

The Determinants of Audit Quality

Dr. Nidhal Al Shanti (Corresponding author)

Dept. of Business and Management, University of Bergamo

PO Box 24127, Via Caniana 2, Bergamo (BG), Italy

Tel: 39-035-205-2250 E-mail: nidhal.alshanti@unibg.it

Received: March 1, 2022 Accepted: April 7, 2022 Published: June 1, 2022

doi:10.5296/ajfa.v14i1.18939 URL: <https://doi.org/10.5296/ajfa.v14i1.18939>

Abstract

This research investigates the impact of auditor experience, auditor education, client's internal controls, and audit procedures performed on audit quality in the UAE. An online Likert scale-based questionnaire was distributed to auditors with financial audit experience in the UAE. Multiple regression analysis was adopted to analyze data since more than one independent variable was investigated. The results demonstrate that auditor experience and auditor education are significantly and positively associated with audit quality, while the client's internal controls and audit procedures are not associated with audit quality. The study's findings will assist recruiters in identifying the appropriate criteria for hiring new auditors and firms in allocating human capital to their large and sensitive clients. Additionally, the research may aid accounting institutes and audit firms in developing and improving their continuing education offerings.

Keywords: audit quality, auditor experience, auditor education, internal control of clients, audit procedures performed

1. Introduction

According to survey respondents, the average organization loses 5% of its annual revenue to fraud. When applied to the estimated 2009 Gross World Product, this figure corresponds to a potential loss of more than \$2.9 trillion in total fraud (Association of Certified Fraud Examiners, 2010). Today's businesses face increasing threats from corruption, which can be explained as an abuse of power and authority to achieve personal or organizational gain (Ashforth & Anand, 2003). As a result, businesses actively combat corruption and fraud in order to avoid such threats. The external audit is one of the methods used by management to gain more trust from third parties and prevent fraud. The IAASB¹ has identified numerous fraud risk factors that serve as indicators of an incentive, pressure, or opportunity to commit fraud, such as increased competition, profitability or trend-level expectations, and significantly related party transactions (IAASB, 2020). Although auditing standards enable professionals to practice their profession and adhere to its principles and standards to achieve the best outcome, they do not guarantee fraud detection, especially given that some economic events could be complex and require the auditor's judgment to evaluate other judgments used by clients. Hence, standards cannot replace the auditor's professional judgment (Shafer, Ketchand, & Morris, 2004).

Auditing traditionally refers to verification by an independent body. It acts to hold actors entrusted with public power accountable by providing information to third parties. The European Court of Auditors (2012), which is responsible for auditing the European Union's inflows and outflows, classifies audits into (a) financial audits to ensure the accuracy of annual financial statements; and (b) compliance audits to ensure the legality and regularity of transactions, as well as compliance with applicable laws and regulations. Financial audits are performed to provide third parties with reasonable assurance or limited-moderated assurance regarding a company's financial performance as reported in financial statements. When applied to stewardship theory, an audit is viewed as a primary tool for mitigating costs through fraud prevention, as auditors (the steward) will report the firm's financial performance to shareholders (the principal) - in addition to any breaches. Even if the steward's and principal's interests diverge, the steward values cooperation over defection. The stewardship theory presupposes that the steward will always act in the principal's best interests, given the steward's collective behavioral character. As a result, auditors may enhance the quality of their work in order to help the organization achieve its objectives (Donaldson, Schoorman, & Davis, 1997), especially that it has been suggested that audit efforts represented by audit hours have a direct impact on audit quality (Christensen, Newton, & Wilkins, 2021).

Authors have widely debated audit quality (Allen & Woodland, 2010; Alissa, Capkun, Jeanjean, & Suca, 2014; Cahan & Sun, 2015; Che, Langli, & Svanström, 2018). DeAngelo (1981) has defined it as the auditor's likelihood of detecting and reporting a breach in a client's accounting system, while DeFond and Zhang (2014) assert that it provides greater assurance that the financial statements faithfully represent the firm's financial condition and

¹ International Auditing and Assurance Standards Board

reporting system. For the purposes of this study, however, audit quality is defined as “conducting audits in the best possible manner through adherence to standards, demonstration of values and ethics, provision of useful information and timely reporting, as well as detecting fraud.” Although this article's definition of audit quality is broad and inclusive, it complies with ACCA Global's key elements of audit quality, which include inputs, processes, outputs, key interactions within financial reporting, and contextual factors such as laws and regulations (ACCA Global, 2014), while, at the same time, it incorporates the definitions introduced by DeAngelo (1981) and DeFond and Zhang (2014).

To ensure a high-quality audit, all audit team members must be properly involved throughout the audit. For example, when a supervisor has confidence in an employee, he or she may spend less time and effort monitoring and evaluating the employee than would be necessary otherwise. Hence, the audit quality suffers. In fact, all members must be able to manage their time effectively in order to verify evidence, review procedures, and finally, review the file and determine which audit opinion to issue (Morales-Sánchez, Orta-Pérez, & Rodríguez-Serrano, 2020).

The purpose of this study is to ascertain the determinants of audit quality in audit firms in the United Arab Emirates (“UAE”) by adopting the stewardship theory. In other words, to investigate what factors affect audit quality in the UAE wherein the steward achieves the objectives of the principal (client). The UAE, established on December 2, 1971, is a Middle Eastern nation that covers an area of 83,600 square kilometers and has a population of roughly 9.3 million people. It is rated fourth in terms of living and working circumstances in the HSBC list of countries (HSBC Expat, 2021), up from seventh in 2018, indicating the country's ongoing growth. In 2017, the nation's gross domestic product (“GDP”) was USD 387.5 billion. The primary industry is extractive (which includes crude oil and natural gas), accounting for 29.5% of GDP, followed by wholesale and retail (11.7%), financial and insurance activities (8.6%), as well as other industries, such as construction and building, real estate activities, and transportation and storage (The United Arab Emirates' Government Portal, 2018).

Four variables will be examined to accomplish the study's objective: audit experience, auditor education, client's internal control, and audit procedures performed. A survey was distributed to 104 auditors to evaluate these four variables and their impact on audit quality. The paper is structured as follows: the first section introduces stewardship theory and prior research analysis on audit quality determinants; the second section provides a methodology description and information about the data sources; and the third section presents a summary of the findings, conclusions, and implications for future research.

2. Literature review and hypothesis development

Failure to detect fraud results in sanctions against audit firms (Firth, Mo, & Wong, 2005), and in some cases, as was the case with Author Anderson, the firm is shut down (Barton, 2005). One might argue that these sanctions and penalties are incurred as a result of a low-quality audit performed by the audit firm. These sanctions have a direct and indirect effect on audit firms and have the potential to harm the audit firm's reputation and the client. Therefore,

audit firms like PwC took immediate action to close one of its affiliates in Japan as a result of the low-quality audit performed to protect their reputation. Watts and Zimmerman argue that the auditor's likelihood of discovering misstatements is contingent upon the auditor's competence (as cited in Morales-Sánchez, et al., 2020). As a result, it is critical to associate audit quality with a few specific factors. The variables in this study were examined earlier by other researchers for their effect on various aspects of audit quality, including compliance with accounting and auditing standards (Gao & Zhang, 2019), audit opinion (Hardies, Vandenhoute, & Breesch, 2018), and performance (Alissa, Capkun, Jeanjean, & Suca, 2014). However, no other research on audit quality has defined audit quality in the way that this research does, and no other research investigated audit quality determinants in the UAE. Additionally, no prior research applied stewardship theory to audit quality.

Stewardship theory was developed to define relationships based on behavioural assumptions. It implies that managers (the stewards) are not motivated by personal gain but rather by the organization's goals and objectives (Donaldson & Davis, Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns, 1991; Donaldson, Schoorman, & Davis, Toward a Stewardship Theory of Management, 1997). It is based on a primary model in which the steward's behaviour is prioritized in such a way that collectivist and pro-organizational behaviours come before individualistic and self-serving behaviours. Given this, the steward's behaviour will remain consistent with the organization's objectives and goals. Such behaviour benefits owners and managerial subordinates because the steward facilitates the achievement of the objectives (Donaldson, Schoorman, & Davis, 1997).

The theory postulates that stewards who successfully improve the organization's performance generally satisfy most stakeholders, as most stakeholders have interests that are served by achieving organizational goals. This is not to say that the steward has no needs; in fact, stewards require income to survive. As a result, the steward understands the trade-off between personal and organizational objectives and believes that by working toward organizational and collective goals, personal needs are met (Donaldson, Schoorman, & Davis, 1997). The client (the principal) appoints the auditor to safeguard the organization against fraud. As a result, audit firms are required to hire auditors with a high level of audit quality in order to improve or maintain the firm's audit quality to meet this objective. Figure 1 depicts the mechanics of this relationship. This article examines how audit experience, auditor education, client's internal control, and audit procedures performed all contribute to audit quality and thus to an audit firm's ability to detect and prevent fraud.

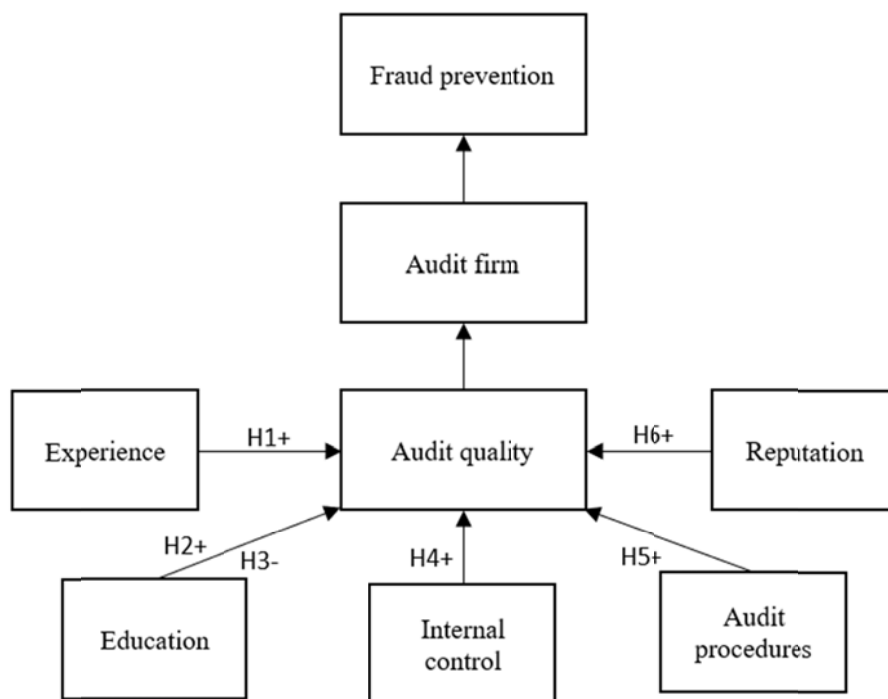


Figure 1. Overall diagram of the association tested

2.1. Auditor Experience

Audit experience is quantified in a variety of ways, including seniority and years spent in the audit profession (Lim & Tan, 2010), audit engagement volume (Sundrgen & Svanström, 2014), and industry expertise (Goodwin & Wu, 2014). Auditor knowledge and experience are critical components of providing high-quality audits, especially because auditors and the audit tests they conduct are the audit process's inputs (Francis, 2011). Training, career progression, and job performance all influence the acquired knowledge and experience related to specific responsibilities and tasks (Ford, Qiuones, Segó, & Sorra, 1992; Campion, Cheraskin, & Stevens, 1994). Earlier research on the impact of audit experience on auditor judgment was conducted primarily through experiments or case studies, making it impossible to determine the effect of audit experience on the entire audit (Cahan & Sun, 2015)—especially since audit experience and audit quality cannot be observed in a short-term study.

A previous review of the literature revealed that auditor experience influences materiality judgments and decisions. Messier (1983) notes that audit partners' materiality judgments are influenced by their experience and firm type. Existing research also shows that experienced auditors are better at identifying the sources of financial statement errors than inexperienced auditors because they have more knowledge and are better equipped to perform the task (Libby & Frederick, 1990). Thus, audit quality improves. Similarly, Gul et al. (2013) conducted research in China, analyzing a sample of 800 individual auditors to determine their audit quality. The findings indicated that audit experience (as a component of auditor characteristics) has a positive effect on the quality of audits.

Furthermore, the findings also indicated that partners who have worked with the Western

accounting system are more conservative than other partners, which results in audit quality variation. Similarly, Gunn and Michas (2018) argued that audit experience influences audit quality by suggesting that auditors deliver higher-quality audits when they are experienced in conducting global group audits, have specific expertise in the country where a client has a significant subsidiary, or have both types of expertise on an engagement. Additionally, auditors with experience as independent directors provide a higher-quality audit than those without such experience. The findings demonstrate that auditors with experience as independent directors deliver superior quality when their directorship experience is in the client's industry (Guo, Li, & Mo, 2021). Likewise, Similarly, audit engagement partners' professional experience and audit quality are highly correlated, particularly early in their careers (Liu & Xu, 2021). The literature review obtained does not show a negative relationship between audit quality and audit experience; hence, audit experience is one of the most important characteristics to evaluate an audit. Therefore, based on the prior research conducted, the research hypothesizes that:

H1: Auditor experience is positively associated with audit quality in audit firms in the UAE.

2.2 Auditor Education

In conjunction with one's beliefs, education has a significant impact on the development of an individual's personality. Monroe and Woodliff (1993) report that in the early 1990s, students' perceptions of the auditor's responsibilities changed during the first term of college. Significantly, few studies have been conducted on the entry-level auditor's competencies, despite the assumption that they should be of a higher quality if a high-quality education is attained. Clikeman et al. (2001) note, however, that there is insufficient evidence to conclude that additional education influences new accountants' professional commitment, ethical orientation, or profession. Nevertheless, auditors with accounting degrees are connected with a greater level of audit quality than accountants with unrelated university degrees in qualitative fields (Chu, Florou, & Pope, 2021).

On the other hand, Bröcheler et al. (2004) argue that a more knowledgeable auditor performs better. The researchers examined the effect of human capital on audit firm survival using data from 1,693 newly established Dutch audit firms and concluded that a higher educational level is associated with increased audit firm longevity. Whereas, as Ngoo et al. (2015) and Lim et al. (2016) demonstrate, accounting graduates lack the required skills for audit firms. Additionally, Anis (2017) conducted a survey of Egyptian auditors and accounting educators to determine if education influences audit quality. He concluded that there is a negative correlation between audit quality and specific accounting skills (such as cost and managerial accounting abilities).

Equally important, CPE² is another method by which auditors and other professionals can increase their knowledge. CPE hours are included in auditor education in this study because they help individuals apply the theoretical knowledge acquired in school. Indeed, CPE

² Continuing Professional Education

auditing courses are designed to equip participants with the knowledge and skills necessary to deal with issues that arise during the audit process and may have a direct impact on subsequent audit work. CPE has been shown to be positively associated with performance, especially when the task assigned to the employee is related to it (Locke & Latham, 2002; Alissa, Capkun, Jeanjean, & Suca, 2014). Similarly, it has been stated that increasing the auditor's CPE hours will increase his or her effort (Che, Langli, & Svanström, 2018), resulting in higher audit quality.

Based on the literature review, there is a shady correlation between education and audit quality. This can arguably be due to the fact that each country has its own teaching system and accounting requirements for becoming an accountant (Allen & Woodland, 2010; Anis, 2017; Che, Langli, & Svanström, 2018). Therefore, the research hypothesizes the following:

H2: Auditor education is positively associated with audit quality in the UAE.

H3: Auditor education is negatively associated with audit quality in the UAE.

2.3 Internal Control of Clients

Organizations' increased emphasis on internal controls is one of the mechanisms they use to prevent fraud. External auditors are required to report on the effectiveness of a company's internal control over financial reporting under the Sarbanes-Oxley Act Section 404 (Sarbanes Oxley, 2002) in addition to Auditing Standard 2201 Article 3 (Public Company Accounting Oversight Board, 2007). While strengthening internal controls may aid in preventing fraudulent and unethical behaviour, it may also result in an increase in dishonest and unethical reporting, depending on the purpose for which the internal controls are being implemented (Liu, Wright, & Wu, 2015).

Internal control ineffectiveness is a significant factor affecting inherent risk, which is the risk posed by transactional error or omission. Internal control deficiencies result in increased audit fees, as auditors are required to perform additional procedures to mitigate audit risk and improve the audit's quality (Hogan & Wilkins, 2008). According to Sare et al. (2013), auditors are more capable of detecting fraud and determining the source of misstatements when they use internal control questionnaires and flowcharts; in other words, the ability to detect fraud improves when internal controls are tested for effectiveness. Additionally, Rubino and Vitolla (2014) find that effective internal controls have a positive impact on material weaknesses, which improves the quality of financial reporting. This has been evidenced by integrating information technology with the internal control framework. Similarly, Donelson et al. (2017) concluded in a previous study that there is a positive correlation between ineffective internal controls and fraud detection. This conclusion is based on an analysis of over 14,000 auditor internal control opinions, of which 1,488 are deemed ineffective. Moreover, the adoption of required internal control audits resulted in a considerable decrease in material misstatements (Lennox & Wu, 2022). Based on the above literature review, the research hypothesizes that:

H4: The client's internal control is positively associated with audit quality in the UAE.

2.4 Audit Procedures Performed

Financial auditing is not simply a set of procedures for gathering and evaluating evidence. The audit planning stage is heavily influenced by the roles of partners and managers, particularly their decisions that contribute to the audit's quality, as they discuss and decide, during this stage, which audit procedures to perform. The term “audit procedures” refers to the techniques, processes, and methods used by auditors to conduct an audit. Given that auditors' responsibility is to obtain reasonable assurance (Public Company Accounting Oversight Board, 2002), it is critical not to over-audit, as this will impair the auditors' profit, nor to under-audit, as this will reduce the audit's quality.

Fischer (1996) previously demonstrated that incorporating technology into the audit profession increased audit efficiency and effort. This improvement, however, is not due to the use of technology; rather, it is due to the elimination of previously used audit procedures. Furthermore, Blokdiik et al. (2006) observe that the audit quality of the big five (now dubbed the big four) is superior to that of non-big five audit firms, even though they perform the same volume of audit work. The difference in audit quality is due to the allocation of audit hours in a less procedural audit approach. Moreover, Simon (2012) finds that auditors who are prompted to link important information to client management objectives can identify more pertinent schemes than auditors who are not prompted to do so. The study focuses on two potential strategies for assisting auditors in identifying instances of management fraud, one of which is linking pertinent information to management objectives. In addition, Lyubimov et al. (2013) claim that audits conducted by an audit firm's domestic office are of higher quality than those conducted by an audit firm's offshore office. One could argue that the difference in quality between onshore and offshore is due to the fact that while offices of the same audit firm perform the same audit procedures, offshore companies perform their own. Consequently, the research hypothesizes that:

H5: Audit procedures are positively associated with audit quality in the UAE.

3. Method

When establishing causation is not the primary purpose of the research, and data collecting from a random sample of respondents from the target population is more practical, a survey design is applicable for the purposes of this research (Judd, Smith, & Kidder, 2014). Due to the research's purpose of identifying parameters related to audit quality, data were collected from a random sample of auditors, making the survey design appropriate for the study investigating the following audit quality model:

$$AQ = \beta_0 + \beta_1EX + \beta_1ED + \beta_1IC + \beta_1AP + \epsilon$$

Where:

AQ = Audit Quality, EX = Auditor Experience, ED = Auditor Education, IC = Client's Internal Controls, and AP = Audit Procedures Performed

The data for this study were collected using a web-based survey. The self-administered online survey was issued to auditors with audit expertise in the UAE. Although an online survey has

certain disadvantages, such as elderly respondents not being online (Leavy, 2017), this constraint was solved by grouping the sample into levels depending on their position. However, an online survey instrument was used to collect data in this study due to the Covid-19 travel restrictions; the speed with which data can be collected; the ability to cover a large population with a small group of individuals; and finally, because the cost of collecting online respondents is less than the cost of traveling (Creswell, 2003). The survey is cross-sectional since the variables under investigation are challenging to examine throughout time. Additionally, the research's nature necessitates a cross-sectional approach since the data gathered focuses on auditors' opinions and experiences.

The survey is divided into four sections: one to introduce the subject, the research, and the variables; a second section to collect demographic information (number of years in the auditing profession and gender); a third section to ask questions, and a final section to obtain consent to use their responses in this research. On a Likert-type scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”), respondents were asked to score the five criteria examined in this study.

The entire population of the UAE was not established since the nation has a greater employee turnover rate than the rest of the world (MetLife, 2017). Indeed, this is another incentive to conduct a data collection survey on the internet. The online survey was given to anyone connected to the internet through a UAE network. A screening question was included to assist in the selection of responders. A statement defining the responder was added to the screening question. If a respondent incorrectly answers the screening question, his or her response will not be tallied and included in the sample. Only 104 people qualified to participate in the survey, and they all finished it. A control question was included in which respondents were asked to pick “Neutral” to confirm that the sample read the survey and completed it correctly.

Table 1 summarizes the final sample, which included auditors with less than three years of audit experience (20.19%), auditors with four to seven years of audit experience (20.19%), auditors with eight to twelve years of audit experience (20.19 %), and auditors with more than twelve years of audit experience (39.42%). Much of the quota was allocated to auditors with more than twelve years of audit experience since they are more experienced than other clusters and have been through almost all audit levels.

Multiple regression analysis was used because multiple variables were examined. SPSS was used to conduct the analysis. Multiple regression is a statistical technique for determining the effect of more than one independent variable on a single dependent variable measured, such as the effect of age, education, ethnic origin, area of residence, and gender on income. It is assumed that there are also interrelationships between the independent variables, which are accounted for in the calculations. Multiple regression's outputs – the correlation between a set of independent variables and the dependent variable – is referred to as multiple R. The square of this, R^2 , indicates the amount of variance in the independent variable caused by the action of two or more independent variables concurrently (Creswell, 2003; Walliman, 2011). Analysis of Variance (“ANOVA”) was used in particular. Ashton (1974) introduced ANOVA to the accounting literature as a model for determining the significance and percentage

variance explained by the main effects of treatments and their interactions. It was immediately widely adopted as a method for overcoming multicollinearity and heteroscedasticity issues when group sizes are equal; and facilitating the estimation of both main and interactive effects in an unbiased manner (Creswell, 2003).

Table 1. Sample breakdown

Description	Frequency	%
<i>Gender:</i>		
Females	52	50.00%
Males	52	50.00%
<i>Total</i>	<i>104</i>	<i>100.00%</i>
<i>Experience:</i>		
Less than 3 years	21	20.19%
From 4 to 7 years	21	20.19%
From 8 to 12 years	21	20.19%
More than 12 years	41	39.42%
<i>Total</i>	<i>104</i>	<i>100.00%</i>

4. Results and discussion

The study offers and analyzes findings based on descriptive statistics and multivariate analysis in this part. Table 2 contains descriptive data and relationships for each of the constructs studied.

On average, the sample auditors indicate that audit experience (EX: mean = 4.18) is associated with audit quality, followed by auditor education (mean = 4.16). These findings demonstrate why the auditing sector in the UAE is not very active in recruiting new graduates (CNN Arabic, 2020). Furthermore, over 68% of respondents agree that their firm's auditors are experienced, and 66% agree that their auditors are highly educated. Additionally, perceptions of audit experience and preference for auditor education could be explained by the fact that most respondents held a professional auditing title and had an average of more than 12 years of audit experience (Table 1), implying that they were already familiar with working with auditors who lacked audit experience or had received a low-quality education.

Since correlation coefficient interpretation varies significantly across scientific disciplines, there are no hard and fast rules for determining their strength (Akoglu, 2018). Thus, for this study, a correlation equal to or greater than 0.65 is considered a strong coefficient, 0.30 to 0.64 is considered moderate, and less than that is considered weak. As a result, auditor experience (0.80; $p < 0.01$) is strongly and positively correlated with audit quality, according to the correlation matrix. Similarly, auditor education is strongly and positively associated with audit quality (0.79; $p < 0.01$), whereas client internal controls (0.58; $p < 0.01$) and audit

procedures (0.59; $p < 0.01$) are only moderately associated with audit quality. At first glance, it appears as though only H1 and H2 are supported.

Table 2. Descriptive statistics and correlation matrix

Descriptive statistics	EX	ED	IC	AP	AQ
Minimum	2	1	1	1	1
Maximum	5	5	5	5	5
Mean	4.18	4.16	3.68	3.76	4.10
Standard deviation	0.68	0.75	0.96	0.93	0.82
Median	4.25	4.25	3.75	4.00	4.25
Cronbach's Alpha ^a	0.83	0.84	0.88	0.83	0.81

<i>Correlation matrix</i>					
EX	1				
ED	0.79	1			
IC	0.56	0.50	1		
AP	0.54	0.49	0.79	1	
AQ	0.80	0.79	0.58	0.59	1

^a In accordance with Malcolm (2003), a Cronbach's Alpha of 0.80 is acceptable.

Table 3 summarizes the results of multiple regression analyses. Compliance with common multiple regression model assumptions was examined in light of Chatterjee and Hadi (2012). The "R" column denotes the correlation coefficient's value. R can be thought of as a proxy for the predictive quality of the dependent variable: in this case, audit quality. A value of .85 is considered to be an acceptable level of prediction. The "R²" column denotes the R² value (also known as the coefficient of determination), which shows how much the independent variables explain the dependent variable. The value of 0.73 indicates that independent variables account for 73% of the variance in audit quality.

Table 3. Model Summary

Model	R	R ²	Adjusted R ²	Std. Error
1	.85 ^a	.73	.72	.44

^a Predictors: (Constant), AP, ED, IC, EX

Furthermore, the F-ratio in the ANOVA table (table 4) indicates whether the overall regression model fits the data well. As the table indicates, the independent variables can be considered statistically significant in predicting the dependent variable, $F(4, 99) = 64.02$, $p < 0.001$; the regression model fits the data well.

Table 4. ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	48.96	4	12.24	64.02	<.001 ^b
	Residual	18.16	99	.19		
	Total	67.12	100			

a. Dependent Variable: AQ

b. Predictors: (Constant), AP, ED, IC, EX

Table 5, on the other hand, determines the statistical significance of each independent variable. This test determines whether the population's unstandardized (or standardized) coefficients equal 0 (zero). If $p < .05$, the coefficients are statistically significantly different from zero (zero). The “t” and “Sig.” columns contain the t-value and corresponding p-value.

 Table 5. Coefficients^a

Model		Standardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error				Beta	Lower Bound
1	Constant	-.25	.279		-.907	.367	-.806	.301
	EX	.46	.111	.384	4.165	<.001	.242	.683
	ED	.42	.096	.384	4.365	<.001	.229	.612
	IC	.04	.077	.047	.522	.603	-.113	.193
	AP	.14	.079	.158	1.779	.078	-.016	.296

a. Dependent Variable: AQ

The regression results support H1 and H2 because they indicate that auditor experience (<0.001) and auditor education (<0.001) are positively and strongly associated with audit quality. H3 is not supported because there is no evidence of a negative association between education and audit quality.

The significance level of the second hypothesis demonstrates the critical importance of education to improve and enhance audit quality. Notably, this finding is consistent with Bröcheler et al.'s (2004) finding that a more knowledgeable auditor performs better. While prior research has established a negative correlation between education and audit quality (Clikeman, Schwartz, & Lathan, 2001; Anis, 2017), this study does not support the third hypothesis. It is reasonable to argue that the definition of education provided to the sample investigated in this study, including advanced education, continuing professional education, and professional certification will have little effect on their opinion, as many audit firms actively recruit qualified auditors. H4 and H5 were supported as the statistical significance level of these two variables are much higher than the accepted one ($p < 0.05$). However, this result is contrary to previous studies conducted, for instance, by Hogan and Wilkins (2008) and Rubino and Vitolla (2014). However, one could argue that business in the UAE is distinct

from that of business in other countries. As a result, their internal controls may be distinct from those of their clients in other countries, so the audit procedures to be performed may also be distinct.

The findings of the five hypotheses contribute to the existing body of knowledge about audit quality in relation to internal and external factors. Some research examines audit fees (Allen & Woodland, 2010) and restatements (Irani, Tate, & Xu, 2015) as audit quality indicators. However, this is the first study to examine the impact of internal factors (education, experience, and audit procedures) on audit quality in the UAE in conjunction with external factors (client's internal control). Although this research has some limitations, these limitations create opportunities for future research. Given that the questionnaire was distributed electronically, and the sample size was small, the findings should be interpreted with caution. A survey of a larger sample of UAE-based auditors would aid in generalizing the findings. It would also be valuable to undertake research in other country-specific contexts for comparison; or to conduct a qualitative study using face-to-face interviews, for example, to address the limitations of the quantitative data by drilling deeper into the factors which affect audit quality.

5. Discussion

The primary data presented in this paper makes a significant and original contribution to our understanding of audit quality in audit firms working within the United Arab Emirates (“UAE”). Because audit quality cannot be directly observed, preparers and users of financial statements frequently rely on the reputation of an audit firm to determine the quality (Irani, Tate, & Xu, 2015), ignoring other factors such as auditor education and experience. For several years after providing training and encouraging auditors to study, improvements in audit quality may not be quantifiable (Allen & Woodland, 2010). As such, this study examined the effect of internal and external factors on audit quality.

Stewardship theory provided the theoretical framework for this study, acting as a portal for examining the factors that influence audit quality in the United Arab Emirates. The findings indicate that audit experience and auditor education are significantly and positively associated with audit quality, consistent with previous research. Additionally, by utilizing the stewardship theory, this study adds to the audit literature, specifically regarding auditor–client relationships. More precisely, it increases awareness surrounding the relationship between audit quality and personal characteristics such as experience and education. Although a few studies have examined these personal characteristics as factors affecting audit quality, this is the first time they have been examined in conjunction with other factors. Moreover, the findings allow for the refinement of prior audit quality studies (Allen & Woodland, 2010; Sare, et al., 2013; Anis, 2017).

The results, in particular, indicate a robust positive relationship between audit experience and audit quality, which supports the first hypothesis and is consistent with previous research (Libby & Frederick, 1990; Gul, Wu, & Yang, 2013). Similarly, the second hypothesis is supported by the findings of this research, which demonstrate a strong and positive correlation between audit education and audit quality. On the other hand, the third hypothesis

was rejected due to the absence of a negative correlation between education and audit quality. It could be argued that this is because a country's educational system may be distinct from other countries. Additionally, the fourth and fifth hypotheses were not supported, as the quality of audits, clients' internal control, and audit procedures performed by auditors are much higher than the statistical significance level. One could argue that internal controls are primarily determined by the nature of the business and the level of risk it faces; as a result, different internal control mechanisms may be used. Auditors, therefore, will perform different audit procedures.

The study's findings have practical ramifications. To begin, they may assist recruiters in identifying the appropriate criteria for hiring new auditors and firms in allocating human capital to their large and sensitive clients. Second, the findings may aid accounting institutes and audit firms in developing and improving their continuing education offerings. Educational institutions might also be encouraged to develop practical courses and establish relationships with audit firms to prepare their students for the market. Third, the findings indicate areas where auditors can improve their audit quality and what factors clients should consider when hiring external auditors to audit their financial statements. Fourth, the study adds to the empirical evidence on audit quality in the United Arab Emirates, a country with a low risk of audit litigation and a greater emphasis on auditor reputation. Overall, this research shows how internal and external factors affect audit quality within a geographically-specific context.

Acknowledgments

This work was not funded by any affiliation or third party. I want to express my gratitude to all professors and reviewers who encouraged me to submit this work for publication and who contributed significantly to the work's quality.

References

- ACCA Global. (2014). *Technical Activities and Advice*. Retrieved October 15, 2021, from <https://www.accaglobal.com/in/en/technical-activities/technical-resources-search/2014/march/audit-quality-iaasb-frwk.html>
- Akoglu, H. (2018). User's guide to correlation coefficients. *Turkish Journal of Emergency Medicine, 18*(1), 91-93. <https://doi.org/10.1016/j.tjem.2018.08.001>
- Alissa, W., Capkun, V., Jeanjean, T., & Suca, N. (2014). An empirical investigation of the impact of audit and auditor characteristics on auditor performance. *Accounting, Organizations and Society, 39*(7), 495-510. <https://doi.org/10.1016/j.aos.2014.06.003>
- Allen, A., & Woodland, A. (2010). Education Requirements, Audit Fees, and Audit Quality. *Auditing: A Journal of Practice & Theory, 29*(2), 1-25. <https://doi.org/10.2308/aud.2010.29.2.1>
- Anis, A. (2017). Auditors' and accounting educators' perceptions of accounting education gaps and audit quality in Egypt. *Journal of Accounting in Emerging Economies, 7*(3), 337-351. <https://doi.org/10.1108/JAEE-08-2016-0070>

- Ashforth, B., & Anand, V. (2003). The normalization of corruption in organizations. *Research in Organizational Behavior*, 25, 1-52. [https://doi.org/10.1016/S0191-3085\(03\)25001-2](https://doi.org/10.1016/S0191-3085(03)25001-2)
- Association of Certified Fraud Examiners. (2010). Reports to the nations. Retrieved September 29, 2021, from https://www.acfe.com/uploadedFiles/ACFE_Website/Content/documents/rtn-2010.pdf
- Barton, J. (2005). Who Cares about Auditor Reputation? *Contemporary Accounting Research*, 22(3), 549-586. <https://doi.org/10.1506/C27U-23K8-E1VL-20R0>
- Blokdijk, H., Driehuisen, F., Simunic, D. A., & Stein, M. T. (2006). An Analysis of Cross-Sectional Differences in Big and Non-Big Public Accounting Firms' Audit Programs. *Auditing: a journal of practice and theory*, 25(1), 27-48. <https://doi.org/10.2308/aud.2006.25.1.27>
- Bröcheler, V., Maijor, S., & Van Witteloostuijn, A. (2004). Auditor human capital and audit firm survival: The Dutch audit industry in 1930-1992. *Accounting, Organizations and Society*, 29(7), 627-646. <https://doi.org/10.1016/j.aos.2003.10.008>
- Cahan, S. F., & Sun, J. (2015). The Effect of Audit Experience on Audit Fees and Audit Quality. *Journal of Accounting, Auditing & Finance*, 30(1), 78-100. <https://doi.org/10.1177/0148558X14544503>
- Campion, M. A., Cheraskin, L., & Stevens, M. J. (1994). Career-related antecedents and outcomes of job rotation. *Academy of Management journal*, 37(6), 1518-1542. <https://doi.org/10.5465/256797>
- Chatterjee, S., & Hadi, A. S. (2012). *Regression analysis by example*. New Jersey: Wiley.
- Che, L., Langli, J. C., & Svanström, T. (2018). Education, Experience, and Audit Effort. *Auditing: A Journal of Practice & Theory*, 37(3), 91-115. <https://doi.org/10.2308/ajpt-51896>
- Christensen, B. E., Newton, N. J., & Wilkins, M. S. (2021). How do team workloads and team staffing affect the audit? Archival evidence from U.S. audits. *Accounting, organizations and society*, 92, 1-20. <https://doi.org/10.1016/j.aos.2021.101225>
- Chu, J., Florou, A., & Pope, P. F. (2021). Auditor University Education: Does it Matter? *The European accounting review*, 1-32. <https://doi.org/10.1080/09638180.2020.1866633>
- Clikeman, P. M., Schwartz, B. N., & Lathan, M. H. (2001). The effect of the 150-hour requirement on new accountants' professional commitment, ethical orientation, and professionalism. *Critical Perspectives on Accounting*, 12(5), 627-645. <https://doi.org/10.1006/cpac.2000.0456>
- CNN Arabic. (2020). arabic.cnn.com. Retrieved February 16, 2022, from <https://arabic.cnn.com/business/article/2020/08/19/uae-graduates-job-sectors>
- Creswell, J. W. (2003). *Research design: qualitative, quantitative, and mixed methods approaches (2nd ed.)*. California: Sage Publications, Inc.

- DeAngelo, L. E. (1981). Auditor independence, 'low balling', and disclosure regulation. *Journal of Accounting and Economics*, 3(2), 113-127. [https://doi.org/10.1016/0165-4101\(81\)90009-4](https://doi.org/10.1016/0165-4101(81)90009-4)
- DeFond, M., & Zhang, J. (2014). A review of archival auditing research. *Journal of Accounting and Economics*, 58(2-3), 275-326. <https://doi.org/10.1016/j.jacceco.2014.09.002>
- Donaldson, L., & Davis, J. H. (1991). Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns. *Australian journal of management*, 16(1), 49-64. <https://doi.org/10.1177/031289629101600103>
- Donaldson, L., Schoorman, F. D., & Davis, J. H. (1997). Toward a Stewardship Theory of Management. *The Academy of Management Review*, 22(1), 20-47. <https://doi.org/10.2307/259223>
- Donelson, D. C., Ege, M. S., & McInnis, J. M. (2017). *Internal Control Weaknesses and Financial Reporting Fraud. Auditing: a journal of practice & theory*, 36(3), 45-69. <https://doi.org/10.2308/ajpt-51608>
- European Court of Auditors. (2012). *Financial and Compliance Audit Manual*. Retrieved September 23, 2021, from European Court of Auditors Web site: https://www.eca.europa.eu/Lists/ECADocuments/FCAM_2012/FCAM_2012_EN.PDF
- Firth, M., Mo, P. L., & Wong, R. M. (2005). Financial Statement Frauds and Auditor Sanctions: An Analysis of Enforcement Actions in China. *Journal of business ethics*, 62(4), 367-381. <https://doi.org/10.1007/s10551-005-0542-4>
- Fischer, M. J. (1996). "Real-izing" the benefits of new technologies as a source of audit evidence: An interpretive field study. *Accounting, organizations and society*, 21(2), 219-242. [https://doi.org/10.1016/0361-3682\(95\)00005-4](https://doi.org/10.1016/0361-3682(95)00005-4)
- Ford, K. J., Qionones, M. A., Segó, D. J., & Sorra, J. S. (1992). Factors affecting the opportunity to perform trained tasks on the job. *Personnel psychology*, 45(3), 511-527. <https://doi.org/10.1111/j.1744-6570.1992.tb00858.x>
- Francis, J. R. (2011). A Framework for Understanding and Researching Audit Quality. *Auditing: A Journal of Practice & Theory*, 30(2), 125-152. <https://doi.org/10.2308/ajpt-50006>
- Gao, P., & Zhang, G. (2019). Auditing Standards, Professional Judgment, and Audit Quality. *The Accounting review*, 94(6), 201-225. <https://doi.org/10.2308/accr-52389>
- Goodwin, J., & Wu, D. (2014). Is the effect of industry expertise on audit pricing an office-level or a partner-level phenomenon? *Review of Accounting Studies*, 19(4), 1532-1578. <https://doi.org/10.1007/s11142-014-9285-8>
- Gul, F. A., Wu, D., & Yang, Z. (2013). Do Individual Auditors Affect Audit Quality? Evidence from Archival Data. *The Accounting Review*, 88(6), 1993-2023. <https://doi.org/10.2308/accr-50536>
- Gunn, J. L., & Michas, P. N. (2018). Auditor Multinational Expertise and Audit Quality. *The*

Accounting review, 93(4), 203-224. <https://doi.org/10.2308/accr-51925>

Guo, Y., Li, J., & Mo, P. L. (2021). Does Independent Director Experience Improve Individual Auditors' Audit Quality? *Journal of Accounting, Auditing & Finance*, 1-22. <https://doi.org/10.1177/0148558X211014808>

Hardies, K., Vandenhaute, M.-L., & Breesch, D. (2018). An Analysis of Auditors' Going-Concern Reporting Accuracy in Private Firms. *Accounting Horizons*, 32(4), 117-132. <https://doi.org/10.2308/acch-52297>

Hogan, C. E., & Wilkins, M. S. (2008). Evidence on the Audit Risk Model: Do Auditors Increase Audit Fees in the Presence of Internal Control Deficiencies? *Contemporary accounting research*, 25(1), 219-242. <https://doi.org/10.1506/car.25.1.9>

HSBC Expat. (2021). *Expat Explorer 2021 report*. Retrieved January 1, 2022, from <https://www.expat.hsbc.com/expat-explorer/league-table/>

IAASB. (2020). Publications: *Handbook of International Quality Control, Auditing, Review, Other Assurance, and Related Services Pronouncements*. Retrieved September 29, 2021, from <https://www.iaasb.org/publications/2020-handbook-international-quality-control-auditing-review-other-assurance-and-related-services>

Irani, A. J., Tate, S. L., & Xu, L. (2015). Restatements: Do They Affect Auditor Reputation for Quality? *American Accounting Association*, 29(4), 829-851. <https://doi.org/10.2308/acch-51187>

Judd, C. M., Smith, E. R., & Kidder, L. H. (2014). *Research Methods in Social Relations*. Fort Worth: Holt, Rinehart, and Winston.

Leavy, P. (2017). *Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches*. New York: The Guilford Press.

Lennox, C. S., & Wu, X. (2022). Mandatory Internal Control Audits, Audit Adjustments, and Financial Reporting Quality: Evidence from China. *The Accounting review*, 341-364. <https://doi.org/10.2308/TAR-2020-0152>

Libby, R., & Frederick, D. M. (1990). Experience and the Ability to Explain Audit Findings. *Journal of Accounting Research*, 28(2), 348-367. <https://doi.org/10.2307/2491154>

Lim, C.-Y., & Tan, H.-T. (2010). Does Auditor Tenure Improve Audit Quality? Moderating Effects of Industry Specialization and Fee Dependence. *Contemporary Accounting Research*, 27(3), 923-957. <https://doi.org/10.1111/j.1911-3846.2010.01031.x>

Lim, Y.-M., Lee, T. H., Yap, C. S., & Ling, C. C. (2016). Employability skills, personal qualities, and early employment problems of entry-level auditors: Perspectives from employers, lecturers, auditors, and students. *Journal of Education for Business*, 91(4), 185-192. <https://doi.org/10.1080/08832323.2016.1153998>

Liu, C., & Xu, C. (2021). The effect of audit engagement partner professional experience on

audit quality and audit fees: early evidence from Form AP disclosure. *Asian review of accounting*, 128-149. <https://doi.org/10.1108/ARA-08-2020-0121>

Liu, X. K., Wright, A. M., & Wu, Y.-J. (2015). Managers' Unethical Fraudulent Financial Reporting: The Effect of Control Strength and Control Framing. *Journal of business ethics*, 129(2), 295-310. <https://doi.org/10.1007/s10551-014-2156-1>

Locke, E. A., & Latham, G. P. (2002). Building a Practically Useful Theory of Goal Setting and Task Motivation A 35-Year Odyssey. *The American psychologist*, 57(9), 705-717. <https://doi.org/10.1037/0003-066X.57.9.705>

Lyubimov, A., Arnold, V., & Sutton, S. G. (2013). An Examination of the Legal Liability Associated with Outsourcing and Offshoring Audit Procedures. *Auditing: A Journal of Practice & Theory*, 32(2), 97-118. <https://doi.org/10.2308/ajpt-50354>

Malcolm, S. (2003). *Research methods in accounting*. London: Sage Publication, Inc.

Messier, W. F. (1983). The Effect of Experience and Firm Type on Materiality / Disclosure Judgments. *Journal of Accounting Research*, 21(2), 611-618. <https://doi.org/10.2307/2490795>

MetLife. (2017). *The Power of Employee Benefits in a Fast Changing Workplace*. Dubai: MetLife.

Monroe, G. S., & Woodliff, D. R. (1993). The effect of education on the audit expectation gap. *Accounting and finance*, 33(1), 61-78. <https://doi.org/10.1111/j.1467-629X.1993.tb00195.x>

Morales-Sánchez, R., Orta-Pérez, M., & Rodríguez-Serrano, M. Á. (2020). The Benefits of Auditors' Sustained Ethical Behavior: Increased Trust and Reduced Costs. *Journal of Business Ethics*, 166(2), 441-459. <https://doi.org/10.1007/s10551-019-04298-2>

Ngoo, Y. T., Tiong, K. M., & Pok, W. F. (2015). Bridging the Gap of Perceived Skills between Employers and Accounting Graduates in Malaysia. *American Journal of Economics*, 5(2), 98-104.

Public Company Accounting Oversight Board. (2002). *Auditing Standards*. Retrieved October 03, 2021, from <https://pcaobus.org/oversight/standards/auditing-standards/details/AS1001>

Public Company Accounting Oversight Board. (2007). *Auditing Standards*. Retrieved October 03, 2021, from <https://pcaobus.org/oversight/standards/auditing-standards/details/AS2201>

Rubino, M., & Vitolla, F. (2014). Internal control over financial reporting: Opportunities using the COBIT framework. *Managerial auditing journal*, 29(8), 736-771. <https://doi.org/10.1108/MAJ-03-2014-1016>

Sarbanes Oxley. (2002). *Rules*. Retrieved October 03, 2021, from <https://www.sarbanes-oxley-101.com/sarbanes-oxley-toc.htm>

Sare, S. K., Fitzgerald, B. C., Graham, L. E., Joe, J. R., Negangard, E. M., & Wolfe, C. J.

(2013). Auditors' Internal Control over Financial Reporting Decisions: Analysis, Synthesis, and Research Directions. *Auditing: a journal of practice and theory*, 32(Supplement 1), 131-166. <https://doi.org/10.2308/ajpt-50345>

Shafer, W. E., Ketchand, A. A., & Morris, R. E. (2004). Auditors' willingness to advocate client-preferred accounting principles. *Journal of Business Ethics*, 52(3), 213-227. <https://doi.org/10.1023/B:BUSI.0000037530.25174.30>

Simon, C. A. (2012). Individual Auditors' Identification of Relevant Fraud Schemes. *Auditing: a journal of practice and theory*, 31(1), 1-16. <https://doi.org/10.2308/ajpt-10169>

Sundrgen, S., & Svanström, T. (2014). Auditor-in-Charge Characteristics and Going-concern Reporting. *Contemporary Accounting Research*, 31(2), 531-550. <https://doi.org/10.1111/1911-3846.12035>

The United Arab Emirates' Government Portal. (2018). *About the UAE*. Retrieved January 1, 2022, from <https://u.ae/en/about-the-uae>

Walliman, N. (2011). Quantitative Data Analysis. In *Social Research Methods* (pp. 110-128). London: SAGE Publications, Ltd.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>)