



Assessing the influence of gender and professional qualification on the competence, integrity, and ethical standards of internal auditors in selected public tertiary institutions in Ghana

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ABSTRACT

Internal auditors' competence, integrity, and ethics have gained interest in public tertiary institutions due to the Auditor's General Report of financial irregularities of some public tertiary institutions. This study therefore investigated the competence, integrity and ethical levels of internal auditors in selected public tertiary institutions in Ghana. McClelland's Competency Theory guided the study. Using a cross-sectional survey design, a closed-ended questionnaire was used to collect data from 40 internal auditors across University of Cape Coast (UCC), University of Environment and Sustainable Development (UESD), and Cape Coast Technical University (CCTU). Descriptive statistics (frequency, percentages, mean and standard deviation) and inferential statistics (One-way ANOVA and independent sample t-tests) were used for data analysis using SPSS version 26. The results revealed that internal auditors demonstrated high levels of competence, integrity and ethics. Furthermore, the results showed that there were no statistically significant differences in internal auditors' competence, integrity, and ethical levels based on gender and professional qualification. The study concluded that internal auditors exhibit high levels of competence, integrity, and ethical standards in the execution of their professional responsibilities irrespective of their gender and professional qualification. The study recommended that internal audit departments continue to uphold and reinforce high standards of competence, integrity, and ethics through regular professional development and ethics training programmes.

Keywords: Competence, Ethics, Internal Auditors, Integrity

I. INTRODUCTION

Internal auditors are regarded as the pillars of transparency, accountability, and effective financial management within organisations, particularly in public sector institutions such as tertiary institutions. This is because internal auditors perform a critical function of providing independent assurance on risk management, control, and governance processes (Institute of Internal Auditors [IIA], 2017). This is true because internal audit staff enquiries may yield crucial information regarding significant company risks that impact operations, legal and regulatory compliance, and financial reporting, all of which may raise the possibility of substantial misstatements. Since assessing the efficiency of the organisation's internal procedures pertaining to financial reporting, operations, and compliance is a major goal of the majority of internal audit functions, queries of internal audit staff may yield important details regarding the architecture and operational efficacy of internal controls (Arens et al., 2011). Nevertheless, the effectiveness of internal audit functions depends substantially on the competence, integrity, and ethical standards maintained by internal auditors themselves (Endaya & Hanefah, 2016).

Competence of the internal auditor is a key element to the effectiveness of internal audit functions of public tertiary institutions. Arens et al. (2011) defines competence as the set of abilities and knowledge required to perform the duties that characterise a person's work. Studies on competence level of internal auditors have produced mixed results with most indicating that internal auditors exhibit high level of competence. For instance, Obeid and Abdelnur (2018) looked at the objectivity and competency of internal audit departments in Sudanese government agencies. The findings



showed that perceptions on the competence of internal audit departments varied from neutral to unsatisfied. However, studies done by Alias et al. (2019) and Zhang et al. (2024) reveal that internal auditors possess high levels of competence. This gives the idea that competence levels of internal auditors may be affected by other variables including their gender and professional qualification. A study by Amondarain et al. (2023) revealed a significant gender difference in perceptions of auditors as competent, with women rating them higher than men. Additionally, Ishola et al. (2018) indicated that accounting staff including internal auditors with professional qualifications reported significantly higher and more competent job performance compared to their non-certified counterparts.

Also, integrity is another key element to the effectiveness of internal audit functions of public tertiary institutions. Integrity as defined by Arens et al. (2011) is when an individual acts according to conscience, regardless of the circumstance. Most empirical reviews on integrity of internal auditors have indicated that internal auditors exhibit high levels of integrity in the execution of their tasks. This was clearly indicated by Alias et al. (2019) and Campion et al. (2011) who revealed that internal auditors generally exhibit high level of integrity in the conduct of their tasks. This suggests that internal auditors' integrity will remain consistent irrespective of their professional qualification and gender. This was evident by Amondarain et al. (2023), who revealed no statistically significant gender difference was found in perceptions of auditors' ethical image with their integrity inclusive, with women and men. Despite the lack of empirical studies on the difference in internal auditors' integrity level based on their professional qualification, a similar study by Alrabba (2016) imply that differences in the integrity levels of auditors may not be strongly influenced by professional qualifications as there was a weak correlation between integrity and professional error detection capacity.

Apart from competence and integrity, ethical level is also one of the key elements to the effectiveness of internal audit functions of public tertiary institutions. Ethics can be defined broadly as a set of moral principles or values (Arens et al., 2011). The Institute of Internal Auditors (IIA) identified four (4) ethical principles that all IIA members and certified internal auditors are expected to follow. These ethical principles are integrity, objectivity, confidentiality, and competency (IIA, 2017). This however considers objectivity, confidentiality, professional behaviour and public interest as the dimensions of ethical level of internal auditors. Professional behaviour and public interest were included due to their growing significance in ensuring that internal auditors uphold the trust placed in them by both their organisations and the wider public. Internal auditors are increasingly expected to act not only in accordance with technical standards but also in ways that protect and promote the public interest, especially in public sector settings. Besides, this study looks at integrity and competency as independent variables even though they are both essential to ethical behaviour.

1.1 Statement of the Problem

Ideally, tertiary institutions' internal auditors are expected to exhibit high levels of competence, integrity and ethical levels in their roles irrespective of their gender or professional qualifications. However, significant financial management problems at a number of public tertiary institutions are revealed in the Auditor-General's 2023 report, which calls into doubt the competence, integrity, and ethics of internal auditors. Unresolved financial issues at Cape Coast Technical University include GH¢497,988.95 in outstanding student debt and GH¢11,674.75 owed to the National Health Insurance Authority for unresolved claims resulting from problems like inappropriate prescriptions, inactive memberships, and duplicate medications. The awarding of two building contracts at the University of Cape Coast, initially valued at GH24,207,250.47, that were later modified by an average of 104% to reach GH49,275,491.55 without the necessary Central Tender Review Committee approval, highlights irregularities (Ghana Audit Service, 2024a; Ghana Audit Service, 2024b).

Additionally, in February 2022, the University of Energy and Sustainable Development (USED) formed a five-member Audit Committee in accordance with the Internal Audit Agency Act 2003 and the Audit Service Act 2000. This committee comprises representatives from the Institute of Chartered Accountants Ghana, the UESD Council, and the Internal Audit Agency. However, due to its recent formation and the continuous improvement of its internal audit structures, it was not included in the national audit report (University of Energy and Sustainable Development, 2022). These issues collectively highlight the urgent need to assess whether internal auditors possess the necessary competence, integrity, and ethical commitment, particularly when considering variations across gender and professional qualification.

Also, this study would address empirical, population, and geographical gaps in the literature. Empirically, no study has examined differences in the level of internal auditors' competence, integrity, and ethical standards based on gender and professional qualification. In terms of the population gap, although similar studies have been conducted in other professions (Zakrisson, 2023; Ishola et al., 2018), little has been done on internal auditors to examine such differences. Geographically, no study in Ghana has assessed the competence, integrity, and ethical levels of internal auditors and how these vary across gender and professional qualification. This clearly suggests that research into internal auditors' competence, integrity and ethical levels as well as differences based on gender and age are still in embryonic stage.



1.2 Research Objectives

The study was guided by the following objectives:

- i. To assess the level of internal auditors' competence.
- ii. To examine the integrity level of internal auditors.
- iii. To determine the ethical level of internal auditors.
- iv. To assess difference in the level of internal auditors' competence based on gender.
- v. To assess difference in the level of internal auditors' competence based on professional qualification.
- vi. To examine difference in the integrity level of internal auditors based on gender.
- vii. To assess difference in the integrity level of internal auditors based on professional qualification.
- viii. To examine difference in the ethical level of internal auditors based on gender.
- ix. To assess difference in the ethical level of internal auditors based on professional qualification.

1.3 Research Hypotheses

H₀₁: There is no statistically significant difference in the level of internal auditors' competence based on gender.

H₀₂: There is no statistically significant difference in the level of internal auditors' competence based on professional qualification.

H₀₃: There is no statistically significant difference in the integrity level of internal auditors based on gender.

H₀₄: There is no statistically significant difference in the integrity level of internal auditors based on professional qualification.

H₀₅: There is no statistically significant difference in the ethical level of internal auditors based on gender.

H₀₆: There is no statistically significant difference in the ethical level of internal auditors based on professional qualification.

II. LITERATURE REVIEW

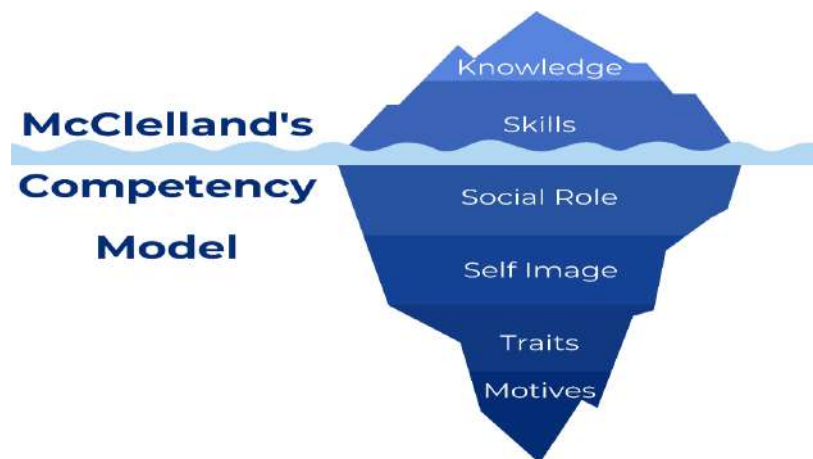
2.1 Theoretical Review

2.1.1 McClelland's Competency Theory

McClelland's Competency Theory, introduced by psychologist David McClelland in his 1973 seminal paper "Testing for Competence Rather Than Intelligence," challenged traditional approaches to employee selection and development (McClelland, 1973). McClelland argued that traditional intelligence tests and academic credentials were poor predictors of job performance, instead, he proposed that specific competencies (i.e., combinations of skills, knowledge, behaviours, and personal characteristics) more accurately predict success in professional settings (Spencer & Spencer, 1993). At its core, the theory defines competencies as underlying characteristics that lead to superior performance, with McClelland conceptualising these using an "iceberg model" (see Figure 1) where visible skills and knowledge appear above the waterline, whilst less visible elements like self-concept, traits, and motives remain hidden beneath (Boyatzis, 1982). To identify these critical competencies, McClelland developed the Behavioural Event Interview (BEI) technique, which compares the behaviours of exceptional performers with those of average performers to isolate differentiating factors (McClelland, 1998). This approach led to the identification of five main competency types: knowledge (specific content expertise), skills (ability to perform tasks), self-concepts (attitudes and values), traits (consistent response patterns), and motives (natural thought patterns driving behaviour) (Spencer & Spencer, 1993).

Despite its widespread adoption, the theory has faced criticism regarding the complexity of accurately measuring certain competencies, potential cultural biases in defining "successful" behaviours, the resource-intensive nature of thorough competency modelling, and difficulties keeping models current in rapidly changing work environments (Barrett & Depinet, 1991; Lawler, 1994). Nevertheless, McClelland's competency theory remains foundational in organisational psychology and human resource management, offering a framework that looks beyond traditional qualifications to identify and develop the specific behaviours and characteristics that drive superior performance (Campion et al., 2011).

Competency theory is integral to assessing the competence, integrity, and ethical level of internal auditors. According to the theory, competence encompasses both technical proficiency and the behavioural attributes necessary to navigate complex auditing tasks. By applying competency theory to internal auditing, organisations can ensure that auditors possess the requisite technical expertise, sound judgement, and ethical standards to perform their duties effectively. The theory suggests that internal auditors should not only demonstrate high levels of professional competence but also uphold strong ethical principles and integrity, which are essential for maintaining objectivity and transparency in their work. Consequently, assessing competence through this lens allows for a holistic evaluation of auditors, ensuring they meet the necessary standards of professionalism and ethics to fulfil their roles responsibly.

**Figure 1***McClelland's Competency Model*

Source: Şen (2025)

2.2 Empirical Review

2.2.1 Level of Internal Auditors' Competence

Obeid and Abdelnur (2018) investigated the evaluation of objectivity and competence within internal audit departments in Sudanese government units. A self-administered questionnaire was developed and utilised to gather data from internal auditors working in government units as well as external auditors responsible for auditing these units. The questionnaires were distributed in person to 100 internal auditors and 50 external auditors, with a total of 101 responses received. The data collected were analysed using both descriptive statistics (frequencies, percentages, and means) and inferential statistics (independent t-test and analysis of variance [ANOVA]) through the use of SPSS. The findings indicated that the overall mean score for objectivity was 2.682, suggesting that both internal and external auditors held views between neutral and dissatisfied regarding the objectivity of internal audit departments. Similarly, the overall mean score for competence was 2.521, indicating a perception that ranged between neutral and dissatisfied concerning the competence of internal audit departments.

Alias et al. (2019) investigated internal auditors' compliance with the code of ethics using empirical data from Malaysian Government-Linked Companies (GLCs). Data were gathered through questionnaires randomly distributed to internal auditors of selected GLCs in Malaysia. The items in the questionnaire were derived from the Certified Internal Auditor (CIA) Examination Paper and The Institute of Internal Auditors (IIA) Competency Framework. The findings indicated that internal auditors within these organisations exhibited a high level of competency in conducting audit engagements and demonstrated the ability to detect unethical practices within their respective companies.

Zhang et al. (2024) investigated the impact of independence, auditors' competence, and the use of information technology on the quality of internal audit. Reflective indicators for internal audit quality, independence, and competence were adapted and measured using six, eight, and four items respectively. The questionnaire employed a six-point Likert scale, ranging from (1) strongly disagree to (6) strongly agree. A total of 193 responses were collected through both online and offline methods; however, after removing 57 invalid responses, 136 valid questionnaires were retained for analysis. The results showed that internal auditors demonstrated a high level of competence, with mean scores ranging from 5.154 to 5.324 and standard deviations between .629 and .733.

2.2.2 Integrity Level of Internal Auditors

Alias et al. (2019) investigated internal auditors' compliance with the code of ethics using empirical data from Malaysian Government-Linked Companies (GLCs). Data were gathered through questionnaires randomly distributed to internal auditors of selected GLCs in Malaysia. The items in the questionnaire were derived from the Certified Internal Auditor (CIA) Examination Paper and The Institute of Internal Auditors (IIA) Competency Framework. The findings indicated that the majority of respondents showed a strong sense of objectivity and integrity when confronted with unethical behaviour during audit engagements.

Campion et al. (2011) investigated the influence of ethics, integrity, auditor experience, and auditor motivation on auditor professionalism. The study employed a saturated sampling technique, resulting in a sample size of 65 respondents. Descriptive analysis showed that the integrity variable (X2) recorded a minimum score of 20, a maximum of 40, a mean of 32.71, and a standard deviation of 3.864, reflecting a generally high level of integrity among the respondents.



2.2.3 Ethical Level of Internal Auditors

Alias et al. (2019) investigated internal auditors' compliance with the code of ethics using empirical data from Malaysian Government-Linked Companies (GLCs). Data were gathered through questionnaires randomly distributed to internal auditors of selected GLCs in Malaysia. The items in the questionnaire were derived from the Certified Internal Auditor (CIA) Examination Paper and The Institute of Internal Auditors (IIA) Competency Framework. The findings revealed that, on average, 73% of internal auditors possessed knowledge of ethics, while 89% were aware of the occurrence of unethical behaviour.

Alrabba (2016) investigated the influence of ethics, integrity, auditor experience, and auditor motivation on auditor professionalism. The study employed a saturated sampling technique, resulting in a sample size of 65 respondents. Descriptive analysis showed that the ethics variable had a minimum score of 34, a maximum of 54, a mean of 44.52, and a standard deviation of 3.540, indicating a relatively high level of ethical standards among the auditors.

2.2.4 Difference in the Level of Internal Auditors' Competence Based on Gender

Zakrisson (2023) investigated gender differences in perceptions of occupational competence in a study titled "Women Rate the Competence of Their Occupational Role Higher Than Men Do." Across two studies, participants rated the warmth and competence of someone in their own occupation, as well as how they believed others would perceive someone in the same role. It was hypothesised that women would show a greater gap between their own ratings and perceived public opinion, reflecting stereotype threat. Study 1 included 449 public sector workers (74% women) in social, care, and education roles. Study 2 involved 189 participants (70% women) from various professions. Contrary to expectations, men and women did not differ in how they believed others would view their occupation's competence. However, women rated their own occupation's competence higher than men did, even when controlling for occupation type and education, suggesting greater confidence among women in evaluating their professional roles.

Amondarain et al. (2023) investigated gender differences in auditing stereotypes and their impact on students' intentions to pursue a career in the profession. The study sample consisted of third- and fourth-year undergraduate students from 21 Spanish institutions of higher education specialising in Economics and Business. Out of approximately 760 questionnaires distributed, 656 valid responses were obtained. The study employed principal component analysis, along with both descriptive (means, standard deviations, percentages, and frequencies) and inferential (t-tests, Chi-square tests, and successive binary logistic regression models) statistical techniques. The findings revealed a significant gender difference in perceptions of auditors as competent, with women rating them higher ($M = 4.04$, $SD = 1.03$) than men ($M = 3.88$, $SD = .93$), $t(654) = 2.44$, $p = .015$.

2.2.5 Difference in the Level of Internal Auditors' Competence Based on Professional Qualification

Ishola et al. (2018) investigated the impact of educational attainment, professional qualifications, and years of experience on accountants' job performance. The study surveyed bursary staff at a first-generation university in Southwest Nigeria, capturing both perceived and experienced job performance and professionalism. Data were collected using a standardised self-report questionnaire, which included a job performance scale ($\alpha = .81$), items on normative and professional accounting roles, and socio-demographic information. All the hypotheses were tested using multiple regression analysis and one-way ANOVA at a significance level of $p \leq .05$. The findings revealed that bursary staff with professional qualifications reported significantly higher job performance compared to their non-certified counterparts. Although this study does not relate to internal auditors, it is implied that difference in internal auditors' competence in their job performance may be attributable to professional qualification.

2.2.6 Difference in the Integrity Level of Internal Auditors Based on Gender

Amondarain et al. (2023) investigated gender differences in auditing stereotypes and their impact on students' intentions to pursue a career in the profession. The study sample consisted of third- and fourth-year undergraduate students from 21 Spanish institutions of higher education specialising in Economics and Business. Out of approximately 760 questionnaires distributed, 656 valid responses were obtained. The study employed principal component analysis, along with both descriptive (means, standard deviations, percentages, and frequencies) and inferential (t-tests, Chi-square tests, and successive binary logistic regression models) statistical techniques. The findings revealed no statistically significant gender difference was found in perceptions of auditors' ethical image, with women ($M = 3.58$, $SD = 1.00$) and men ($M = 3.66$, $SD = 1.00$) showing similar views, $t(654) = -.51$, $p = .614$. The findings of Amondarain et al. (2023) imply that there is no significant difference in the perceived integrity levels of internal auditors based on gender, suggesting that both male and female auditors are viewed as equally ethical.



2.2.7 Difference in the Integrity Level of Internal Auditors Based on Professional Qualification

Alrabba (2016) examined the impact of the code of ethics on the quality of auditors' professional judgement in Jordan. A total of 150 auditors were targeted for the study, with 142 successfully responding to the survey. A questionnaire was employed for data collection, as it was considered suitable for capturing personal opinions, experiences, and outcomes. The data were analysed using regression analysis and advanced spreadsheet tools. The study found that various aspects of auditors' ethical conduct influenced their ability to detect inaccuracies in financial statements. In particular, attributes such as integrity, objectivity, and independence showed a weak correlation with the ability to identify financial misstatements. The findings of Alrabba (2016) imply that differences in the integrity levels of auditors may not be strongly influenced by professional qualifications alone, suggesting that other ethical and organisational factors play a more significant role in shaping auditors' professional judgement.

2.2.8 Difference in the Ethical Level of Internal Auditors Based on Gender

Amondarain et al. (2023) investigated gender differences in auditing stereotypes and their impact on students' intentions to pursue a career in the profession. The study sample consisted of third- and fourth-year undergraduate students from 21 Spanish institutions of higher education specialising in Economics and Business. Out of approximately 760 questionnaires distributed, 656 valid responses were obtained. The study employed principal component analysis, along with both descriptive (means, standard deviations, percentages, and frequencies) and inferential (t-tests, Chi-square tests, and successive binary logistic regression models) statistical techniques. The findings revealed a significant gender difference in perceptions of auditors as competent, with women rating them higher ($M = 4.04$, $SD = 1.03$) than men ($M = 3.88$, $SD = .93$), $t(654) = 2.44$, $p = .015$. However, no statistically significant gender difference was found in perceptions of auditors' ethical image, with women ($M = 3.58$, $SD = 1.00$) and men ($M = 3.66$, $SD = 1.00$) showing similar views, $t(654) = -.51$, $p = .614$.

Ratna and Anisykurlillah (2020) investigated the effects of experience, independence, and gender on auditor professional scepticism, with professional ethics serving as a moderating variable. The study targeted a population of 347 auditors working in public accounting firms located in Central Java and Yogyakarta. Using a convenience sampling technique, data were collected from 83 auditors through the administration of structured questionnaires. Data analysis was conducted using descriptive statistics and multiple regression analysis, with hypothesis testing performed through Moderated Regression Analysis (MRA) via IBM SPSS version 21. The findings revealed that auditor experience, gender, and professional ethics significantly influence professional scepticism. The regression analysis yielded an adjusted R^2 value of .203, indicating that 20.3% of the variance in professional scepticism could be explained by the independent variables—experience, independence, gender, and professional ethics. The findings of Ratna and Anisykurlillah (2020) imply that differences in ethical levels among internal auditors may be influenced by individual attributes such as professional experience and gender.

2.2.9 Difference in the Ethical Level of Internal Auditors Based on Professional Qualification

Ratna and Anisykurlillah (2020) investigated the effects of experience, independence, and gender on auditor professional scepticism, with professional ethics serving as a moderating variable. The study targeted a population of 347 auditors working in public accounting firms located in Central Java and Yogyakarta. Using a convenience sampling technique, data were collected from 83 auditors through the administration of structured questionnaires. Data analysis was conducted using descriptive statistics and multiple regression analysis, with hypothesis testing performed through Moderated Regression Analysis (MRA) via IBM SPSS version 21. The findings revealed that auditor experience, gender, and professional ethics significantly influence professional scepticism. However, independence alone, as well as the interaction effects between experience and professional ethics, independence and professional ethics, and gender and professional ethics, did not have a statistically significant impact on auditor professional scepticism. The findings of Ratna and Anisykurlillah (2020) imply that differences in ethical levels among internal auditors may be influenced more by individual attributes such as professional experience and gender than by professional qualifications alone.

2.3 Conceptual Framework

The conceptual framework in Figure 2 illustrates the hypothesised relationships between selected demographic factors (gender and professional qualification) and the perceived qualities of internal auditors, namely competence, integrity, and ethics. The framework posits that gender differences (H1, H3, H5) are expected to have a direct influence on these core qualities of internal auditors. Specifically, it is hypothesised that variations in competence (H1), integrity (H3), and ethics (H5) may be attributed to gender-based experiences, perceptions, and professional interactions. Likewise, the framework hypothesises that professional qualifications (H2, H4, H6) significantly shape internal auditors' qualities. It suggests that levels of competence (H2), integrity (H4), and ethical standards (H6) may vary according to the type or level of professional certification or training acquired. Collectively, these hypothesised paths aim to examine

whether and how demographic characteristics such as gender and professional qualification influence the key professional attributes required for effective internal auditing.

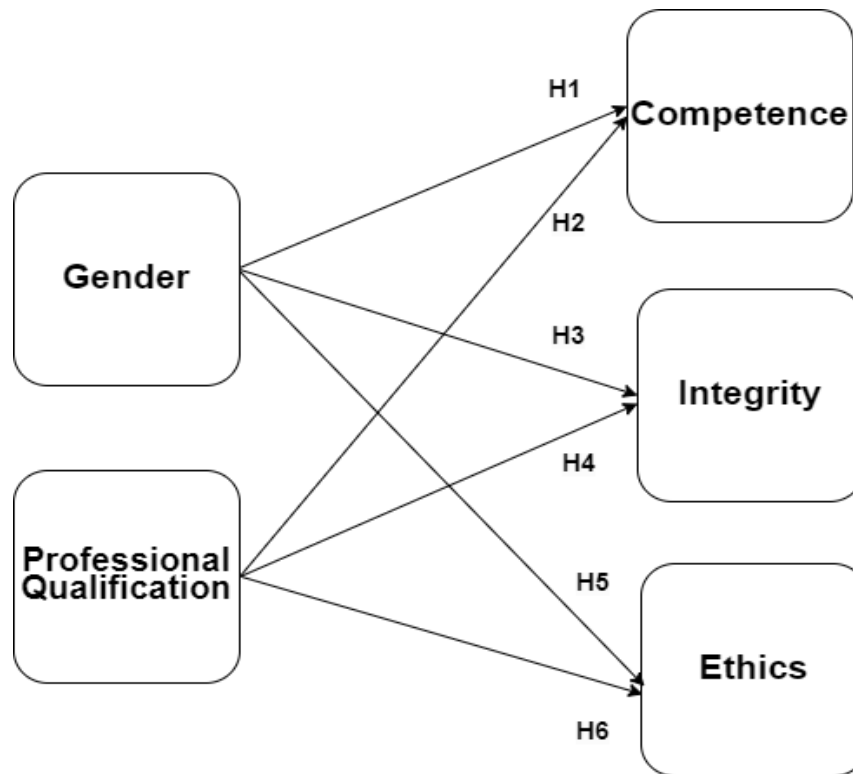


Figure 2

Conceptual Framework Depicting Gender and Professional Qualification Differences in Internal Auditors' Competence, Integrity and Ethical Levels

III. METHODOLOGY

3.1 Research Design and Sampling Procedure

This study employed a cross-sectional survey design to examine gender and professional qualification differences in internal auditors' competence, integrity and ethical levels. The target population comprised all internal auditors from three public tertiary institutions namely: University of Cape Coast (UCC), University of Environment and Sustainable Development (UESD), and Cape Coast Technical University (CCTU). The study used the census approach to include the total population since the population size was manageable, sufficient time was available for data collection, and all participants were within reach. Consequently, the sample size equaled the entire population of 27 UCC, 10 UESD and 3 CCTU internal auditors.

3.2 Instrumentation and Data Collection

The study utilised closed-ended questionnaire which had four sections. The first section was used to gather background information from respondents, including their gender, age, institution, academic qualification, professional qualification, and the number of years they had worked in their current institution. The second section comprised 12 items aimed at assessing the competence of internal auditors, of which 10 items were adapted from Sukriah and Inapty (2009) by translating the original Indonesian language into English, while the remaining 2 items were self-developed. The third section focused on the integrity of internal auditors and included 14 items adapted from Sukriah and Inapty (2009), with the necessary language translation from Indonesian to English. The fourth section measured the ethical level of internal auditors using 8 items: 4 items adapted from rules of ethical conduct as outlined by Arens et al. (2011) and 4 was self-developed for professional behaviour and public interest dimensions. All items in the questionnaire were rated on a five-point Likert scale: 1 = undecided, 2 = strongly disagree, 3 = disagree, 4 = agree, and 5 = strongly agree. The questionnaire was subsequently analysed to determine its validity and reliability.

The reliability of the data collected was assessed using Cronbach's Alpha, with the results summarised in Table 1. Following Nunnally and Bernstein's (2008) recommendation of a .7 threshold for acceptable reliability, the overall instrument demonstrated excellent reliability with an alpha coefficient of .939, indicating strong internal consistency



across all items. Among the main scales, Integrity (.890), Competence (.876), and Ethics (.869) all showed high reliability, further affirming the consistency of responses.

Table 1
Reliability Test

Scale	Respondents	No. of Items	Cronbach's Alpha
Competence	40	12	.876
Integrity	40	14	.890
Ethics	40	8	.869
Overall	40	34	.939

3.3 Data Analysis

The data collected was analysed using both descriptive and inferential statistics. Descriptive statistics included frequency counts, percentages, means, and standard deviations. For inferential analysis, independent sample t-tests and one-way ANOVA were utilised. A normality test was conducted to ensure that the assumptions for performing the t-tests and ANOVA were met, with a significance threshold set at .05.

3.4 Test for Normality

The normality diagnostic for the study was evaluated by examining the skewness and kurtosis of the data distribution, as shown in Table 2. According to Field (2009), skewness values should fall within ± 1.96 for small samples ($N < 200$), while Hair et al. (2010) recommend that kurtosis values remain below 7 to confirm normality. For the Competence variable, the mean score was 4.24 and the median was 4.21. The skewness value of 0.011 indicates an almost perfectly symmetrical distribution. The kurtosis value of -.499 suggests a slightly platykurtic distribution, meaning the data are relatively flatter than a normal distribution, with fewer extreme outliers. Similarly, Integrity had a mean of 4.27 and a median of 4.18. The skewness value of -.418 reflects a slight negative skewness, indicating a minor elongation on the left tail of the distribution. The kurtosis value of -.487 also points to a platykurtic shape, suggesting a broad, flatter peak than the normal curve.

For Ethics, the mean was 4.35 and the median was 4.44. The skewness value of -1.136 indicates a more pronounced negative skewness, with the distribution stretching further on the left side. The kurtosis value of 1.807, although higher than those of the other variables, still falls within the acceptable range, indicating a leptokurtic distribution meaning the distribution has a sharper peak and heavier tails compared to a normal curve, implying the presence of more data points around the mean and in the tails. Overall, all skewness and kurtosis values lie within the recommended thresholds, indicating no significant deviation from normality. Therefore, the data can be considered approximately normally distributed, justifying the use of parametric statistical techniques for subsequent analysis.

The results of the normality assessment using a Histogram and Normal Q-Q Plot are displayed in Figure 3. As shown in the figure, the data points for each variable (Competence, Integrity, and Ethics) appear to be approximately normally distributed, as they align closely with the diagonal line on the Q-Q plots, indicating minimal deviation from normality. Furthermore, there were no visible signs of non-linear patterns in the distribution. Taken together, both the statistical tests and the graphical evidence support the conclusion that the data for all three variables are normally distributed.

Table 2
Test for Normality

Variable		Statistic	Std. Error
Competence	Mean	4.2354	.07054
	Median	4.2083	
	Skewness	.011	.374
	Kurtosis	-.499	.733
Integrity	Mean	4.2714	.08097
	Median	4.1786	
	Skewness	-.418	.374
	Kurtosis	-.487	.733
Ethics	Mean	4.3531	.09483
	Median	4.4375	
	Skewness	-1.136	.374
	Kurtosis	1.807	.733

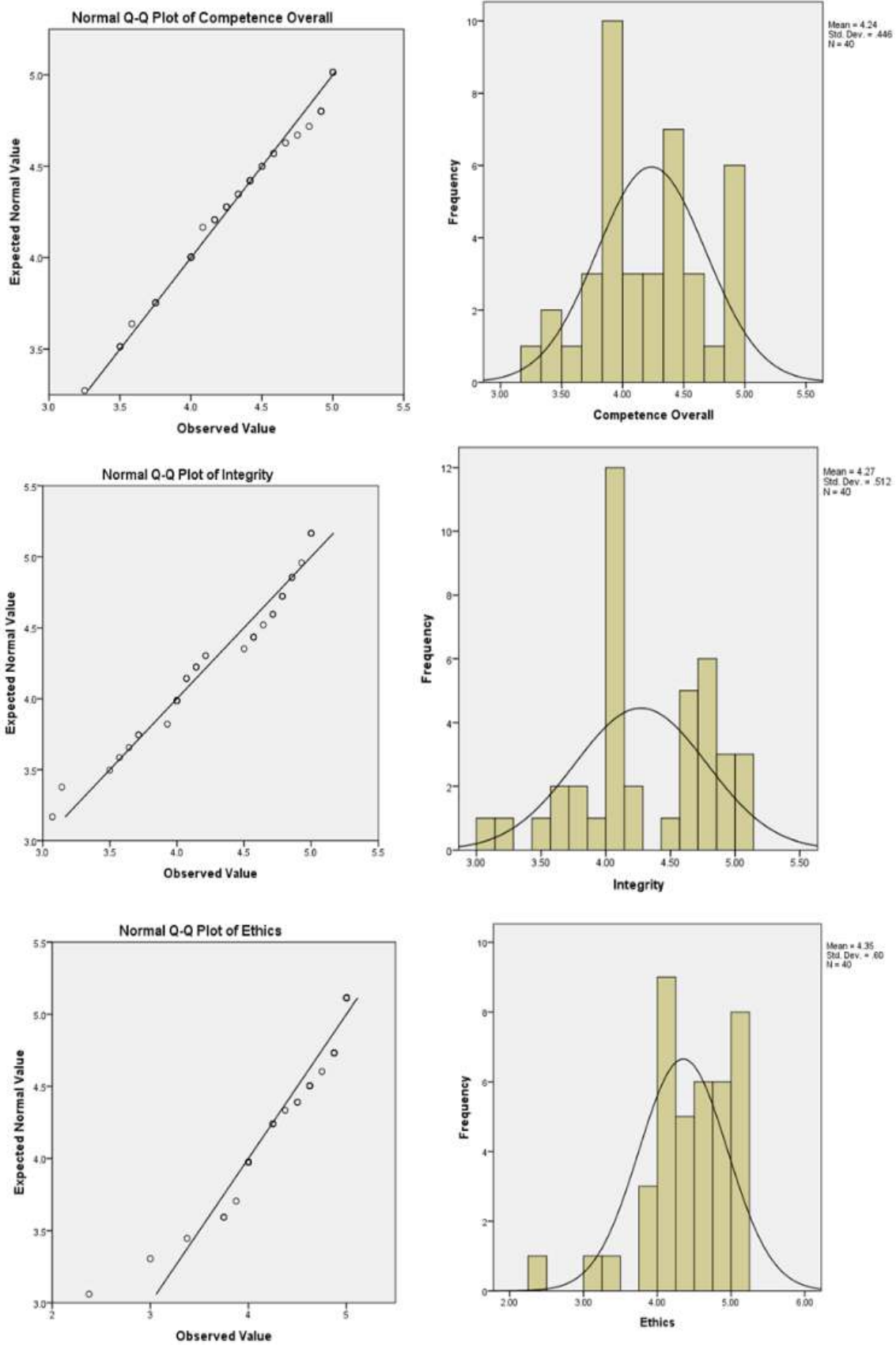


Figure 3
Normality Test using Histogram and Normal Q-Q plot



IV. FINDINGS & DISCUSSION

4.1 Background Characteristics of the Respondents

The results on the background characteristics of the respondents are shown in Table 3.

Table 3

Background Characteristics of the Respondents

Demography	Subscale	Frequency	Percentages (%)
Gender	Male	27	67.5
	Female	13	32.5
Age	Below 30 years	9	22.5
	31 – 40 years	17	42.5
	41 – 50 years	11	27.5
	Above 50 years	3	7.5
Place of work	University of Cape Coast (UCC)	27	67.5
	University of Environment and Sustainable Development (UESD)	10	25.0
	Cape Coast Technical University (CCTU)	3	7.5
Academic Qualification	PhD	2	5.0
	Master's Degree	22	55.0
	Bachelor's Degree	16	40.0
Professional Qualification	ICAG	23	57.5
	ACCA	12	30.0
	None	5	12.5
Number of years worked in institution	1 – 5 years	23	57.5
	6 – 10 years	3	7.5
	11 – 15 years	6	15.0
	Above 15 years	8	20.0

From Table 3, male respondents (27; 67.5%) formed more than twice the number of female respondents (13; 32.5%), indicating a male-dominated sample in the study. In terms of age distribution, the majority of participants (42.5%) were within the 31–40 years, followed by those aged 41–50 years (27.5%). Respondents below 30 years constituted 22.5%, while those above 50 years made up the smallest group (7.5%). This suggests that the sample was largely composed of individuals in their early to mid-career stages. With regard to the place of work, most of the participants (67.5%) were from the University of Cape Coast (UCC), followed by 22.5% from the University of Environment and Sustainable Development (UESD), and a smaller proportion (7.5%) came from Cape Coast Technical University (CCTU). In terms of academic qualifications, over half of the respondents (55.0%) held a Master's degree, 40.0% had a Bachelor's degree, and only a small number (5.0%) possessed a PhD, indicating a highly educated sample overall. For professional qualifications, a majority of respondents (57.5%) were affiliated with the Institute of Chartered Accountants, Ghana (ICAG), while 30.0% held qualifications from the Association of Chartered Certified Accountants (ACCA), and 12.5% reported having no professional certification. Regarding years of work experience within their institutions, more than half (57.5%) had worked between 1 and 5 years, followed by those with over 15 years of experience (20.0%), 11–15 years (15.0%), and 6–10 years (7.5%). This distribution indicates that most respondents were relatively early in their institutional careers, with a smaller representation of more experienced personnel.

4.2 Level of Internal Auditors' Competence

Research Objective 1 aimed to determine the level of internal auditors' competence. Table 4 presents the results.

**Table 4***Level of Internal Auditors' Competence*

	Mean	SD
<i>General Knowledge</i>	4.29	.42
I have the ability to perform analytical reviews.	4.33	.66
I have knowledge of organisational theory to understand organisations.	4.25	.44
I have auditing knowledge and knowledge of the public sector.	4.30	.61
I have accounting knowledge to help manage numbers and data.	4.35	.53
I have adequate knowledge of professional auditing standards and regulations	4.23	.48
<i>Personal Quality</i>	4.10	.62
I have a strong curiosity, broad-mindedness, and the ability to handle uncertainty.	4.00	.88
I accept that there are no easy solutions and acknowledge that some findings may be subjective.	3.85	.95
I be able to work collaboratively in a team.	4.45	.60
<i>Specific Expertise</i>	4.27	.55
I have the ability to discover material errors in financial reports.	4.43	.55
I have skills in conducting interviews and rapid reading abilities.	4.28	.75
I understand statistics and have expertise in using computers.	4.08	.80
I have the ability to write and present reports effectively.	4.30	.79
Overall Competence	4.24	.45

Key: 1.0-2.1 (*Low*), 2.2-3.4 (*Medium*), and 3.5-5.0 (*High*)

From Table 4, the results show that internal auditors perceive themselves to have a high level of competence, with an overall mean score of 4.24 (SD = .45), indicating strong agreement across the various competence dimensions. Specifically, in the area of General Knowledge, the mean score was 4.29 (SD = .42), reflecting respondents' confidence in their foundational knowledge relevant to auditing. The highest rated item under this dimension was "I have accounting knowledge to help manage numbers and data" (M = 4.35, SD = .53), followed closely by "I have the ability to perform analytical reviews" (M = 4.33, SD = .66). This suggests that internal auditors feel well-equipped with the analytical and accounting skills necessary for effective auditing practice. In terms of Personal Quality, the mean score was slightly lower at 4.10 (SD = .62), but still well within the high category. The statement "I be able to work collaboratively in a team" received the highest mean (M = 4.45, SD = .60), suggesting strong interpersonal and teamwork skills among respondents. However, items such as "I accept that there are no easy solutions and acknowledge that some findings may be subjective" (M = 3.85, SD = .95) and "I have a strong curiosity, broad-mindedness, and the ability to handle uncertainty" (M = 4.00, SD = .88) had relatively lower means, implying room for development in terms of dealing with ambiguity and maintaining openness to complex audit findings.

For Specific Expertise, the mean score was also high (M = 4.27, SD = .55), showing that respondents believe they possess advanced skills that are essential in practice. Notably, "I have the ability to discover material errors in financial reports" had one of the highest means overall (M = 4.43, SD = .55), indicating strong confidence in critical auditing skills. Similarly, strong ratings were observed for "I have the ability to write and present reports effectively" (M = 4.30, SD = .79) and "I have skills in conducting interviews and rapid reading abilities" (M = 4.28, SD = .75), suggesting a well-rounded skill set among the internal auditors surveyed. Overall, the consistently high mean scores across all items and sub-dimensions of competence demonstrate that internal auditors view themselves as highly competent, both in terms of knowledge and practical skills. The relatively low standard deviation values also indicate a high level of agreement among the respondents, pointing to homogeneity in their perceived competence levels.

4.3 Integrity Level of Internal Auditors

Research Objective 2 aimed to examine the integrity level of internal auditors. Table 5 presents the results.

**Table 5***Integrity Level of Internal Auditors*

	Mean	SD
Honesty	4.37	.60
I comply with regulations, whether monitored or not.	4.48	.51
I work according to the actual situation, without adding or omitting any facts.	4.25	.81
I do not accept anything in any form that is not rightfully mine.	4.38	.70
Courage	4.28	.65
I do not get intimidated by others and do not succumb to pressure from others trying to influence my opinions or stance.	4.40	.96
I express actings that, according to my judgment and belief, need to be taken.	4.20	.91
I have strong self-confidence when facing various difficulties.	4.23	.86
Wisdom	4.13	.58
I carefully weigh the issues and their consequences.	4.25	.74
I consider the interests of the institution/organisation.	4.28	.55
I do not consider the situation of individuals/groups or an organisation unit to justify actions that violate laws or regulations.	3.85	1.1
Responsibility	4.30	.58
I do not avoid responsibility or blame others, which could result in harm to others.	4.15	.92
I take responsibility if my audit findings require correction or improvement.	4.35	.58
I motivate myself by showing consistent enthusiasm for my work.	4.33	.73
I act and behave according to the prevailing norms.	4.18	.90
When making recommendations, I strictly adhere to applicable rules/regulations while ensuring that the recommendations are actionable	4.50	.64
Overall Integrity	4.27	.51

Key: 1.0-2.1 (*Low*), 2.2-3.4 (*Medium*), and 3.5-5.0 (*High*)

From Table 5, the findings reveal that internal auditors perceive themselves to have a high level of integrity, as reflected by the overall mean score of 4.27 (SD = .51). This suggests that, across the various dimensions of integrity: Honesty, Courage, Wisdom, and Responsibility, respondents demonstrated strong agreement with statements reflecting ethical conduct, personal accountability, and professional standards. Under the Honesty dimension, the mean score was 4.37 (SD = .60), indicating a high level of adherence to truthfulness and fairness. The item “I comply with regulations, whether monitored or not” received the highest mean score in this section (M = 4.48, SD = .51), showing a strong internal moral compass among auditors, independent of external oversight. Similarly, “I do not accept anything in any form that is not rightfully mine” (M = 4.38, SD = .70) reinforces this stance, while “I work according to the actual situation, without adding or omitting any facts” also received a high mean of 4.25 (SD = .81), highlighting auditors’ commitment to accurate and unbiased reporting.

The Courage dimension had a mean score of 4.28 (SD = .65), indicating that auditors are generally confident in standing by their ethical judgments even under pressure. “I do not get intimidated by others and do not succumb to pressure from others trying to influence my opinions or stance” scored the highest (M = 4.40, SD = .96), followed by “I have strong self-confidence when facing various difficulties” (M = 4.23, SD = .86). These suggest a strong ethical backbone and emotional resilience in professional scenarios. In terms of Wisdom, the mean score was slightly lower but still high at 4.13 (SD = .58), reflecting thoughtful and principled decision-making. While “I consider the interests of the institution/organisation” received a relatively high score (M = 4.28, SD = .55), the statement “I do not consider the situation of individuals/groups or an organisation unit to justify actions that violate laws or regulations” received the lowest mean across all items (M = 3.85, SD = 1.10), pointing to a potential ethical grey area where individual or group circumstances might challenge strict rule adherence.

Under the Responsibility dimension, internal auditors again rated themselves highly, with a mean score of 4.30 (SD = .58). The highest mean score overall was observed here, with “When making recommendations, I strictly adhere to applicable rules/regulations while ensuring that the recommendations are actionable” (M = 4.50, SD = .64). Additionally, strong scores for “I take responsibility if my audit findings require correction or improvement” (M = 4.35, SD = .58) and “I motivate myself by showing consistent enthusiasm for my work” (M = 4.33, SD = .73) suggest high professional integrity and a commitment to continuous improvement. In summary, the consistently high mean values across all items and dimensions suggest that the internal auditors in this study exhibit a strong sense of personal and professional integrity. The relatively low standard deviation values indicate a consensus among respondents in their self-perceptions, pointing to a uniform integrity profile across the sample.



4.4 Ethical Level of Internal Auditors

Research Objective 3 aimed to assess the ethical level of internal auditors. Table 6 displays the results.

Table 6

Ethical Level of Internal Auditors

	Mean	SD
Objectivity	4.41	.69
I make decisions without being influenced by personal interests.	4.40	.74
I avoid conflicts of interest that may compromise my impartiality.	4.43	.75
Confidentiality	4.41	.83
I maintain confidentiality regarding sensitive information acquired during audits.	4.38	.93
I do not disclose any confidential information without proper authorization.	4.45	.93
Professional Behaviour	4.45	.55
I act in a manner that is consistent with the professional standards and expectations of the profession.	4.48	.60
I demonstrate professionalism in all interactions, adhering to ethical norms and legal standards.	4.43	.55
Public Interest	4.14	.90
I prioritise the public interest over personal or organisational gains.	3.95	1.08
I ensure that my work benefits the wider public and upholds societal trust.	4.33	.92
Overall Ethics	4.35	.60

Key: 1.0-2.1 (*Low*), 2.2-3.4 (*Medium*), and 3.5-5.0 (*High*)

From Table 6, it is evident that internal auditors possess a high level of ethical standards, as reflected by the overall mean score of 4.35 (SD = .60). This suggests strong adherence to key ethical principles including Objectivity, Confidentiality, Professional Behaviour, and Public Interest. The dimension of Objectivity recorded a high mean of 4.41 (SD = .69), indicating that internal auditors strive to maintain impartiality and independence in their professional judgments. Both items: “I make decisions without being influenced by personal interests” (M = 4.40, SD = .74) and “I avoid conflicts of interest that may compromise my impartiality” (M = 4.43, SD = .75) show a strong commitment to unbiased decision-making, essential for the credibility of the auditing function. Similarly, Confidentiality was also rated highly, with a mean score of 4.41 (SD = .83). Respondents strongly agreed with the importance of maintaining confidentiality regarding sensitive information acquired during audits (M = 4.38, SD = .93), and not disclosing such information without proper authorisation (M = 4.45, SD = .93). These responses suggest a firm ethical stance on safeguarding information integrity and client trust.

The highest scoring dimension was Professional Behaviour, with a mean of 4.45 (SD = .55), demonstrating that internal auditors consistently conduct themselves in alignment with professional standards. Respondents affirmed that they act in accordance with the ethical norms and expectations of their profession (M = 4.48, SD = .60) and maintain professionalism in all interactions (M = 4.43, SD = .55), reflecting integrity and reliability in their professional conduct. Although the dimension of Public Interest had the lowest mean among the four dimensions, it was still high at 4.14 (SD = .90). This indicates a strong, albeit slightly less uniform, commitment to ensuring that audit work serves societal good. The item “I ensure that my work benefits the wider public and upholds societal trust” (M = 4.33, SD = .92) scored higher than “I prioritise the public interest over personal or organisational gains” (M = 3.95, SD = 1.08), suggesting that while auditors acknowledge the importance of public interest, there may be occasional tension between personal, organisational, and societal obligations. In sum, the results suggest that internal auditors exhibit a robust ethical orientation across all measured domains, with especially high scores in maintaining confidentiality and professional behaviour. The standard deviation values, while slightly higher in the public interest dimension, generally reflect consensus among respondents, underscoring a consistently high ethical standard across the sample.

4.5 Testing Homogeneity of Variances and Mean Equality

Tables 7 and 8 present the results of statistical tests used to assess the assumptions of homogeneity of variances and the equality of means across groups.

**Table 7***Levene's Test for Equality of Variances*

Dependent Variable	Independent Variable	F	Sig.
Competence	Gender	.838	.366
General Knowledge	Gender	.315	.578
Personal Quality	Gender	.421	.520
Specific Expertise	Gender	2.798	.103
Integrity	Gender	.110	.744
Honesty	Gender	2.111	.154
Courage	Gender	4.118	.049
Wisdom	Gender	3.885	.056
Responsibility	Gender	.100	.753
Ethics	Gender	6.77	.010
Objectivity	Gender	.000	.995
Confidentiality	Gender	.438	.512
Professional Behaviour	Gender	2.267	.140
Public Interest	Gender	.037	.849

Table 8*Robust Test for Equality of Means (Welch)*

Dependent Variable	Independent Variable	Statistic	df1	df2	Sig.
Competence	Professional Qualification	2.840	2	10.085	.105
General Knowledge	Professional Qualification	3.326	2	11.016	.074
Personal Quality	Professional Qualification	2.477	2	10.018	.134
Specific Expertise	Professional Qualification	1.217	2	10.078	.336
Integrity	Professional Qualification	2.141	2	10.941	.438
Honesty	Professional Qualification	1.541	2	10.392	.259
Courage	Professional Qualification	.672	2	10.445	.531
Wisdom	Professional Qualification	1.191	2	9.665	.345
Responsibility	Professional Qualification	2.221	2	11.512	.153
Ethics	Professional Qualification	1.174	2	11.462	.151
Objectivity	Professional Qualification	.931	2	12.299	.420
Confidentiality	Professional Qualification	.276	2	10.534	.764
Professional Behaviour	Professional Qualification	.767	2	10.545	.489
Public Interest	Professional Qualification	1.516	2	10.417	.264

Before conducting an independent samples t-test or a one-way ANOVA, it is essential to test for the assumption of homogeneity of variance, which posits that the variances of the dependent variables are equal across the levels of the independent variables. From Table 7, Levene's test results for gender show that the assumption of equal variances is met for competence ($p = .366$), General Knowledge ($p = .578$), Personal Quality ($p = .520$), and Specific Expertise ($p = .103$), as all p-values are non-significant. Likewise, the test results for Integrity ($p = .744$), Honesty ($p = .154$), Wisdom ($p = .056$), and Responsibility ($p = .753$) indicate that homogeneity of variance is not violated. However, the result for Courage yielded a significant p-value ($p = .049$), suggesting that the variance across gender for this subscale of integrity is unequal. Additionally, for the Ethics variable, Levene's test was significant ($p = .010$), indicating a violation of the homogeneity assumption. On the other hand, all subscales under ethics, including Objectivity ($p = .995$), Confidentiality ($p = .512$), Professional Behaviour ($p = .140$), and Public Interest ($p = .849$), showed non-significant values, indicating that their variances across gender are homogeneous.

To further examine group differences based on professional qualification, the Welch test was conducted, as presented in Table 8. The results show no significant differences across professional qualification groups for any of the dependent variables, including Competence ($p = .105$), Integrity ($p = .438$), and Ethics ($p = .151$). Similarly, none of the subscales under these variables demonstrated statistically significant differences (all $p > .05$). This implies that while the assumption of homogeneity of variance was violated for Courage and Ethics in the gender comparison, it was met for the remaining variables, allowing for further analyses using t-tests and ANOVA where appropriate.



4.6 Difference in the Level of Internal Auditors' Competence Based on Gender

Research Objective 4 and Hypothesis 1 examined the difference in the level of internal auditors' competence based on gender. The dependent variables include Competence and its dimensions (General Knowledge, Personal Quality, and Specific Expertise), while the independent variable is gender, consisting of male and female students. An independent sample t-test, at a significance level of .05, was employed to test whether there are significant differences between male and female internal auditors in terms of competence and its dimensions. This statistical tool was chosen because the independent variable (i.e., gender) consists of two categories, and the dependent variables (i.e., Competence and its dimensions) were normally distributed. The results are presented in Table 9.

Table 9

Difference in the Level of Internal Auditors' Competence Based on Gender

Variable	Gender	N	Mean	SD	t	df	Sig.
Competence	Male	27	4.25	.42	.357	38	.723
	Female	13	4.20	.51			
General Knowledge	Male	27	4.33	.40	.771	38	.445
	Female	13	4.22	.47			
Personal Quality	Male	27	4.11	.65	.160	38	.873
	Female	13	4.08	.60			
Specific Expertise	Male	27	4.27	.48	-.004	38	.997
	Female	13	4.27	.69			

The results in Table 9 show that there are no statistically significant differences in the level of internal auditors' competence based on gender across all measured variables. For overall competence, male auditors ($M = 4.25$, $SD = .42$) reported slightly higher mean scores than their female counterparts ($M = 4.20$, $SD = .51$), but the difference was not significant [$t(38) = .357$, $p = .723$]. Similarly, for the subscale of general knowledge, male auditors ($M = 4.33$, $SD = .40$) scored higher than females ($M = 4.22$, $SD = .47$), though this difference was not statistically significant [$t(38) = .771$, $p = .445$]. In terms of personal quality, male auditors ($M = 4.11$, $SD = .65$) had marginally higher scores than female auditors ($M = 4.08$, $SD = .60$), with no significant difference [$t(38) = .160$, $p = .873$]. Finally, both male and female auditors reported the same mean score for specific expertise ($M = 4.27$), with a non-significant result [$t(38) = -.004$, $p = .997$]. These findings indicate that internal auditors, regardless of gender, perceive themselves as equally competent across the domains assessed in the study.

4.7 Difference in the Level of Internal Auditors' Competence Based on Professional Qualification

The aim of Research Objective 5 and Hypothesis 2 were to examine difference in the level of internal auditors' competence based on professional qualification. One-Way ANOVA, at a significance level of .05, was used to test whether there is a significant difference among the professional qualification groups of internal auditors in terms of competence and its dimensions (General Knowledge, Personal Quality, and Specific Expertise). This statistical tool was employed because the independent variable (i.e., professional qualification) consists of three groups (ICAG, ACCA, and None), while the dependent variables (i.e., Competence and its dimensions) are normally distributed. The results are presented in Table 10.

Table 10

Difference in the Level of Internal Auditors' Competence Based on Professional Qualification

Variable	Age Group	N	Mean	SD	ANOVA	Sum of Squares	df	Mean Square	F	Sig.
Competence	ICAG	23	4.35	.41	Between Groups	.980	2	.490	2.672	.082
	ACCA	12	4.00	.40	Within Groups	6.783	37	.183		
	None	5	4.27	.57	Total	7.762	39			
General Knowledge	ICAG	23	4.38	.45	Between Groups	.856	2	.428	2.597	.088
	ACCA	12	4.07	.30	Within Groups	6.100	37	.165		
	None	5	4.40	.42	Total	6.956	39			
Personal Quality	ICAG	23	4.28	.55	Between Groups	1.959	2	.979	2.746	.077
	ACCA	12	3.78	.64	Within Groups	13.197	37	.357		
	None	5	4.07	.72	Total	15.156	39			
Specific Expertise	ICAG	23	4.37	.53	Between Groups	.648	2	.324	1.087	.348
	ACCA	12	4.08	.48	Within Groups	11.025	37	.298		
	None	5	4.25	.75	Total	11.673	39			



The results in Table 10 indicate that there are no statistically significant differences in the level of internal auditors' competence based on professional qualification across all measured variables. For overall competence, auditors with ICAG qualification ($M = 4.35$, $SD = .41$) reported the highest mean, followed by those with no professional qualification ($M = 4.27$, $SD = .57$), and those with ACCA ($M = 4.00$, $SD = .40$). However, the ANOVA results show that these differences were not statistically significant [$F(2, 37) = 2.672$, $p = .082$]. Similarly, for the general knowledge component, ICAG-qualified auditors ($M = 4.38$, $SD = .45$) scored higher than both ACCA ($M = 4.07$, $SD = .30$) and those without qualifications ($M = 4.40$, $SD = .42$), but the variation was not significant [$F(2, 37) = 2.597$, $p = .088$]. In terms of personal quality, the highest mean score was also reported by ICAG holders ($M = 4.28$, $SD = .55$), while ACCA holders had the lowest ($M = 3.78$, $SD = .64$), yet this difference did not reach significance [$F(2, 37) = 2.746$, $p = .077$]. For specific expertise, again, ICAG holders scored highest ($M = 4.37$, $SD = .53$), followed by those with no professional qualification ($M = 4.25$, $SD = .75$), and ACCA holders ($M = 4.08$, $SD = .48$). However, the differences were not statistically significant [$F(2, 37) = 1.087$, $p = .348$]. Overall, while some variations in competence levels exist among the different professional qualification groups, none of these differences were statistically significant, suggesting that professional qualification type does not significantly influence perceived competence among internal auditors in this sample.

4.8 Difference in the Integrity Level of Internal Auditors Based on Gender

Research Objective 6 and Hypothesis 3 assessed the difference in the integrity level of internal auditors based on gender. The dependent variables include Integrity and its dimensions (Honesty, Courage, Wisdom and Responsibility), while the independent variable is gender, consisting of male and female students. An independent sample t-test, at a significance level of .05, was employed to test whether there are significant differences between male and female internal auditors in terms of Integrity and its dimensions. This statistical tool was chosen because the independent variable (i.e., gender) consists of two categories, and the dependent variables (i.e., Integrity and its dimensions) were normally distributed. The results are presented in Table 11.

Table 11

Difference in the Integrity Level of Internal Auditors Based on Gender

Variable	Gender	N	Mean	SD	t	df	Sig.
Integrity	Male	27	4.24	.54	-.635	38	.529
	Female	13	4.35	.47			
Honesty	Male	27	4.36	.52	-.130	38	.897
	Female	13	4.38	.76			
Courage	Male	27	4.22	.73	-850	34.566	.401
	Female	13	4.38	.47			
Wisdom	Male	27	4.10	.67	-.409	38	.685
	Female	13	4.18	.35			
Responsibility	Male	27	4.25	.61	-.748	38	.459
	Female	13	4.40	.52			

The results in Table 11 show that there are no statistically significant differences in the integrity levels of internal auditors based on gender. For overall integrity, female auditors ($M = 4.35$, $SD = .47$) reported slightly higher scores than their male counterparts ($M = 4.24$, $SD = .54$); however, this difference was not statistically significant [$t(38) = -.635$, $p = .529$]. In terms of the specific components of integrity, the mean scores for honesty were nearly identical for males ($M = 4.36$, $SD = .52$) and females ($M = 4.38$, $SD = .76$), with no significant difference observed [$t(38) = -.130$, $p = .897$]. Similarly, no significant gender differences were found for courage [$t(34.566) = -.850$, $p = .401$], with females ($M = 4.38$, $SD = .47$) reporting slightly higher levels than males ($M = 4.22$, $SD = .73$). For wisdom, both male ($M = 4.10$, $SD = .67$) and female ($M = 4.18$, $SD = .35$) auditors reported comparable levels, and the difference was not statistically significant [$t(38) = -.409$, $p = .685$]. Lastly, the responsibility component also showed no significant difference between males ($M = 4.25$, $SD = .61$) and females ($M = 4.40$, $SD = .52$), [$t(38) = -.748$, $p = .459$]. Overall, the findings suggest that gender does not significantly influence the integrity levels of internal auditors across the measured dimensions.

4.9 Difference in the Integrity Level of Internal Auditors Based on Professional Qualification

The focus of Research Objective 7 and Hypothesis 4 were to examine the difference in the integrity level of internal auditors based on professional qualification. One-Way ANOVA, at a significance level of .05, was used to test whether there is a significant difference among the professional qualification groups of internal auditors in terms of Integrity and its dimensions (Honesty, Courage, Wisdom and Responsibility). This statistical tool was employed because



the independent variable (i.e., professional qualification) consists of three groups (ICAG, ACCA, and None), while the dependent variables (i.e., Integrity and its dimensions) are normally distributed. The results are presented in Table 12.

Table 12

Difference in the Integrity Level of Internal Auditors Based on Professional Qualification

Variable	Age Group	N	Mean	SD	ANOVA	Sum of Squares	Df	Mean Square	F	Sig.
Integrity	ICAG	23	4.41	.46	Between Groups	1.162	2	.581	2.371	.107
	ACCA	12	4.02	.53	Within Groups	9.065	37	.245		
	None	5	4.24	.57	Total	10.227	39			
Honesty	ICAG	23	4.51	.50	Between Groups	1.423	2	.712	2.101	.137
	ACCA	12	4.08	.73	Within Groups	12.532	37	.339		
	None	5	4.40	.55	Total	13.956	39			
Courage	ICAG	23	4.38	.65	Between Groups	.589	2	.294	.679	.514
	ACCA	12	4.11	.62	Within Groups	16.053	37	.434		
	None	5	4.20	.77	Total	16.642	39			
Wisdom	ICAG	23	4.25	.51	Between Groups	.808	2	.404	1.222	.306
	ACCA	12	3.94	.57	Within Groups	12.233	37	.331		
	None	5	4.00	.85	Total	13.042	39			
Responsibility	ICAG	23	4.46	.51	Between Groups	1.801	2	.900	2.902	.068
	ACCA	12	3.98	.67	Within Groups	11.479	37	.310		
	None	5	4.32	.44	Total	13.280	39			

The results in Table 12 indicate no statistically significant differences in the overall integrity levels of internal auditors based on professional qualification [$F(2, 37) = 2.371, p = .107$], although the ICAG group ($M = 4.41, SD = .46$) reported noticeably higher integrity levels than those with ACCA ($M = 4.02, SD = .53$) and those without any professional qualification ($M = 4.24, SD = .57$). This suggests a potential trend in which professional qualification may influence perceptions of integrity, even though the results are not statistically significant. Similarly, for the sub-dimensions of integrity, no significant differences were observed. Honesty did not differ significantly among the groups [$F(2, 37) = 2.101, p = .137$], though again, the ICAG group ($M = 4.51, SD = .50$) reported higher levels compared to ACCA ($M = 4.08, SD = .73$) and those without a qualification ($M = 4.40, SD = .55$). For courage, the results were also not significant [$F(2, 37) = .679, p = .514$], indicating consistency across all groups, with mean scores ranging from 4.11 to 4.38. In terms of wisdom, no statistically significant differences were observed across the qualification categories [$F(2, 37) = 1.222, p = .306$], although the ICAG group again reported slightly higher scores ($M = 4.25, SD = .51$) than their counterparts. Lastly, responsibility approached statistical significance [$F(2, 37) = 2.902, p = .068$], suggesting that ICAG members ($M = 4.46, SD = .51$) may perceive themselves as more responsible than ACCA holders ($M = 3.98, SD = .67$) or those without a qualification ($M = 4.32, SD = .44$), though the difference does not meet the conventional significance threshold. Overall, while the results show a consistent pattern of higher integrity-related scores among ICAG-qualified auditors, none of the observed differences were statistically significant.

4.10 Difference in the Ethical Level of Internal Auditors Based on Gender

The purpose of Research Objective 8 and Hypothesis 5 were to assess the difference in the ethical level of internal auditors based on gender. The dependent variables include Ethics and its dimensions (Objectivity, Confidentiality, Professional Behaviour and Public Interest), while the independent variable is gender, consisting of male and female students. An independent sample t-test, at a significance level of .05, was employed to test whether there are significant differences between male and female internal auditors in terms of ethics and its dimensions. This statistical tool was chosen because the independent variable (i.e., gender) consists of two categories, and the dependent variables (i.e., Ethics and its dimensions) were normally distributed. The results are presented in Table 13.

**Table 13***Difference in the Ethical Level of Internal Auditors Based on Gender*

Variable	Gender	N	Mean	SD	t	df	Sig.
Ethics	Male	27	4.32	.61	-.507	38	.615
	Female	13	4.42	.59			
Objectivity	Male	27	4.35	.72	-.800	38	.429
	Female	13	4.54	.63			
Confidentiality	Male	27	4.41	.92	-.055	38	.956
	Female	13	4.42	.65			
Professional Behaviour	Male	27	4.41	.59	-.698	38	.489
	Female	13	4.54	.48			
Public Interest	Male	27	4.11	.90	-.264	38	.793
	Female	13	4.19	.93			

The results in Table 13 reveal no statistically significant differences in the ethical level of internal auditors based on gender. For overall ethics, male auditors ($M = 4.32$, $SD = .61$) and female auditors ($M = 4.42$, $SD = .59$) reported comparable levels of ethical behaviour, with the difference not reaching statistical significance [$t(38) = -.507$, $p = .615$]. This indicates that both male and female internal auditors perceive themselves as similarly ethical in their professional conduct. Across the specific dimensions of ethics, the pattern remained consistent. For objectivity, males ($M = 4.35$, $SD = .72$) and females ($M = 4.54$, $SD = .63$) did not differ significantly [$t(38) = -0.800$, $p = .429$]. Confidentiality was rated almost identically by both groups, with males scoring $M = 4.41$ ($SD = .92$) and females $M = 4.42$ ($SD = .65$) [$t(38) = -.055$, $p = .956$]. Similarly, no significant gender difference was found in professional behaviour [$t(38) = -.698$, $p = .489$], where males reported $M = 4.41$ ($SD = .59$) and females $M = 4.54$ ($SD = .48$). Lastly, perceptions of prioritizing the public interest were also statistically similar, with males ($M = 4.11$, $SD = .90$) and females ($M = 4.19$, $SD = .93$) showing no meaningful difference [$t(38) = -.264$, $p = .793$]. Overall, these findings suggest that gender does not significantly influence internal auditors' ethical standards or their adherence to ethical dimensions in practice.

4.11 Difference in the Ethical Level of Internal Auditors Based on Professional Qualification

The focus of Research Objective 9 and Hypothesis 6 were to examine the difference in the ethical level of internal auditors based on professional qualification. One-Way ANOVA, at a significance level of .05, was used to test whether there is a significant difference among the professional qualification groups of internal auditors in terms of ethics and its dimensions (Objectivity, Confidentiality, Professional Behaviour and Public Interest). This statistical tool was employed because the independent variable (i.e., professional qualification) consists of three groups (ICAG, ACCA, and None), while the dependent variables (i.e., Ethics and its dimensions) are normally distributed. The results are presented in Table 14.

Table 14*Difference in the Ethical Level of Internal Auditors Based on Professional Qualification*

Variable	Age Group	N	Mean	SD	ANOVA	Sum of Squares	df	Mean Square	F	Sig.
Ethics	ICAG	23	4.47	.60	Between Groups	.825	2	.413	1.156	.326
	ACCA	12	4.16	.55	Within Groups	13.203	37	.357		
	None	5	4.28	.71	Total	14.028	39			
Objectivity	ICAG	23	4.52	.78	Between Groups	.775	2	.388	.812	.452
	ACCA	12	4.21	.54	Within Groups	17.668	37	.478		
	None	5	4.40	.55	Total	18.444	39			
Confidentiality	ICAG	23	4.48	.89	Between Groups	.588	2	.294	.413	.665
	ACCA	12	4.42	.67	Within Groups	26.356	37	.712		
	None	5	4.10	1.02	Total	26.944	39			
Professional Behaviour	ICAG	23	4.54	.58	Between Groups	.477	2	.238	.772	.469
	ACCA	12	4.33	.44	Within Groups	11.423	37	.309		
	None	5	4.30	.67	Total	11.900	39			
Public Interest	ICAG	23	4.35	.65	Between Groups	3.810	2	1.905	2.546	.092
	ACCA	12	3.67	1.23	Within Groups	27.684	37	.748		
	None	5	4.30	.67	Total	31.494	39			



The results in Table 14 show that there were no statistically significant differences in the ethical level of internal auditors based on their professional qualifications. For the overall ethics score, although internal auditors with ICAG qualifications reported slightly higher mean scores ($M = 4.47$, $SD = .60$) than those with ACCA ($M = 4.16$, $SD = .55$) or no professional qualification ($M = 4.28$, $SD = .71$), the difference was not statistically significant [$F(2, 37) = 1.156$, $p = .326$]. A similar pattern was observed across the various dimensions of ethics. For objectivity, mean scores ranged from 4.21 (ACCA) to 4.52 (ICAG), but the differences did not reach significance [$F(2, 37) = .812$, $p = .452$]. For confidentiality, although ICAG holders again reported slightly higher scores ($M = 4.48$, $SD = .89$), the variation across groups was not statistically significant [$F(2, 37) = .413$, $p = .665$]. Regarding professional behaviour, the differences among ICAG ($M = 4.54$, $SD = .58$), ACCA ($M = 4.33$, $SD = .44$), and those with no qualifications ($M = 4.30$, $SD = .67$) were also not significant [$F(2, 37) = 0.772$, $p = .469$]. Lastly, although the mean score for public interest was notably lower among ACCA holders ($M = 3.67$, $SD = 1.23$) compared to ICAG ($M = 4.35$, $SD = .65$) and those with no qualifications ($M = 4.30$, $SD = .67$), this difference approached but did not reach statistical significance [$F(2, 37) = 2.546$, $p = .092$]. Overall, the findings suggest that internal auditors' ethical perceptions do not significantly differ based on their professional qualifications.

4.12 Discussion

This study examined the levels of internal auditors' competence, integrity and ethics. The results indicated that internal auditors perceive themselves to possess high levels across all the three attributes, with the highest being ethics, followed by integrity and competence. These results show that the internal auditing profession typically adheres closely to ethical standards and professional norms. According to empirical research by Alias et al. (2019) and Zhang et al. (2024), internal auditors in Malaysian government-linked companies and other corporate settings showed strong capabilities in audit engagements and ethical risk detection, which is consistent with the high level of perceived competence. The high integrity levels identified in this study also align with the findings of Campion et al. (2011), who discovered that integrity was a key element of auditor professionalism. Regarding ethical standards, the present findings corroborate those of Alias et al. (2019), who observed that internal auditors were generally ethically conscious and compliant.

Also, the study also examined whether differences exist in the perceived levels of internal auditors' integrity, competence and ethics based on gender and professional qualification with the aid of six hypotheses. The results from the six hypotheses indicated no statistically significant differences across gender and professional qualification. This suggests that internal auditors maintain consistent ethical, competence and integrity levels irrespective of their gender and professional certification. These results are consistent with those of Amondarain et al. (2023), who discovered no discernible gender variations in respondents' perceptions regarding the ethical image of auditors, with both male and female respondents expressing comparable opinions. The results of this study indicate that internal auditors have a balanced self-perception, despite the fact that Zakrisson (2023) and Amondarain et al. (2023) observed that women tend to assess competence in their occupational positions higher than males. In a similar vein, although Ishola et al. (2018) found that qualified professionals performed better on the job, our results imply that professional qualifications may not substantially alter opinions about competence, ethics, or integrity in internal auditing. Further evidence for this comes from Alrabba (2016) and Ratna and Anisykurlillah (2020), who contend that integrity and ethical behaviour are influenced more likely by contextual or individual variables than just professional qualification.

V. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

In conclusion, this study highlights the high levels of competence, integrity, and ethical standards perceived by internal auditors in the execution of their professional responsibilities. According to the results, internal auditors believe they are very competent and have a strong commitment to integrity and ethical standards, which reflects a solid internal control environment and professional behaviour. A consistent norm of ethical and professional behaviour across demographic and credential-based lines is shown by the study's finding that there were no statistically significant changes in these perceptions depending on gender or professional qualification. This consistency supports the notion that the fundamental principles underlying internal auditing procedures are firmly embedded and go beyond personal characteristics like gender or certification status.

5.2 Recommendations

In light of these findings, it is recommended that internal audit departments continue to uphold and reinforce high standards of competence, integrity, and ethics through regular professional development and ethics training programmes. Even if the existing levels are admirably high, continuous efforts are necessary to uphold these standards in a corporate and regulatory environment that is always changing. Furthermore, training programmes should prioritise



inclusion and make sure that ethical culture is constantly conveyed and reinforced across all levels of the internal audit function, since views were not substantially influenced by gender or professional qualification. Future research may also look into additional elements that might improve professional performance and ethical behaviour in internal auditing, such as work environment, leadership support, and organisational culture. By taking these actions, internal auditors will maintain their position as dependable consultants and watchdogs in businesses, preserving public confidence and improving audit quality.

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