

# Audit regulation and its relevance for audit quality in Namibia



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**Background:** Corporate scandals have resulted in decreasing levels of confidence in the audit profession so that audit quality is under finer scrutiny.

**Aim:** This article has explored the role external audit regulation in Namibia plays in ensuring the quality of its financial statement audits.

**Setting:** The opinions of audit and regulation experts in Namibia were examined.

**Method:** A mixed-method approach, grounded in an interpretive epistemology, was employed. A correspondence table was developed, using the current literature. The opinions of audit and regulation experts on the effect that external regulations have on audit quality were then sought, using correspondence analysis and interviews.

**Results:** The primary themes of audit quality from a regulatory perspective are maintaining independence and consulting on complex audit matters, the employment of competent members in the engagement team and a culture of quality, driven by firm leadership. It is further revealed that administrative functions play a vital role in contributing to the quality of an audit.

**Conclusion:** A conceptual model, linking regulation and audit quality, is presented. Independence is considered the cornerstone of the audit profession, while regulations are relevant to independence. Regulators may consider introducing measures such as rotation of audit firms or the disclosure of audit tenure in annual financial statements.

**Contribution:** This is the first research of its kind in Namibia. It is helpful to regulators and audit practitioners because it allows them to gain a better understanding of whether the current regulations adequately enhance audit quality, instead of being perceived as a 'tick-box' exercise.

**Keywords:** audit quality; external regulation; International Standard on Quality Control 1 (ISQC 1); Namibia; Public Accountants' and Auditors' Board (PAAB); Institute of Chartered Accountants of Namibia (ICAN).

## Introduction

The Namibian audit profession has been in existence for over 70 years. The key players are the Institute of Chartered Accountants in Namibia (ICAN), established in October 1990 (ICAN 2018), and the Public Accountants' and Auditors' Board (PAAB). The PAAB was established by the *Public Accountants' and Auditors' Act* of 1951, as amended in 1990 (International Federation of Accountants [IFAC] 2020). The ICAN focuses its efforts on supporting PAAB and ICAN members with the implementation of control standards to ensure a high level of audit quality (IFAC 2020).

The PAAB has assumed the responsibility of carrying out quality assurance reviews and recognises the importance of quality assurance. The audit function is evolving from a technical process to one from which clients expect value-added insights based on the auditor's understanding of the auditee and the industry in which it operates (Barac et al. 2016). Quality assurance is also becoming increasingly important in light of corporate scandals and audit failures. This has given rise to increased scrutiny of financial reports and, following that, audit regulation and quality (Hay 2015; Knechel 2016).

Corporate scandals have resulted in decreasing levels of confidence in the audit profession (Odendaal & De Jager 2008). These scandals have led to serious concerns being raised about auditor independence and audit quality in general (Firth, Rui & Wu 2012). The quality of the audit function, as a means to prevent or detect corporate fraud, is being questioned by users of financial statements (Harber 2018).

In response, regulators have begun to play a more active monitoring role. They are questioning whether external auditors are, in fact, independent of their clients and are performing audit engagements to the required standard. Consequently, there has been a proliferation of rules, regulations and other prescriptions (Daniels & Booker 2011), aimed at improving minimum levels of audit quality (Association of Chartered Certified Accountants [ACCA] 2010; Barac et al. 2016; Holm & Zaman 2019; Humphrey et al. 2011).

A significant amount of prior audit quality research assesses the relationship between regulatory developments and audit quality proxies (Humphrey 2008), but research dealing with developing economies, especially those in Africa, is limited (Abozaid, Elshaabany & Diab 2020; Dikuua et al. 2018). At the same time, much of the literature on the quality of audits is concerned with the inferential testing of quality surrogates, rather than direct engagement with key stakeholders (Humphrey 2008; Hussein & MohdHanefah 2013). This article addresses this particular limitation by providing primary empirical evidence of how audit practitioners interpret and react to regulation in practical settings, using a correspondence analysis complemented by semi-structured interviews. The main objective of the article is to explore the role external audit regulation in Namibia plays in ensuring the quality of its financial statement audits. We seek to answer the question: How do external regulatory measures impact audit quality?

Rather than relying on broad measures of audit quality, typically applied in quantitative studies (such as changes in earnings or financial reporting quality), the provisions of ISQC 1 (International Standard on Quality Control 1: Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Services Engagements) are mobilised to describe audit quality. This allows for a more detailed account of how external regulation contributes to improve the audit quality to be provided. The elements, or features, of audit quality per ISQC 1, serve as column headings in the correspondence analysis. Certain steps taken by PAAB and ICAN to bolster the quality of audit engagements are row headings. A sample of experts completes the resulting correspondence table based on their views of those aspects of ISQC 1 aided, or enhanced, by the Namibian audit regulation.

The remainder of this article is structured as follows: Section 2 presents the literature on audit quality in terms of ISQC 1 and on audit regulation in Namibia. This is followed by the description of the data and method in Section 3 and the presentation and discussion of the results of the correspondence analysis and interviews in Section 4. The article is then concluded in Section 5.

## Literature review

The prior research focuses on quality proxies, rather than on specific policies, systems and practices (Humphrey 2008) that may contribute to better quality audits. Accordingly, in 2013,

the Public Company Accounting Oversight Board (PCAOB) embarked on a project to develop audit quality measures. They found that there are two types of audit quality indicators: output-based and input-based indicators. Examples of the former include the number of frauds detected and financial restatements required. Instances of the latter are processes and procedures adopted to detect fraud and the average experience level of staff assigned to audit engagements. An alternate approach relies on the guidance provided by existing professional standards to examine the processes and systems that must be in place to support the performance of a high-quality audit.

## International Standard on Quality Control 1 elements of audit quality

International Standard on Quality Control 1 has been used previously in audit research. It has been applied in over 50 jurisdictions and has been subject to extensive review (Boolaky 2012; Maroun 2014; Ndaba, Harber & Maroun 2021). As a result, ISQC 1 forms an appropriate basis for this article. The elements of audit quality are discussed below and form the row headings in the correspondence analysis to test the association between quality indicators and the audit regulatory features.

### Firm leadership and a culture of quality

The leadership of any firm is responsible for promoting an internal culture of quality (International Auditing and Assurance Standards Board [IAASB] 2009a). The International Ethics Standards Board for Accountants (IESBA) reiterates that the leadership of a firm should promote compliance with the fundamental principles as outlined in the International Code of Ethics for Professional Accountants. It also sets out the expectation that engagement team members will act in the public interest and emphasises the importance of ethical behaviour (IESBA 2021).

A quality-oriented internal culture emphasises the need to have policies and procedures in place to meet the requirement to perform work complying with the relevant professional standards and to issue appropriate reports (IAASB 2009). The first quality element is:

- **Q1:** Establishing policies and procedures promoting a culture of quality, driven by firm leaders and strengthened by enhanced supervision.

### Independence

Auditor independence is a key indicator of audit quality (PCAOB 2013). This sentiment is echoed by the IAASB which identifies independence as a core requirement for ensuring high ethical standards and effective firm leadership (IAASB 2009). Codes on corporate governance, such as King-IV in South Africa, endorse this view with one of the core objectives of good governance being the promotion of a culture of ethics and independence in order for organisations to deliver desired outcomes (Institute of Directors in Southern Africa [IoD] 2016). Researchers further argue that

auditors who have an economic interest in their clients will lack independence and will be less likely to report any irregularities, thereby reducing audit quality (Daniels & Booker 2011).

Independence comes in two forms, namely 'in mind' and 'in appearance' (IESBA 2021). The former is:

[T]he state of mind that permits the expression of a conclusion without being affected by influences that compromise professional judgement, thereby allowing an individual to act with integrity, and exercise objectivity and professional scepticism. (p. 31)

Independence in appearance is concerned with:

[T]he avoidance of facts and circumstances that are so significant that a reasonable and informed third party would be likely to conclude that a firm's, or an audit team member's, integrity, objectivity or professional scepticism has been compromised. (IESBA 2021, p. 32)

Auditors' independence contributes to achieving trust in the audit profession (Power 2003). Regulators have introduced measures, *inter alia* mandatory rotation of audit firms, in an attempt to strengthen the independence of auditors (Harber 2018).

Based on the above, the following statement has been included in the correspondence table:

- **Q2:** Maintaining independence of mind and appearance in accordance with relevant ethical requirements.

#### Client acceptance and continuance procedures

Audit firms are required to adopt client and engagement acceptance procedures to ensure compliance with the fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour (IESBA 2021). Client acceptance procedures have also been used in prior research as an output measure of audit quality (Francis 2011). Based on the importance of client acceptance and continuance procedures, the following statement has been included in the correspondence table:

- **Q3:** Ensuring ethical compliance, including client acceptance and continuance procedures.

#### Competence of engagement team members

Under ISQC 1, audit firms are required to establish policies and procedures designed to provide the audit firm with reasonable assurance that it has sufficient personnel with the required competence, capabilities and commitment to ethical principles (IAASB 2009). This notion of competence is further supported by codes on corporate governance stating that effective leadership is exemplified by competence (IoD 2016). Competence and due care, evidenced by attaining and maintaining knowledge and skill at the level required to ensure professional service, are 'fundamental principles' characterising auditors and high-quality engagements (IESBA 2021). Accordingly, the following statement is included in the correspondence table:

- **Q4:** Awareness of the importance of sufficient members in the engagement team with the required competence and capability to apply and comply with the International Standards on Auditing (ISAs).

#### Consultation

Alongside independence and competence requirements, effective monitoring, supervision and consultation are critical, especially concerning difficult or contentious issues (IAASB 2009). The 'collective experience and technical expertise of the firm' at the appropriate level on complex or controversial and ethical issues strengthen the overall audit process and firm culture (IAASB 2009:26–27):

- **Q5:** Ensuring that appropriate consultation on complex audit matters takes place; that differences in opinion are resolved and that consultation conclusions are implemented.

#### Review and monitoring processes

Consultation in the form of second partner and other specialist reviews may bolster audit quality by safeguarding independence and ensuring that complex issues are not overlooked or misinterpreted during engagements (Barac et al. 2016). International Standard on Quality Control 1 emphasises the importance of continual improvement, internal quality control and sound documentation standards (IAASB 2009). Ensuring audits are completed and documented timeously is also key to sound audit quality:

- **Q6:** Appointing engagement quality control reviewers to enhance the overall quality of the engagement.
- **Q7:** Ensuring that quality engagement files are completed on a timely basis and that all aspects of the engagement have been thoroughly documented.
- **Q8:** Ensuring that a firm establishes a monitoring process of its internal quality control policies and procedures driving continual improvement.

#### Namibian regulatory measures

The PAAB is charged with the legal responsibility of monitoring and maintaining the quality of services provided by registered auditors (IFAC 2020). External regulatory measures applicable in the Namibian audit environment are summarised below. They are labelled R1 to R8 and are included as column headings in the correspondence table (Table 1).

#### Training

The PAAB regulate the training and registration of accountants, as well as the contracts of training officers (PAAB 2022a). Training regulations include core administrative experience, assessment and disciplinary processes. The training regulations specify the selection of people with high intellectual ability, an increased focus on professional values, ethics and business acumen, as well as a balance of compulsory, elective and residual skills development (PAAB 2022a).

The content of the PAAB's training programme covers accounting, external reporting and pervasive skills. Pervasive skills cover professional conduct, management and

TABLE 1: Correspondence table.

Controls and measures		Namibian regulatory measures								
	R1	R2	R3	R4	R5	R6	R7	R8		
Quality trait as per ISQC 1	The registration and administration of training officers and training contracts, respectively, are performed by the PAAB.	Training offices are re-accredited on a regular basis to ensure that educational programmes enforced are distinguished by quality in training and practical experience through the integrated application of knowledge, skill and professional values.	Quality Assurance Reviews are performed on engagement partners' audit files by the PAAB on a regular basis and this process is overseen by the PAAB Quality Assurance Committee.	Auditors are required to complete a mandatory 18-month Audit Development Programme to be registered by the PAAB as a Registered Auditor.	Every ADP candidate is required to complete a portfolio of evidence, by which certain competencies have to be demonstrated which are evaluated by the PAAB Audit Development Committee.	R6: Allegations of improper conduct are investigated, in accordance with the PAAB Disciplinary Rules and the IFAC Code of Ethics for Professional Accountants, by the PAAB Investigations Committee.	Holders of the Chartered Accountant (Namibia) designation and Registered Accountants and Auditors, are required to demonstrate continued development of professional knowledge and skill which is monitored by the ICAN.	Members who do not meet the CPD requirements have to provide an achievable plan of remedial action to the ICAN Secretariat. Failure of remedial action, or failure to carry out the plan provided to the ICAN Secretariat, may result in the ultimate revoking of the CA(NAM) designation.		
Q1: Establishing policies and procedures promoting a culture of quality, driven by firm leaders and strengthened by enhanced supervision.	-	-	-	-	-	-	-	-	-	-
Q2: Maintaining independence of mind and appearance in accordance with relevant ethical requirements.	-	-	-	-	-	-	-	-	-	-
Q3: Ensuring ethical compliance, including client acceptance and continuance procedures.	-	-	-	-	-	-	-	-	-	-
Q4: Awareness of the importance of sufficient members in the engagement team with the required competence and capability to apply and comply with the ISAs.	-	-	-	-	-	-	-	-	-	-
Q5: Ensuring that appropriate consultation on complex audit matters takes place; that differences in opinion are resolved and that consultation conclusions are implemented.	-	-	-	-	-	-	-	-	-	-
Q6: Appointing engagement quality control reviewers to enhance the overall quality of the engagement.	-	-	-	-	-	-	-	-	-	-
Q7: Ensuring that quality engagement files are completed on a timely basis and that all aspects of the engagement have been thoroughly documented.	-	-	-	-	-	-	-	-	-	-
Q8: Ensuring that a firm establishes a monitoring process of its internal quality control policies and procedures driving continual improvement.	-	-	-	-	-	-	-	-	-	-

Q, quality element; R, regulatory measures.

leadership, personal attributes and information technology (PAAB 2022a). These are provided to trainees through a combination of formal education and job experience (PAAB 2022a). With these points in mind, the following regulatory measures designed to drive better quality audits are identified:

- **R1:** The registration and administration of training officers and contracts, respectively, are performed by the PAAB.
- **R2:** Training offices are re-accredited on a regular basis to ensure that the educational programmes enforced are distinguished by quality in training and practical experience through the integrated application of knowledge, skill and professional values.

Practice reviews are conducted in conjunction with the PAAB training regulations; accordingly, the correspondence table includes:

- **R3:** Quality Assurance Reviews are performed on engagement partners' audit files by the PAAB on a regular basis and this process is overseen by the PAAB Quality Assurance Committee.

The Audit Development Programme (ADP) is a period of specialisation for professional accountants who wish to become Registered Auditors and Accountants (RAA) in Namibia (PAAB 2022b).

The ADP allows candidates to gain exposure to a broad range of complex matters faced by RAAs in practice and helps them to develop professional competence and judgement, ethical values, as well as lifelong learning skills (PAAB 2022b). The candidates are exposed to tasks that, over time, increase in complexity and allow candidates to take on more responsibility for the aspects of an audit engagement that present a greater risk to the firm, the clients and other stakeholders (PAAB 2022b). Once an RAA, these accountants are expected to continue refining their auditing and managing skills throughout their careers:

- **R4:** Auditors are required to complete a mandatory 18-month ADP to be registered by the PAAB as a Registered Auditor.
- **R5:** Every ADP candidate is required to complete a portfolio of evidence, by which certain competencies have to be demonstrated which are evaluated by the PAAB Audit Development Committee.

Continuing development of professional knowledge and skill has distinct benefits for the individual professional accountant in maintaining a high level of technical competence, developing new areas of expertise and increasing career options, job satisfaction and client satisfaction. Continuous Professional Development (CPD) can be structured or unstructured (ICAN 2018). Structured learning includes courses presented by educational institutions, member bodies or employers, individual study programmes, participation in conferences, NAM briefing sessions or discussion groups and service as a member of a

technical committee of a professional body or firm (ICAN 2018). Members' compliance with CPD requirements is monitored by ICAN. Non-compliant members must present plans to become compliant to the ICAN Secretariate or risk being removed from the register of members (ICAN 2018). The regulatory measures concerning this, are:

- **R7:** Holders of the Chartered Accountant (Namibia) designation (CA[NAM]) and Registered Accountants and Auditors, are required to demonstrate continued development of professional knowledge and skill which is monitored by the ICAN.
- **R8:** Members who do not meet the CPD requirements have to provide an achievable plan of remedial action to the ICAN Secretariat. Failure to provide a plan of remedial action, or failure to carry out the plan provided to the ICAN Secretariat, may result in the ultimate revoking of the CA(NAM) designation.

### Peer review and inspection

Peer reviews, together with mandatory inspections, were introduced as a means to re-establish the trust in the audit function by ensuring an improvement in audit quality (Löhlein 2016). There are opposing views on whether or not external quality control contributes positively to the improvement of audit quality. In the 6 years of inspection conducted by the PCAOB, which were underway in 2012, it remained unclear whether the inspection process benefited audit quality (Church & Shefchik 2012).

In Namibia, the PAAB is responsible for conducting practice reviews to build local capacity. These reviews are focused on technical, as well as ethical issues. In addition, one of the PAAB's vital mandates is to investigate, through the PAAB Investigations Committee, any allegations of improper conduct that are reported (PAAB 2020):

- **R6:** Allegations of improper conduct are investigated, in accordance with the PAAB Disciplinary Rules and the IFAC Code of Ethics for Professional Accountants, by the PAAB Investigations Committee.

The next section presents the method used and demonstrates how the above regulatory and quality elements were used in the research.

## Data and method

A mixed-methods approach, grounded in an interpretive epistemology, was employed to examine the association between audit regulatory features and audit quality in Namibia. The opinions of audit experts on the effect external regulations have on audit quality are explored, using correspondence analysis, instead of testing whether a causal relationship exists between the two 'variables' (Maroun 2014). Correspondence analysis has become popular in research and is appropriate for this article because it is exploratory in nature (Kudrats, Money & Hair Jr 2014).

The aim of this article is not to quantify audit quality but to gain an understanding of the association between external

regulation and audit quality (Maroun 2014). Data were collected in two phases: Phase 1 used correspondence analysis to aggregate and summarise the perceptions of audit experts in Namibia. Phase 2 used the correspondence plot as a basis for semi-structured interviews with five audit experts to further explore the association between external regulation and audit quality to enhance the results from the correspondence analysis.

### Correspondence analysis

The purpose of using a correspondence analysis is to explore the relationship between the ISQC 1 elements of audit quality and external regulatory measures. While correspondence analysis does not generate empirical results (Kudlats et al. 2014; Ram et al. 2016; Ram 2018), it does provide an opportunity for insight to be derived from how participants correlate audit quality and regulatory measures.

In this correspondence table, key external regulations constitute column headings, while ISQC 1 audit quality elements constitute row headings. The columns are labelled 'R1'-'R8' and the rows are labelled 'Q1'-'Q8' resulting in an 8-by-8 correspondence table (Table 1) as explained in the literature review. The table was piloted with researchers at a Namibian university to identify any validity and suitability weaknesses (Ram et al. 2016; Ram 2018).

The fact that audit experts only were used in this article presents a potential for bias. However, it ensures that only knowledgeable professionals are engaged who add to the internal validity of the findings (Maroun 2014). Surveying both the setters of regulation and those subjected to the regulations mitigates this risk. The participants provide insight into the correlation between Namibian regulatory measures and audit quality in completing the correspondence table.

### Data collection

Purposeful selection of Namibian audit experts and a small sample size enhance the quality of the research findings (Maroun 2017; Maroun, Turner & Sartorius 2011; Ram 2018) by ensuring that only participants with extensive audit experience and knowledge of ISQC 1 and Namibian regulation are engaged. This also ensures that the day-to-day audit experiences of the participants are incorporated in the research. Seventy-three potential participants were engaged while 42 responded. This response rate may appear low relative to international studies on audit quality but reflects the size of the Namibian capital market, as well as the local accounting and auditing profession.

For the correspondence analysis, there is a direct relationship between the sample size and the number of row and column headings. Studies with comparable correspondence tables (in terms of the number of row and column points) rely on samples consistent with those proposed by this article (Kudlats et al. 2014; Ram et al. 2016; Ram 2018).

The PAAB and ICAN helped to distribute the correspondence table to potential participants. A covering letter informed them of the purpose and nature of the research. It also included instructions on how to complete the correspondence analysis. The participants were asked to mark an 'X' in cells where the ISQC 1 audit quality elements (rows) correspond positively with the respective external regulation (columns).

### Data analysis

Descriptive statistics and a correlation matrix were generated from the correspondence table (Kudlats et al. 2014). The results were accumulated into a single frequency table and a two-variable scatterplot (Bendixen 1996). Column headings (quality indicators) were used to label the axes in the final correspondence plot. Namibian regulatory measures were then positioned based on their size, correlation with the axes and inertial contribution. This is explained in more detail below (see Figure 1).

The approach of Kudlats et al. (2014), was followed. Step one is to determine the strength of associations between ISQC 1 quality traits and regulatory measures. This was measured through the inertial contribution that each point makes to the total inertia of the model. Inertia is described as the key measure of association within the plot (Ram 2018), which is developed to position each of the regulatory measures with respect to the four categories of quality traits.

Step two involves determining a suitable number of dimensions. In general, two dimensions on the correspondence plot are acceptable because of the complexity of analysing plots with three or more dimensions (Ram 2018). Where a two-dimensional solution accounts for a significant portion of the total inertia of the model, two dimensions are considered appropriate (Bendixen 1996).

Step three is to interpret the dimensional representation (Ram 2018). Based on the descriptive statistics, the quality traits (row headings) and regulatory measures (column headings) that are statistically significant were determined and displayed on the correspondence plot. The total inertia

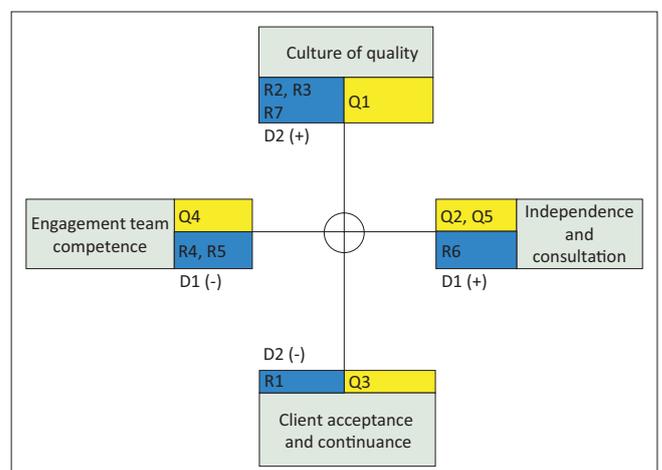


FIGURE 1: Correspondence plot.

of the model is allocated independently, but equally, to each quality trait and regulatory measure by dividing the total inertia of 100% by the number of points. Where the inertial contribution of a quality trait or regulatory measure exceeds the average inertia per trait and measure, it is considered statistically significant (Kudrats et al. 2014; Ram 2018).

Step four involves assigning a dimensional reference and the researcher placed each significant trait and measure on the plot, based on the co-ordinates of each point. The sign of the co-ordinate (positive or negative) provides the necessary evidence for whether a significant regulatory measure is to be placed on the positive or negative side of the relevant  $x$ - or  $y$ -axis. For each placement, the grouping of significant traits is analysed for interconnections and, based on these findings, each of the four-axis placements is named.

The row and column points are then shown on the same graphical display to allow for easy visualisation of the associations (Doey & Kurta 2011). A Chi-square statistic is used to measure the distance between points on the scatterplot and, in turn, measure the association among variables (Bendixen 1996; Doey & Kurta 2011).

To aid further analysis of the results from the correspondence analysis, a limited number of semi-structured interviews was conducted with the respondents.

## Interviews

The interviews were semi-structured and flexible to ensure a rich data set was obtained, while staying focused (Kudrats et al. 2014; Maroun 2014). The correspondence analysis technique was explained to the interviewees at the beginning of the interviews. Any misunderstandings or misinterpretations were resolved verbally after which the correspondence plot was provided. The interviewees were then allowed to interpret the plot and provide their views on the relevance of Namibian regulation to audit quality. To ensure no ambiguity and prevent rehearsed responses, respondents were asked to explain certain concepts in their own words or to provide different perspectives on the evidence before them (Alvesson 2003). A total of five interviews were conducted, which the researcher concluded to be satisfactory as saturation was reached. Participants with at least 10 years of experience in the audit profession were selected for the interviews. Their views complement the initial analysis of the correspondence plot and further incorporate the lived experiences of auditors in relation to the external regulations and audit quality.

To generate and organise findings, the responses were grouped according to the four axes (positive and negative  $x$ - and  $y$ -axes) identified in the first phase of data collection. Using these pre-defined parameters did not detract from the exploratory nature of the research and allowed for the methodical analysis of the responses (Maroun & Atkins 2014). The intention of the semi-structured interviews was not to obtain consensus amongst respondents.

At the start of the interviews, the participants were reminded of the nature and purpose of the research, and the fact that there are no correct or incorrect answers. The researcher provided the participant with the correspondence plot (Figure 1) and an explanation of the correspondence analysis technique. Details of the interviewees are provided in Table 2.

Interviewees' responses were coded on a line-by-line basis by first allocating them to the respective initial correspondence analysis regulatory measures and quality traits. The responses were then categorised into those supporting and those opposing the correspondence plot results.

## Validity and reliability

An application for full ethical approval was made to the School Committee and ethics consent was received in 2019. The ethics approval number is CACCN/1188. Informed consent in writing was acquired at all points in the research. All data were kept on a secured laptop and were not provided to any person. To increase face validity (Leedy & Ormrod 2014), the research supervisors were consulted and the correspondence table was piloted with auditing academics at the researcher's home university.

Reliability was strengthened by the fact that the mixed-method adopted in the article, allowed the researcher to triangulate the findings from the literature, the correspondence analysis and the semi-structured interviews. The coding, which was developed in the correspondence analysis tool, is grounded in prior literature, also limiting subjectivity and ensuring thorough and consistent analysis of the responses.

The use of correspondence analysis does, however, present certain limitations. Correspondence analysis is an exploratory and descriptive tool (Kudrats et al. 2014) and can, as a result, not be used for hypothesis testing, or providing a quantitative conclusion (Maroun 2014). Despite these limitations, correspondence analysis was considered appropriate as it is a quantitative methodological tool which enabled the researcher to improve the interpretation of the data and communicate the findings more effectively using a visual mapping approach (Kudrats et al. 2014).

## Ethical considerations

The School of Accountancy ethics committee approved the study. This Committee forms part of the Research Ethics Committee of the faculty of Commerce, Law and Management, which forms part of the Human Research

**TABLE 2:** Details of interviewees.

Participant code	Experience (number of years)	Role in the organisation	Size of audit firm	Length of interview
P1	22	Audit partner	Big 4	1 h, 15 min
P2	13	Audit partner	Small	1 h
P3	15	Audit partner	Medium	n/a – email
P4	10	Audit partner	Small	n/a – email
P5	17	Audit partner	Big 4	1 h

Ethics Committee (HREC) (non-medical) of the University of the Witwatersrand, Johannesburg (CACCN/1188).

## Results

Table 3 provides the preliminary descriptive statistics. The first two dimensions, which are the  $x$ - and  $y$ -axes in the final correspondence plot, account for 72.2% of the total inertia and contributed to most of the exploratory potential of the graphical plot. The model's inertial contribution is consistent with that reported by previous studies using this method (Kudrats et al. 2014; Maroun 2014; Ram 2018). At 49 degrees of freedom, the Chi-square statistic of 232.285 was significant at the 1% level ( $p < 0.01$ ). In other words, it was more than the critical value using a 99% confidence level. This indicator provides evidence that there are strong associations between the rows and the columns in the two-variable solution.

### The correspondence plot

Only regulatory measures (Rs) and quality traits, as per ISQC 1 (Qs), that make an above average inertial contribution were included in the analysis for ease of interpretation. Statistically significant points were those with inertial contributions exceeding 12.5% (100% inertia divided by the 8 regulatory measures and 8 quality traits, respectively). The researchers chose to round this percentage down to 10%. All the statistically significant points have been included in the correspondence plot (Figure 1).

Each row point's sign and dimension of significance were used to position the row points on the positive or negative  $x$ - and  $y$ -axes (Bendixen 1996; Kudrats et al. 2014; Maroun 2014). It is important to note that the sign of each row point is not in itself indicative of whether an association is favourable or unfavourable but merely specifies the positioning of each row point on the positive or negative  $x$ - and  $y$ -axes (Maroun 2014; Ram et al. 2016; Ram 2018), relative to different elements of ISQC 1 quality traits.

The statistics in Tables A1 and A2 in the Appendix were generated by STATA and provided the necessary guidance in selecting the significant quality traits to be loaded on the positive or negative  $x$ - and  $y$ -axes.

Table 4 shows the loading of the significant quality traits onto the  $x$ - and  $y$ -axes in the correspondence plot and the interpretively developed name for the axis.

**TABLE 3:** Descriptive statistics for correspondence analysis.

Statistic	Value
Active rows	8
Active columns	8
Number of observations	780
Pearson's $\chi^2$ (49)	232.285
Probability $> \chi^2$	0.000
Total inertia	0.298
Number of dimensions	2
Explained inertia (2 dimensions) (%)	72.2

Similarly, Table 5 shows how the regulatory measures were loaded onto the axes.

### Analysis of the final correspondence plot

The final correspondence plot is presented in Figure 1 with regulatory measures shaded in blue and ISQC 1 quality traits shaded in yellow.

For ease of analysis, discussion points are summarised according to the labels assigned to the  $x$ - and  $y$ -axis in the final correspondence plot. The views of audit experts are also considered through interviews.

### Independence and consultation

The results indicate that there is a strong correlation between the maintenance of independence (Q2), consultation on complex issues (Q5) and the regulatory measure enforcing the investigation of improper conduct (R6). The correlation between independence and investigations of improper conduct supports the notion that external regulation improves independence in appearance, improving credibility. It is also likely to improve independence, as there is a credible risk of sanctions, should there be a lack of independence (ICAN 2014). In other words, independence standing alone is insufficient and requires enforcement.

Independent auditors may also be more likely to consult on complex and potential audit issues. This is because the auditor will not be discouraged from thoroughly investigating the matters to ensure audit quality for fear of risking their self-interests (Maroun & Atkins 2014). Finally, with audit still being a for-profit business, strong investigations over improper conduct may be useful to audit managers that feel the need to justify increased audit expenses to ensure appropriate audit quality. Namibian audit experts took a similar view:

Independence is the cornerstone of the audit profession. Without being independent, the audit practitioner cannot be unbiased and free from any conflict of interest. This has a

**TABLE 4:** Relationship between axes and quality traits.

Axis	Significant ISQC 1 quality traits	Axis name
Positive $x$ -axis (Dimension 1)	<p><b>Q2:</b> Maintaining independence of mind and appearance in accordance with relevant ethical requirements.</p> <p><b>Q5:</b> Ensuring that appropriate consultation on complex audit matters takes place, that differences in opinion are resolved and that consultation conclusions are implemented.</p>	Independence and consultation
Negative $x$ -axis (Dimension 1)	<b>Q4:</b> Awareness of the importance of sufficient members in the engagement team with the required competence and capability to comply with the ISAs.	Engagement team competence
Positive $y$ -axis (Dimension 2)	<b>Q1:</b> Establishing policies and procedures promoting a culture of quality, driven by firm leaders and strengthened by enhanced supervision.	Culture of quality
Negative $y$ -axis (Dimension 2)	<b>Q3:</b> Ensuring ethical compliance, including client acceptance and continuance procedures.	Client acceptance and continuance

**TABLE 5:** Relationship between axes and regulatory measures.

Axis	Significant regulatory measures	Axis name
Positive x-axis (Dimension 1)	<b>R6:</b> Allegations of improper conduct are investigated, in accordance with the PAAB Disciplinary Rules and the IFAC Code of Ethics for Professional Accountants, by the PAAB Investigations Committee.	Independence and consultation
Negative x-axis (Dimension 1)	<b>R4:</b> Auditors are required to complete a mandatory 18-month Audit Development Programme to be registered by the PAAB as a Registered Auditor. <b>R5:</b> Every ADP candidate is required to complete a portfolio of evidence, by which certain competencies have to be demonstrated which are evaluated by the PAAB Audit Development Committee.	Engagement team competence
Positive y-axis (Dimension 2)	<b>R2:</b> Training offices are re-accredited on a regular basis to ensure that educational programmes enforced are distinguished by quality in training and practical experience through the integrated application of knowledge, skill and professional values. <b>R3:</b> Quality Assurance Reviews are performed on engagement partners' audit files by the PAAB on a regular basis and this process is overseen by the PAAB Quality Assurance Committee. <b>R7:</b> Holders of the CA(NAM) designation and Registered Accountants and Auditors, are required to demonstrate continued development of professional knowledge and skill which is monitored by the ICAN.	Culture of quality
Negative y-axis (Dimension 2)	<b>R1:</b> The registration and administration of training officers and training contracts, respectively, are performed by the PAAB.	Client acceptance and continuance

massive impact on the quality of the audit that we deliver. Consultation also plays a critical role in the quality of the audit that we deliver. In fact, the firm's methodology requires that, as a minimum, the engagement team must engage the risk advisory specialists within the firm to confirm whether or not their services are required to assess the client's systems, based on the size and complexity of the entity. The risk advisory specialists, if engaged to provide their services, must be involved in the audit throughout every stage of the audit from the pre-engagement and planning stages right up to the reporting stage. They are regarded as part of the engagement team. (P1, Big 4 firm, Audit partner, 22 years' experience)

The Namibian audit profession has historically been predominantly self-regulated, with external regulation only bolstering the self-regulatory measures already in place. Both independence and consultation have become an inherent part of audit methodologies. The added external regulation, relating to the PAAB's investigations process, highlights the importance of these two quality traits:

Being a smaller audit practice, we do not have the internal structures and resources to employ [full-time] specialists. Also, our clients are normally small to medium-sized. Therefore, in most cases we do not need specialists to be able to issue an audit opinion. Where we do require the services of a specialist, we source someone externally for that specific purpose. (P4, Small firm, Audit partner, 10 years' experience)

The size of the firm plays a role in determining whether it has the necessary resources to employ full-time or ad-hoc internal specialists. As highlighted by DeAngelo (1981), the size of the audit firm is commonly used as an indicator of audit quality. The smaller firms usually do not require specialists' expertise because of the smaller size and level of complexity of their clients. The smaller firms, however, recognise the importance of consultation and, while they may not have the expertise in-house, external consultants are engaged as required. This approach is supported by ISQC 1 which indicates that smaller firms can consult externally by making use of 'advisory services provided by other firms, professional or regulatory bodies or commercial organisations which provide the relevant services' (IAASB, 2009, p. 62):

No matter the size of the audit firm, independence in mind and in appearance is fundamental to the quality of the audit. (P2, Small firm, Audit partner, 13 years' experience)

Independence is a key priority for audit firms of all sizes. The strong association between these two quality traits and the PAAB's investigations process suggests that in Namibia there is a strong motivation to comply with and apply these to ensure that the practitioners conduct themselves appropriately at all times.

#### Engagement team competence

The competence of engagement team members (Q4) appears to be ameliorated by the regulatory requirement for eligible candidates to register for the ADP (R4) and to complete a portfolio of evidence in lieu of demonstrating the appropriate level of competence to register as an RAA in Namibia (R5).

The awareness of the importance of sufficient engagement team members with the required competence and capabilities has been highlighted as a key indicator of audit quality. As highlighted by the IoD (2016), effective leadership is exemplified by competence. The correspondence plot (Figure 1) indicated that there is a strong correlation between the competence of engagement team members and the implementation of the ADP. This demonstrates the positive link between effective leadership and competence. This correlation is further supported by the PAAB's view that the ADP ultimately aims to develop, *inter alia*, the candidate's professional competence, judgement and ethical values (PAAB 2022b):

At first the ADP was not well understood and there was not sufficient buy-in from the manager body to register for the programme. However, since the regulator actively started promoting the programme, visiting audit practices to explain the need for the programme, the process and desired outcomes, there has been a definite increase in registrations. (P5, Big 4 firm, Audit partner, 17 years' experience)

From the above responses, this programme is perceived as positively contributing to the competence of potential RAAs:

I fully agree with correlation between the competence of engagement team members and ADP. However, I would have

expected that the training office accreditation of firms' educational programmes (R2) would also have a strong correlation with competent engagement team members. Our educational programmes are aimed more at developing our trainees and we strongly believe that competence should be developed from the first day the trainee steps into our firm. (P2, Small firm, audit partner, 13 years' experience)

The above respondent highlighted their audit firm's commitment to the development of the trainees, before they came to a point in their careers where they are eligible to register for the ADP. The competence of any potential RAA starts on the first day of a traineeship; this is not necessarily covered by the ADP but starts by adopting a quality training programme.

This association supports the view that a critical factor that contributes to the legitimacy of the audit profession is technical expertise and competence (Power 2003) and that an increased level of competence, expertise and proficiency in an engagement team positively affects audit quality (PCAOB 2013). The strong association between Q4, R4 and R5, highlighted in the correspondence plot, complemented this view, and the responses of the participants further strengthened the association.

### Culture of quality

A culture of quality promoted by the firm leadership (Q1) shows a strong association with several regulatory measures, namely the training office accreditation process (R2), quality assurance reviews (R3), as well as the requirement for holders of the CA(NAM) designation to demonstrate continued development of professional knowledge and skill, which is monitored by the ICAN (R7).

The audit firm leadership or tone at the top plays a pivotal role in the emphasis of the culture of quality, as well as the importance of quality work over financial considerations (PCAOB 2013). This view is supported by the IAASB's stance on firm leadership and the fact that it should promote an internal culture of quality (IAASB, 2009):

The tone at the top drives a firm's culture and personnel management and is quintessential to promoting audit quality. It forms the pinnacle of an audit quality paradigm and is rooted in professional scepticism, objectivity and integrity; however, it also relies on the underlying processes and foundation of operational inputs for support. (PCAOB 2013, p. 13)

The correspondence plot highlights a correlation between the establishment of policies and procedures promoting a culture of quality driven by firm leaders and strengthened by enhanced supervision (Q1), the re-accreditation of training offices to ensure the quality of educational programmes (R2), the quality assurance review process (R3) and the requirement on CA(NAM) holders to demonstrate continued professional development (R7). This result is in line with ICAN's opinion that CPD plays an important role in ensuring that a high level of technical competence is maintained (ICAN 2018).

Maintaining the required CPD hours most definitely contributes to the continuous development of the individual but also bolsters the overall professional skills of the firm and contributes to audit quality. (P5, Big 4 firm, Audit partner, 17 years' experience)

Maintaining the required CPD hours is perceived as a critical part of promoting a culture of quality. This association is strongly supported by respondent P5, as it is perceived to contribute positively to audit quality as a whole:

It was not easy to become a partner and rightly so. It reminds me of the saying 'with great power comes great responsibility'. And our responsibility to establish the appropriate structures, reporting lines, policies and procedures sets the tone of the whole firm. (P2, Small firm, Audit partner, 13 years' experience)

### Client acceptance and continuance

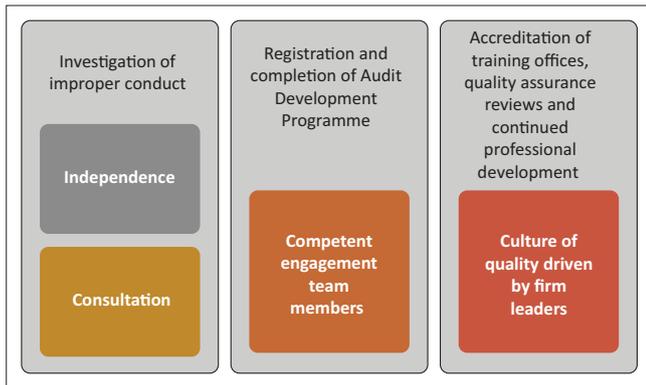
Finally, the plot revealed that the registration and administration of training officers and training contracts (R1) address ethical compliance in terms of client acceptance and continuance procedures (Q3). The firm is responsible for ensuring that policies and procedures for the acceptance and continuance of client relationships and specific engagements are established (IAASB, 2009). Client acceptance procedures have also been used as an output measure of audit quality (Francis 2011). This association may indicate that the underlying concept used for 'client acceptance and continuous procedures' has become entrenched and deployed to other areas. This is considered a positive, as incorporating ethical and reputational considerations into more aspects of the functioning of audit firms is likely to both improve audit quality and rebuild trust in the profession (Knechel 2016). While a slight association can be made between Q3 and R1, the respondents all echo the sentiment that the association is remote, as expressed by a participant:

I don't really understand the correlation between client acceptance and continuance procedures and the registration and administration of training officers and training contracts. (P3, Medium firm, Audit partner, 15 years' experience)

In this case, there is a disconnect between the initial findings from the correspondence plot and the perceptions of the audit experts. As correspondence analysis is an exploratory method, this type of disconnect is not unusual (Kudrats et al. 2014). Correspondence analysis should not be interpreted as providing evidence of quantitatively measuring the effect of the current regulatory measures on audit quality (Maroun 2014). The next section concludes the article.

## Conclusion

This article used interpretive techniques to provide insight into the regulatory environment in Namibia and its effect on audit quality. The article departed from the traditional approach of testing audit quality surrogates. Direct engagement with a sample of regulators and practising accountants was used to provide insights into exactly how external regulatory measures impact audit quality. The findings complement the largely



**FIGURE 2:** Conceptual model illustrating links among elements of regulation and audit quality.

Anglo-Saxon focus on audit quality by earlier studies (DeAngelo 1981; Francis 2004; Holm & Zaman 2012). Further, the findings provide one of the first accounts of how external regulations influence those practices that, according to ISQC 1, are essential for high-quality audits with a focus on a developing African economy.

The correspondence plot showed a definite association between the regulations over investigations of improper conduct (regulation) and independence and consultation (quality traits). These quality traits appear to be engrained in Namibian audit practitioners. Audit experts agree that the implementation of the ADP by the PAAB has played a significant role in ensuring the competence of engagement team members, specifically that of potential RAAs in Namibia. Some respondents think that competence should be harnessed right from the start of the training. This association is further evidenced in the correspondence plot. Regulatory measures relating to the accreditation of training offices, quality reviews and continuing professional development have shown a strong correlation with the promotion of a culture of quality by firm leadership.

Based on the combined results of the correspondence plot and the views of the audit experts, a conceptual diagram (Figure 2) was developed to illustrate the associations between external regulatory measures and audit quality.

This figure illustrates that the primary audit quality themes from a regulatory perspective are maintaining independence and consulting on complex audit matters, the employment of sufficiently competent engagement team members and a culture of quality driven by firm leadership. The model reveals that administrative functions form a vital role in contributing to audit quality. The key areas of investigation, registration and accreditation form an overarching regulatory oversight function for upholding and ameliorating audit quality. While much emphasis has been placed on the evaluation of audit quality proxies and regulations (Humphrey 2008; Hussein & MohdHanefah 2013), this model introduces other elements worthy of recognition – how the profession is administered, investigated and accredited.

This article is useful for both audit practitioners and regulators. By examining the associations between Namibian regulatory measures and ISQC 1 audit quality traits, the research shines light on the enhancement of audit quality through the current external regulatory measures. The research also provides regulators with the necessary insight into the role of external regulations in enhancing audit quality which, while based on insights obtained from Namibian auditors, should be broadly applicable in other jurisdictions, where a mix of external and self-regulatory measures is used to safeguard audit quality.

With the current disparity between capabilities and resources in large and small audit firms, regulators may consider streamlining some regulations to make them fit for purpose for the smaller audit firms. Furthermore, independence is considered the cornerstone of the audit profession and the regulations are relevant for independence. Regulators may consider introducing measures such as rotation of audit firms or the disclosure of audit tenure in annual financial statements.

Future research may include audit clients' views on what constitutes a quality audit and the inclusion of a comparison of the same in a South African context. There is still a dearth of research concerning audit regulation and quality in developing economies and future research may consider exploring this area.

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## Competing interests

The authors have declared that no competing interest exists.

## Authors' contributions

M.B.D. is the primary researcher in this project. W.M. and W.v.Z. provided the conceptualisation, review, supervision and editing of the research. A.J.R. edited the work, reviewed the data and redrafted the article for submission.

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## Data availability

The data that support the findings of this study are not openly available due to the involvement of human participants and privacy laws.

## Disclaimer

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

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Appendix 1 starts on the next page→

## Appendix 1

**TABLE 1-A1:** Statistics for quality traits as per ISQC 1 in symmetric normalisation.

Categories (Rows)	Overall		Contribution of point to the inertia of dimension (axis)		Co-ordinate value (Significant axis)
	Mass	Inertia	Axis 1	Axis 2	
Q1	0.137	0.047	0.000	0.358	0.028
Q2	0.141	0.046	0.209	0.077	0.704
Q3	0.127	0.037	0.015	0.302	-0.202
Q4	0.136	0.072	0.593	0.000	-1.207
Q5	0.078	0.025	0.110	0.071	0.686
Q6	0.106	0.034	0.054	0.047	0.411
Q7	0.103	0.016	0.007	0.085	0.148
Q8	0.172	0.020	0.012	0.059	-0.151

ISQC 1, International Standard on Quality Control 1.

**TABLE 2-A2:** Statistics for RS in symmetric normalisation.

Categories (Columns)	Overall		Contribution of point to the inertia of dimension (axis)		Co-ordinate value (Significant axis)
	Mass	Inertia	Axis 1	Axis 2	
R1	0.059	0.024	0.048	0.105	-0.521
R2	0.150	0.037	0.000	0.306	0.016
R3	0.212	0.052	0.092	0.239	0.381
R4	0.132	0.051	0.364	0.066	-0.959
R5	0.136	0.034	0.173	0.042	-0.652
R6	0.131	0.053	0.276	0.050	0.839
R7	0.133	0.029	0.031	0.176	0.278
R8	0.047	0.018	0.017	0.017	0.342

RS, regulatory measures.