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The effect of Accounting Education Quality on Auditor's Performance in Libya

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أثر جودة التعليم المحاسبي على أداء المراجعين في ليبيا

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Abstract:
This research investigates the impact of accounting education quality on auditor performance among Libyan external auditors operating in Tripoli. The study utilized a quantitative approach, gathering data from 53 structured questionnaires distributed to external auditors. The Partial Least Squares Structural Equation Modeling (PLS-SEM) approach was employed to assess the study model and test the relationship. Findings reveal a significant and positive influence of the quality of accounting education on Libyan auditors' performance. This indicates that improved accounting education quality can enhance auditors' skills, allowing them to execute their responsibilities more effectively and ultimately improve their overall work quality. The study contributes empirical evidence from the Libyan context, offering insights to professional bodies and policymakers on how to facilitate the enhancement of auditing performance through accounting education.

Keywords: Accounting Education Quality, Auditor Performance, Libyan External Auditors.

الملخص
يهدف هذا البحث إلى دراسة تأثير جودة التعليم المحاسبي على أداء المدققين بين المدققين الخارجيين الليبيين العاملين في طرابلس. استخدمت الدراسة منهجًا كميًا، حيث تم جمع البيانات من 53 استبانة منظمة وزعت على المدققين الخارجيين. تم استخدام نموذج المعادلة الهيكلية بالمربعات الصغرى الجزئية (PLS-SEM) لتقييم نموذج الدراسة واختبار العلاقة. أظهرت النتائج وجود تأثير إيجابي ومعنوي لجودة التعليم المحاسبي على أداء المدققين الليبيين. يشير هذا إلى أن تحسين جودة التعليم المحاسبي يمكن أن يزيد من مهارات المدققين لتنفيذ مسؤولياتهم التدقيقية بفعالية أكبر، وبالتالي تعزيز جودة عملهم الإجمالية. تقدم الدراسة أدلة تجريبية من السياق الليبي، مما يوفر فهمًا أعمق للهيئات المهنية وصناع السياسات حول كيفية تسهيل تعزيز أداء التدقيق من خلال التعليم المحاسبي.

الكلمات المفتاحية :جودة التعليم المحاسبي، أداء المدقق، المدققون الخارجيون الليبيون.

1. Introduction

External auditors' performance plays a significant role in safeguarding the reliability of the financial reporting process and in emphasizing stakeholders' trust in the financial reports. Auditor performance comprehends several aspects, including the auditor's ability to detect material misstatements, accuracy, technical competence, and the adherence to national auditing standards. Libya, as a developing country, undergoes rapid change in terms of its regulatory, institutional, and educational systems, as the environment where these systems operate is largely understood as one of the crucial drivers of auditors' performance.

One important element of auditor performance can be the quality of accounting education. This covers features such as the academic training courses the auditor receives during their study at university and also during their career work through professional development. This affects their level of understanding and mastering financial reporting regulations, accounting and auditing standards, and other associated analytical auditing skills. Thus, education quality is an important factor for auditing in terms of theoretical knowledge, as well as in terms of practical judgment and decision-making involved in the auditing profession.

Problem Statement

Some studies in Libya have indicated that the quality of the accounting education system is facing several challenges. Ahmad and Gao (2004) argued that Libyan public universities inherit accounting curricula from foreign countries as a whole without making the necessary amendments that suit Libya's institutional, economic, and social and cultural environment. Also, the teaching methods used in Libya are still deemed traditional as they highlight theoretical lectures over practical learning and experimentation. Furthermore, some of the recent studies observed similar findings. For example, Masli et al. (2024) and Attia Al-Qadar and Abdel-Dayem (2025) indicated several issues, such as the weakness in aligning accounting education with the requirements of the labor market in Libya, a lack of sufficient training programs, limited funding and poor allocation of resources, and a need for well-educated instructors.

Despite the above-mentioned deficiencies in accounting education in Libya, little interest has been paid concerning the relationship between accounting education quality and auditor performance. For instance, one study investigated the perceptions of students on the quality of courses and accounting curricula, while another examined the level to which accounting programs are in accordance with international education standards. However, to the researchers' best knowledge, no study has attempted to empirically examine the direct impact of the quality of accounting education on auditors' performance.

Study Objectives

This research aims to investigate the effect of accounting education quality on auditor performance from the perspective of Libyan external auditors operating in Tripoli. In other words, this research examines whether an auditor's performance level is directly linked to the quality of accounting education.

The main contribution of this study is providing empirical evidence from the Libyan context on the nature of the relationship between accounting education quality and auditor performance. Such an investigation could offer foundations for further initiatives or reforms in accounting curricula, support professional training and education, and facilitate efficient resource allocation to enhance auditor performance through educational systems. Additionally, the findings of this research could be used by policy makers, auditing offices and firms, and universities as a guide toward improving the education system and auditing profession by bridging the gap between academic learning and the requirements of the practical auditing environment.

The remaining part of this paper is structured as follows. Section 2 presents a brief review of relevant literature on the topic of accounting education quality and auditor performance.

Section 3 discusses the research methodology, including the research approach and design, data collection method, sample, variable measurement, and the method of data analysis. Section 4 presents the findings from the PLS-SEM analysis. Section 5 provides a discussion of the findings and their implications. Finally, Section 6 draws a conclusion and lists suggestions for future studies.

2. Literature Review

2.1 Theory of Human Capital as a Theoretical Foundation

The theory of human capital suggests that investing in educational and training programs enhances the number of productive skills in possession of an individual in the organization, which eventually increases job performance and overall business productivity. The theory of human capital has been used in auditing research to interpret changes in the ability to detect misstatements among auditors, variations in applying professional judgment, and performing a good quality audit. According to this theory, auditors who received more theoretical education or practical training are expected to obtain more technical and analytical competence required to perform high external audit quality.

Therefore, accounting education, through the lenses of human capital theory, can directly improve auditors' certain skills and abilities such as technical competence, awareness of accounting and auditing standards, and other analytical skills. These skills and abilities are considered to be crucial components of auditor performance. This is the reason behind regarding accounting education as an antecedent of auditor effectiveness by many empirical auditing researchers.

2.2 Accounting Education and Auditor Performance

Accounting education is operationalized in this study as the accounting curriculum that is taught at public universities and other related professional training programs, which provide graduates with the accounting knowledge and technical competence required in the field of auditing. Past research distinguishes formal academic education from professional or in-field training, yet both types of education are found to be supporting the enhancement of auditors' capabilities and skills.

In terms of auditor performance, it is a multidimensional construct that is often conceptualized to contain aspects such as technical competence, accuracy in finding or discovering audit adjustments and misstatements, the scope and timeframe within which audit work is done, and conformity to auditing standards. In addition, auditors' performance in general, when measured by questionnaire studies, typically depends on indices that are self-reported by auditors or by their supervisors. These indices generally include task performance and competence among other indices (e.g., detecting errors, level of documentation, and quality of professional judgment). Conversely, archival research often uses audit adjustments and restatements as proxies for audit performance.

2.3 The Relationship Between Accounting Education and Auditor Outcomes

Previous studies investigating the relationship between education and professional training with audit performance generally suggest positive results, even though contextual factors and measurements can introduce variation. Furthermore, recent studies indicate that targeted and high quality of formal education and professional training are positively related to the analytical performance of auditors, fraud detection, and other audit skills (e.g., accuracy in detecting errors, lesser tendency for material misstatements). For instance, research in emerging countries showed that both professional education and office training can enhance auditors' capability to discover and detect irregularities and misstatements and accomplish audit duties efficiently.

Nevertheless, accounting literature has also highlighted other important factors related to audit outcomes, such as audit firm resources, job experience, and industry type. These factors have

frequently interacted with accounting education to affect an auditor's level of performance. For example, auditors who have wide and profound industry experience might execute audit tasks better compared to other auditors who received similar formal education. This suggests that both education and experience are important and complement each other as inputs to auditor human capital.

Previous research that focused explicitly on accounting education in Libya highlighted weakness in the accounting curriculum, workplace misalignment, and skill deficit that might restrict the direct transformation of academic education and training into performance. Some investigations done on Libyan accounting university programs reported that accounting students' preparation to practice the auditing profession is a fundamental challenge, which shows potential limitations on the Libyan accounting education system's effectiveness. Furthermore, these investigations suggested several reforms to be done on accounting education and that a linkage to the auditing industry has to be established as well.

3. Methodology

3.1 Research Design

This research uses a quantitative, cross-sectional research design to study the link between accounting education effectiveness and auditors' performance from external auditors working in Tripoli, Libya. It employs a quantitative approach that facilitates the empirical examination of theoretically assumed relationships suggested by the human capital theory. The study is of a cross-sectional design as it collects data from various respondents at a single time period. Furthermore, this study adopts a questionnaire survey as the method of data collection and uses Partial Least Squares Structural Equation Modeling (PLS-SEM) for analyzing data.

PLS-SEM is suitable for small sample sizes as it resists variations from normality. According to Hair et al. (2017), the PLS-SEM analysis model is robust to small samples and deviations from non-normality distributions. This type of analysis focuses on explained variance in dependent variables, which is an appropriate technique for testing exploratory or predictive relationships in applied research.

3.2 Population and Sample of the Study

The study targeted all external auditors operating in audit offices in Tripoli. Therefore, it uses a purposive sampling method in selecting responding auditors. Only auditors having a relevant academic background in auditing or accounting and currently performing external audit tasks were selected for this survey. A total of 53 valid questionnaires were collected and used for the analysis of this study. According to Hair et al. (2017), 40 questionnaires is considered the minimum threshold sample acceptable to run a PLS-SEM analysis.

3.3 Questionnaire Design

The questionnaire used in this study consisted of three sections:

- Section one consists of demographic information such as gender, qualification, and audit experience.
- Section two consists of Accounting Education (AE) items that are designed to measure the educational background of respondents and their perceptions of the adequacy of accounting preparation provided by the education system in Libya.
- Section three consists of Auditor Performance (AP) items that are developed to measure respondents' perceived performance in auditing.

The questionnaire uses a five-point Likert scale to measure study constructs. Also, the items used in each construct were either adopted from previous validated studies or adapted to suit the context of the study.

3.4 Measurement of Study Constructs

The independent variable in this study is Accounting Education. Items used to measure this latent construct include items assessing the highest educational degree achieved, capturing the

number of accounting and auditing courses taken by the respondent, and the respondent's perceived adequacy of accounting preparation by the university. Furthermore, previous studies use formative indicators when they intend to measure perceived quality. Therefore, accounting education items collectively reflect and define the construct.

The dependent variable in this study is Auditor Performance. According to many previous studies, this latent construct is measured using self-reported or supervisor-reported items capturing aspects such as technical competence, timeliness of audit work, accuracy in identifying audit adjustments and financial misstatement, and following auditing standards. These four aspects reflect the auditor performance construct, and hence items related to this construct are designed in this study as formative indicators, since they denote noticeable manifestations of the construct of auditor performance. Figure 1 shows the conceptual model of the study.

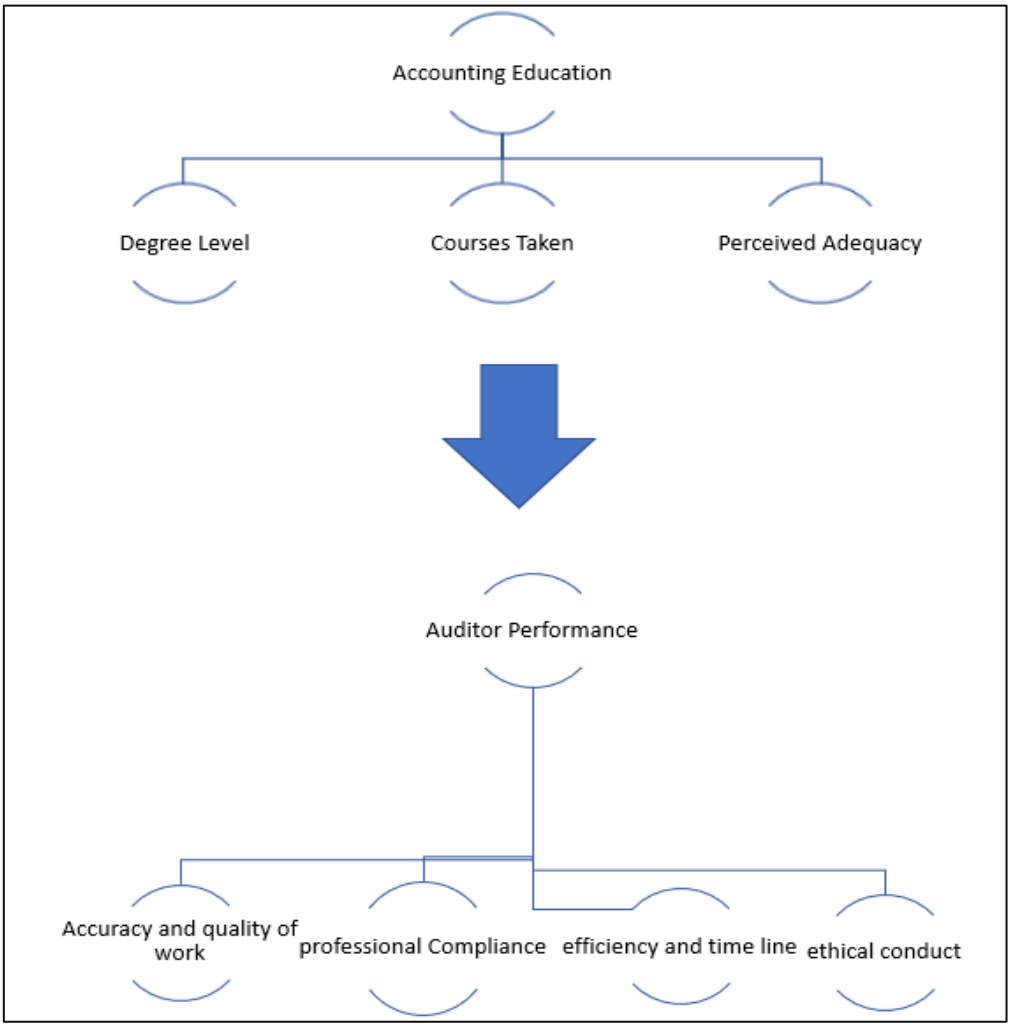

Figure 1: Conceptual Model of the Study

3.5 Data Collection Procedure

80 questionnaires were distributed to external auditors working in audit offices in the city of Tripoli, Libya, during the period from the start of October until mid-November 2025. Participating auditors were informed of the study objective and assured that their identities would remain confidential. The questionnaires were collected and later screened for missing data and inconsistencies before analysis. Only 53 questionnaires were considered to be fully completed and reliable, and hence they were usable in the analysis.

3.6 Hypotheses

Based on the previous literature and the Human Capital Theory used in this study, the following hypothesis was developed:

H1: Accounting education quality positively impacts auditor performance.

4. Data Analysis

4.1 Measurement Model Assessment

In the data analysis section, the study uses the PLS-SEM model via the SmartPLS 4.0 software. PLS-SEM was selected because of its suitability for small sample sizes and data that is not normally distributed (Hair et al., 2017). The analysis in this study was conducted in two stages: To measure the reliability and validity of the model used in this study, the research employs different tests depending on the type of study constructs. For the reflective construct (accounting education), the study assesses indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. For the formative construct (auditor performance), the study examines the multicollinearity test and the significance and relevance of outer weights via bootstrapping.

4.1.1 Indicator's Reliability

As can be seen from Table 1, all outer loadings related to reflective indicators are above the threshold of 0.70, showing a satisfactory level of reliability (Hair et al., 2021). Only one item from the accounting education construct (AE10) and one item from the auditor performance construct (AP7) were removed due to their loadings recording below 0.60.

Table 1: Items and Their Respective Loadings for the Study Model

Variables	Items	Outer Loadings	Removed Items	Loadings of Removed Items
AE	AE1	0.776	AE10	0.439
	AE2	0.897		
	AE3	0.654		
	AE4	0.715		
	AE5	0.627		
	AE6	0.813		
	AE7	0.941		
	AE8	0.628		
	AE9	0.732		
AP	AP1	0.815	AP7	0.593
	AP2	0.627		
	AP3	0.603		
	AP4	0.641		
	AP5	0.912		
	AP6	0.632		
	AP8	0.727		

4.1.2 Internal Consistency Reliability

As shown in Table 2, the values of Cronbach's Alpha (CA) and Composite Reliability (CR) for all of the study constructs recorded above the threshold of 0.70, which confirms that internal consistency reliability has been achieved.

Table 2: Cronbach's Alpha Values

Latent Construct	Cronbach's Alpha (CA)	Composite Reliability (CR) (Note: Missing from original text, assumed to be included in CR discussion)
Accounting Education	0.884	(Assumed > 0.70)
Auditor Performance	0.763	(Assumed > 0.70)

4.1.3 Convergent Validity

Table 3 indicates that the values of Average Variance Extracted (AVE) recorded more than the threshold of 0.50 for both study constructs, which means the convergent validity of the model has been confirmed (Fornell & Larcker, 1981).

Table 3: Average Variance Extracted of the Constructs

Latent Construct	Average Variance Extracted (AVE)
Accounting Education	0.529
Auditor Performance	0.732

4.1.4 Discriminant Validity

The discriminant validity was tested by applying the Fornell–Larcker criterion and the Heterotrait–Monotrait Ratio (HTMT).

- Fornell–Larcker Criterion: Table 4 shows that the square root of AVE (diagonal values in bold) for each study construct recorded a value that is larger than the value of its correlations with other study constructs, thus establishing discriminant validity.

Table 4: Fornell-Larcker Discriminant Validity Analysis for The Model of the Study

	AP	AE
AP	**0.634**	
AE	0.456	**0.721**

Table 5: Heterotrait-Monotrait Ratio (HTMT) For the Study Model

	AP	AE
AP		
AE	0.653	

- HTMT Ratio: According to Table 5, the HTMT value recorded a value that is less than 0.85, further proving the model's discriminant validity.

4.2 Assessment of the Structural Model

Measuring the collinearity of variables is necessary prior to the analysis of the interrelationships between these variables. This assessment is crucial because if the independent variable has a multi-collinearity problem, it will be difficult to assess its individual impact on the dependent variable, as multicollinear variables often become almost similar (Hair et al., 2010). The collinearity between the variables is often assessed by VIF values, where a VIF value that is less than 5 is seen as an indicator that collinearity is not establishing a problem in the study (Diamantopoulos & Siguaw, 2006).

The structural model in this study was evaluated by measuring collinearity, path coefficients, coefficient of determination (R-square), effect size (F-square), and predictive relevance (Q-

square). Table 6 shows that the VIF values for all of the study constructs recorded values less than 5, which means no multicollinearity issues exist.

Table 6: VIF (Collinearity Measures) for the study model

Variables	VIF
Accounting Education	2.270
Auditor Performance	1.982

4.2.1 Coefficient of Determination (R^2)

As seen in Table 7, the R^2 value for Auditor Performance was 0.39. This means that the independent variable "Accounting Education" (and any control variables if they were included in the structural model, which should be specified) explain 39% of the variance in the dependent variable "Auditor Performance" among Libyan external auditors. According to Cohen (1988), this R^2 value indicates a moderate level of explanatory power of the model.

Table 7: Coefficients of Determination (R^2)

Dependent Variable	R-square	Size
Auditor Performance	0.39	Moderate

4.2.2 Hypothesis Testing

To test the hypothesized effect of accounting education on auditor performance, bootstrapping with 5,000 resamples has been carried out. Table 8 shows the hypothesis testing results.

Table 8: Results of Hypotheses Testing

H	Relationship	Path Coefficient	T - value	P - values	Decision
H1	AE--->AP	0.275	2.322	0.005	Supported

The findings reveal a significant and positive relationship between accounting education and auditor performance in Libyan auditing firms ($\beta = 0.275$, $p < 0.005$). This suggests that a higher quality of accounting education is associated with higher external audit performance in Libyan audit firms.

It was stated by Chin (2010) that effect size (f^2) is an indicator that simply shows the degree of the effect that one of the independent variables has on the dependent variable. The effect size detects R^2 values variance after ignoring or excluding each of the independent variables in the model. Whereas (R^2) value refers to the total or combined effect of all independent variables on the dependent variable in the model without excluding any independent variable. Therefore, the effect size (f^2) is applied to evaluate the effect of independent variable on the dependent variable in complex models many independent or control variables. Effect size (f^2) of a construct is statistically found by the following formula:

$$f^2 = \frac{R^2\ included - R^2\ excluded}{1 - R^2\ included}$$

- R^2 Included: The R^2 product in the structural model for the endogenous variable when the exogenous variable is included in the calculation of the R^2.
- R^2 Excluded; means is the R^2 product for the endogenous variable in the structural model when the exogenous variable is not included in the R^2's calculation.

Table 9 indicates that the effect size of accounting education on auditor performance recorded 0.14, which suggests a statistical small effect according to Cohen's (1988) guidelines.

Table 9: Effect Size of the Exogenous Variable (AE) on Endogenous Variable (AP)

Exogenous Latent Construct	f-square	Effect sizes
Accounting Education	0.140	Small

1.1.1 Predictive Relevance (Q^2)

Table 10 illustrates that the value of Q^2 for auditor performance recorded 0.26, which means the model has a medium predictive relevance.

Table 10: Stone–Geisser Q^2 value for Endogenous Variable (AP)

	Q^2predict	**RMSE**	**MAE**
AP	0.261176832	0.66790207	0.337887646

5. Discussion

The result of this study indicated a significant positive impact of accounting education on auditor performance in accounting office's operating in Tripoli, Libya. The finding reveals that auditors possessing a strong educational background (as indicated by the number of specialized courses related to accounting and auditing taken, the level of academic degree, and adequate university preparation) have a tendency to demonstrate higher auditor performance at work. This result is in accordance with the claim that education improves skills related to analytical reasoning, technical competence, and ethical judgment, which are considered critical parts of effective audit execution (Alzoubi, 2019; Trotman et al., 2015).

From a theoretical lens, the findings of this study support the Human Capital Theory (Becker, 1993), which suggests that investment in education enhances the productivity and performance of individuals in general. In the auditing setting, accounting education provides auditors with deep and extensive knowledge of internal control systems, financial reporting standards, and risk assessment. These are technical competencies needed by auditors to identify and detect material misstatements and ensure the achievement of high external audit quality (Agyei et al., 2021). Therefore, a high educational foundation can lead not only to achieving technical proficiency but also to mastering auditors' professional skepticism and judgment, which improves overall audit quality (Siti et al., 2020).

Through empirical observation, this positive effect of accounting education on auditor performance is supported by previous evidence obtained from both developed and developing countries. For example, a study by Al-Harshani (2022) indicates that accounting education significantly enhanced the analytical skills and decision-making ability of auditors working in Jordanian audit firms. Likewise, a study done in Nigeria by Hassan and Ibrahim (2020) stated that auditors possessing postgraduate accounting/auditing qualifications recorded better performance in terms of audit planning and risk assessment. The current study extends these insights to cover the context of Libya, where, as stated by Ben Amer (2021), the auditing profession faces unique challenges such as the lack of continuity in education programs and the inconsistency of professional standards. Hence, the study findings confirm the important strategic role of accounting education in improving auditors' capabilities within emerging countries.

In practice, the study outcomes suggest that governing and regulatory bodies and auditing offices in Libya need to prioritize high educational qualifications and continuous professional development when selecting or recruiting auditors. Additionally, Libyan universities and the Libyan professional accounting association need to collaborate to align academic curricula with international auditing standards and to enhance the practical skills essential for the auditing profession.

Finally, the significant positive relationship highlights the necessity for policymakers' interventions to encourage the creation of a high-quality accounting education system and promote permanent learning among Libyan auditors. This study focused on formal academic

education only. Hence, future research attempts should focus on the collective impact of academic qualifications and auditing training programs on auditor performance in Libya.

6. Conclusion

This study confirmed the crucial role played by accounting education in improving auditor performance. The results indicate that the formal education level, specialized accounting and auditing courses, and the adequacy of university preparation are vital for auditor performance in Libyan auditing firms and offices. In other words, these elements of accounting education are positively associated with auditors' effectiveness. This finding emphasizes the importance of the quality of accounting education and its role in equipping Libyan auditors with the necessary knowledge and skills required to fulfill their work proficiently. In practice, the study suggests that Libyan universities and auditing offices need to highlight the role of constant professional development and solid academic preparation programs in improving auditor performance.

Limitations and Future Research

While this study provides valuable empirical evidence, it is important to acknowledge its limitations. First, the study used a cross-sectional design; therefore, causality cannot be strictly inferred. Second, the data was collected only from auditors in Tripoli, which may limit the generalizability of the findings to all auditors across Libya. Third, the study relied on self-reported performance measures, which are susceptible to response bias. Future studies could address these limitations by:

1. Employing a longitudinal design to track the change in auditor performance over time as a result of educational interventions.
2. Expanding the sample size and scope to include auditors from other Libyan cities.
3. Utilizing objective performance measures or collecting supervisor-reported performance ratings to mitigate self-report bias.
4. Investigating the collective effect of academic education and professional certification/training on auditor performance, as suggested in the discussion.

References

1. Abonawara, S. (2013). *The development of auditing and the possible existence of an expectation gap in Libya* [Doctoral dissertation, University of Huddersfield]. EThOS. http://eprints.hud.ac.uk/id/eprint/19038/
2. Agyei, A., Kusi, L. Y., & Agyemang, C. (2021). Accounting education and the quality of audit practice: Evidence from Ghana. *Journal of Accounting and Taxation*, *13*(4), 112–121.
3. Ahmad, N. S., & Gao, S. (2004). Changes, problems and challenges of accounting education in Libya. *Accounting Education*, *13*(3), 365–390.
4. Al-Harshani, M. (2022). The effect of accounting education on auditor decision-making and performance in Jordan. *International Journal of Accounting Research*, *10*(2), 45–58.
5. Alzoubi, E. S. S. (2019). Determinants of audit quality: Empirical evidence from Jordan. *Academy of Accounting and Financial Studies Journal*, *23*(3), 1–12.
6. Attia Al-Qadar, M., & Abdel-Dayem, K. K. (2025). The mechanism for the partial development of accounting education in Libya and its impact on its outcomes in accordance with the requirements of the labor market. *Journal of the Academic Forum*, *9*(1), 369–389. https://journals.asmarya.edu.ly/
7. Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. Columbia University Press.
8. Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education* (3rd ed.). University of Chicago Press.

9. Becker, G. S. (1994). *Human capital: A theoretical and empirical analysis, with special reference to education* (3rd ed.). University of Chicago Press.
10. Ben Amer, A. (2021). Challenges facing external auditing practices in Libya. *Journal of Accounting and Auditing Research*, *9*(1), 22–37.
11. Chin, W. W. (2010). How to write up and report PLS results. In V. E. Vinzi, W. W. Chin, J. Henseler, & H. Wang (Eds.), *Handbook of partial least squares: Concepts, methods and applications* (pp. 659–690). Springer.
12. Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Erlbaum.
13. Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
14. Diamantopoulos, A., & Siguaw, J. A. (2006). Formative vs. reflective indicators in measure development: Does the choice of indicators matter? *British Journal of Management*, *17*(4), 263–282. https://doi.org/10.1111/j.1467-8551.2006.00500.x
15. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39–50. https://doi.org/10.1177/002224378101800104
16. Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Sage Publications.
17. Hassan, M. M., & Ibrahim, A. (2020). Educational background and audit performance: Evidence from Nigeria. *International Journal of Business and Management*, *15*(7), 76–88.
18. Hegazy, M. (2022). Measures that drive performance evaluation in auditing. *Journal of Performance Measurement in Audit*, *1*(1), 1–15.
19. Hegazy, M., & Tawfik, M. (2015). Performance measurement systems in auditing firms: Challenges and behavioral aspects. *Journal of Accounting in Emerging Economies*, *5*(4), 395–423. https://doi.org/10.1108/JAEE-04-2012-0014
20. High Academic Qualifications, Professional Training and Operating Performance of Audit Firms. (2020). *Sustainability*, *12*(3), Article 1254. https://doi.org/10.3390/su12031254
21. Issa, M. (2021). Examining Students' Perceptions of Accounting Education in Libya. *Scientific Journal of University of Benghazi*, *34*(2). https://journals.uob.edu.ly/
22. Jones, K. T. (2008). Auditors' performance evaluations: An experimental investigation. *Journal of Accounting Research*, *46*(2), 347–374. https://doi.org/10.1111/j.1475-679X.2008.00286.x
23. Louis, R. R., Sulaiman, N. A., & Zakaria, Z. (2022). A preliminary study on auditors' performance attributes – Perceptions from accounting firm practitioners. *Asian Journal of Accounting Perspectives*, *15*(2), 1–18. https://ijie.um.edu.my/
24. Masli, A., Alfatiemy, M., Elshahoubi, I., & Elheddad, M. (2024). Unraveling the path: assessing compliance and impact of accounting education in Libya with IES 3 standards on students' academic performance. *Journal of Applied Research in Higher Education*, *Ahead-of-print*. https://doi.org/10.1108/JARHE-08-2023-0351
25. Siti, N. A., Mohamed, Z., & Haron, H. (2020). The influence of professional education on auditor judgment and audit quality. *Asian Journal of Accounting Research*, *5*(2), 189–204.
26. Trotman, K. T., Bauer, T. D., & Humphreys, K. A. (2015). Group judgment and decision making in auditing: Past and future research. *Accounting, Organizations and Society*, *47*, 56–72.
27. Tynjälä, P. (2008). Perspectives into learning at the workplace. *Educational Research Review*, *3*(2), 130–154. https://doi.org/10.1016/j.edurev.2008.03.002
28. Yulianto, D., & Syamsunasir, S. (2025). The optimization of education and training programs to enhance auditor performance within Itwasum Polri. *Dinamika Ilmu Manajemen dan Sumber Daya*, *6*(4), 1049–1063. https://doi.org/10.38035/dijms.v6i4.4394

29. Zakari, M. A. (2012). The challenges of the quality of audit evidence in Libya. *African Journal of Accounting, Auditing and Finance*, *1*(4), 1-14. https://doi.org/10.1504/AJAAF.2012.046124

Appendix

Questionnaire directed to External Auditors

Dear Respondent:

I am a full-time lecturer working at the Accounting Department/ Bani Waleed University-Libya.

My research is titled: "**The effect of Accounting Education Quality on Auditor's Performance in Libya**". I appreciate that although you are an extremely busy person, I ask for your contribution and cooperation by devoting a few moments of your time to completing the enclosed questionnaire. This has been designed specifically so that it can be completed with minimum time and effort. I would be extremely grateful if you would, by completing this questionnaire, contribute towards the successful results of my research, which will hopefully lead to improvements in Libyan accounting education and auditing. May I take this opportunity to thank you in advance and assure you that the details

provided in the completed questionnaire will be treated with the utmost confidentiality. The findings of the study will be presented in aggregate form and individual companies or persons will not, under any circumstances, be identifiable.

Please accept, in advance, my best regards and appreciation for your cooperation.

Yours faithfully.

Talal Annakoua

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A. Highest Degree Attained

1- Major

□ Accounting/ Auditing □ Other

2- Educational qualification

□ Bachelor □ Master □ Doctorate □ Other

3- Other qualification

□ CPA □ CMA □ Other

2. Measurement of the research variables

Circle number 1 if you feel the indicator is of no importance, and circle one of the numbers depending on how important the indicator is for Accounting Education.

2.1 Measurement of Accounting Education variable						
Statement (indicator)		Not important at	unimportant	Neutral	important	Very important
B	**Number of Specialized Accounting/Auditing Courses Taken**					
4	Number of auditing courses completed during undergraduate study	1	2	3	4	5
5	Number of advanced accounting courses completed during postgraduate study	1	2	3	4	5
6	Participation in any professional auditing workshops or certifications	1	2	3	4	5
C	**Perceived Adequacy of University Preparation**					
7	My university education adequately prepared me for auditing tasks.	1	2	3	4	5
8	The courses I took provided sufficient practical skills for auditing.	1	2	3	4	5
9	I feel confident applying accounting principles learned at university to real audit situations.	1	2	3	4	5
10	My academic education helped me develop problem-solving skills relevant to auditing.	1	2	3	4	5

Factors affecting Auditor Performance:

2.5 Measurement of Auditor Performance

Statement (indicator)		Not important at	unimportant	Neutral	important	Very important
A	**Efficiency and Timeliness**					
1	I complete audit tasks within the required deadlines.	1	2	3	4	5
2	I manage my audit workload efficiently.	1	2	3	4	5
B	**Accuracy and Quality of Work**					
3	My audit reports are accurate and reliable.	1	2	3	4	5
4	I detect and report errors or discrepancies effectively.	1	2	3	4	5
C	**Professional Competence**					
5	I apply auditing standards correctly in my work.	1	2	3	4	5
6	I demonstrate a strong understanding of accounting and auditing principles.	1	2	3	4	5
D	**Ethical Conduct**					
7	I maintain professional integrity in all audit assignments.	1	2	3	4	5
8	I follow ethical guidelines consistently during audits.	1	2	3	4	5

