the effectiveness of internal auditors in the civil service of Ghana.

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Master's  Doctorate

5. **Job Position** .....

6. **No of years worked:**

Less than 5 years  5 – 10 years

11 – 15 years  16 – 20 years

21 – 25 years  26 years +

**Section B: INTERNAL AUDIT EFFECTIVENESS**

*The following items relate to the assessment of the effectiveness of internal audit in the Ghana Civil Service. Kindly use the 5-point scale below to provide appropriate responses for each category. Thank you.*

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Strongly Disagree	Disagree	Indifferent/I don't know	Agree	Strongly Agree

QUESTION ITEMS						
		Disagree		Not Sure	Agree	
Independence of Internal Audit		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
1	Internal auditors are sufficiently free to perform their professional obligations and duties	[ ]	[ ]	[ ]	[ ]	[ ]
2	The head of internal audit reports to a level within the organization that allows the internal audit unit to fulfill its responsibilities	[ ]	[ ]	[ ]	[ ]	[ ]
3	The head of internal audit has direct contact to the board or highest official	[ ]	[ ]	[ ]	[ ]	[ ]

4	The internal audit department has direct contact with senior management other than the finance director	<input type="checkbox"/>				
5	Tensions sometimes arise between internal auditors and units they audit	<input type="checkbox"/>				
6	Internal auditors are not often frustrated by the administration in doing their work	<input type="checkbox"/>				
7	Internal audit staff have free access to all departments and workers in the organization	<input type="checkbox"/>				
8	The top managerial staff endorses the appointment and replacement of the head of internal auditing	<input type="checkbox"/>				
9	Internal audit staff are not asked to perform non-audit functions	<input type="checkbox"/>				
		<b>Disagree</b>		<b>Not Sure</b>	<b>Agree</b>	
<b>Competence of Internal Audit</b>		<b><u>1</u></b>	<b><u>2</u></b>	<b><u>3</u></b>	<b><u>4</u></b>	<b><u>5</u></b>
1	Internal auditors in my outfit have adequate professional knowledge	<input type="checkbox"/>				
2	Internal auditors in my outfit are proficient in risk-based internal auditing	<input type="checkbox"/>				
3	Internal auditors in my outfit are proficient in control, assessment and risk analysis techniques	<input type="checkbox"/>				

4	There is adequate communication between internal auditors and auditees	<input type="checkbox"/>				
5	Internal auditors in my outfit undergo continuous training and development	<input type="checkbox"/>				
6	Internal auditors in my outfit have adequate education	<input type="checkbox"/>				
		<b>Disagree</b>		<b>Not Sure</b>	<b>Agree</b>	
<b>Top Management Support</b>		<b><u>1</u></b>	<b><u>2</u></b>	<b><u>3</u></b>	<b><u>4</u></b>	<b><u>5</u></b>
1	Senior management supports internal audit to perform its obligations	<input type="checkbox"/>				
2	Senior management are involved in the internal audit plan/arrangement	<input type="checkbox"/>				
3	Internal audit provides senior management with sufficient, reliable and relevant reports about the work they perform and recommendations made	<input type="checkbox"/>				
4	The response to internal audit reports by the senior management is reasonable	<input type="checkbox"/>				
5	Internal audit department is large enough to successfully carry out its duties and responsibilities	<input type="checkbox"/>				

6	Internal audit department has sufficient budget/funds to successfully perform its duties and responsibilities	<input type="checkbox"/>				
		<b>Disagree</b>		<b>Not Sure</b>	<b>Agree</b>	
<b>Internal Audit Effectiveness</b>		<b><u>1</u></b>	<b><u>2</u></b>	<b><u>3</u></b>	<b><u>4</u></b>	<b><u>5</u></b>
1	Internal audit enhances better performance in the organization	<input type="checkbox"/>				
2	Internal audits reviews organizational programmes to determine whether results are consistent with objectives and goals	<input type="checkbox"/>				
3	Internal audit determines the adequacy and effectiveness of the organization's internal control systems	<input type="checkbox"/>				
4	Internal audit makes recommendations for the improvement of internal control systems	<input type="checkbox"/>				
5	Internal audit reviews the accuracy and reliability of financial reports	<input type="checkbox"/>				
6	Internal audit reviews compliance with procedures, policies, and plans	<input type="checkbox"/>				
7	Internal audit reviews compliance with external laws and regulations	<input type="checkbox"/>				
8	Internal audit reviews the economical and effective use of the organization's resources	<input type="checkbox"/>				

9	Internal audit reviews and enhances the viability of risk management	<input type="checkbox"/>				
10	Internal audit enhances the organization's efficiency	<input type="checkbox"/>				
11	Internal audit develops appropriate annual audit plans	<input type="checkbox"/>				
12	Recommendations in the internal audit report are implemented in a timely manner	<input type="checkbox"/>				
13	Internal audit does adequate follow-ups to ensure remedial action is taken and is effective	<input type="checkbox"/>				

**Section C: FACTORS WHICH IMPACT INTERNAL AUDIT EFFECTIVENESS**

*This section examines factors which you think impact the effectiveness of internal audit in your organization. Kindly provide responses which reflect your opinion/view about the questions.*

1. In your view, which factors do you think impact internal audit effectiveness in your organization?

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2. Over the years, how have you dealt with the challenges to internal audit effectiveness?

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3. In your view, which factors do you see impacting internal audit effectiveness in the near future?

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4. How can these future factors be mitigated?

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**Thank you so much for your time**

# 국문초록

## 가나 행정 부문 내부감사의 효과성 평가

George Asenso Brobbey

서울대학교 행정대학원

글로벌행정전공

공공 부문에서의 내부 감사의 중요성은 최근 몇 년 동안 주로 공공 지출을 투명화하고 공공 자원의 현명한 활용을 보장하려는 정부의 추구하고, 민원 서비스가 효율적으로 수행되고 부패 관행이 없어지기를 바라는 시민들의 열망으로 인해 크게 부각되었다. 다만 이를 달성하기 위해서는 내부감사기능이 공공부문 조직의 운영 내에서 정당한 역할을 하고 있는지 비판적으로 평가할 필요가 있다.

본 연구는 가나 행정 기관의 내부 감사의 효과성을 검토한다. 연구의 목적은 내부 감사 효과성 검토, 내부 감사 효과성에 영향을 미치는 요인 조사, 내부 감사의 효과성을 개선하기 위하여 실행 가능한 조치를 권고하는 것이다. 본 연구는 내부감사의 독립성, 내부감사의 역량, 최고경영지원 등을, 행정부문 내부 감사의 실효성에 영향을 미치는 요인으로 상정하고 분석한다. 이를 달성하기 위해 본 연구는 조사 연구 설계와, 특히 양적 접근법과 질적 접근법을 모두 포함하는 혼합 방법 접근법을 활용하였다. 주요 데이터는 온라인 플랫폼을 통해 120개의 활용 가능한 설문들을 관리하여 수집했다. 수집한 데이터를 분석함에 있어, 본 연구는 내부 감사 효과와 세 가지 독립 변수, 즉 내부 감사 독립성, 내부 감사의 역량, 내부 감사에 대한 최고경영지원 사이의 연관성을 확립하기 위해 최소자승법(OLS)을 활용한 선형 회귀 모델을 채택했다.

연구결과 내부감사의 독립성, 내부감사의 역량, 내부감사에 대한 최고경영지원 등이 모두 가나 행정부문의 내부 감사의 효과성에 유의미한 영향을 주는 것으로 나타났다.

이러한 연구 결과를 바탕으로, 행정부문에서의 내부 감사의 효과성을 높이기 위하여 내부 감사인의 독립성을 제고하고 내부 감사인의 역량을 증진시키며, 내부 감사 활동에 대한 최고경영지원을 더욱 보장하고 내부 감사인의 근무환경과 여건을 개선할 것을 권고한다.

**주제어:** 내부 감사, 내부 감사 효과, 내부 감사 독립성, 내부 감사 역량, 가나 행정 부문

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