"Impact of auditor characteristics on audit quality during COVID-19: Evidence from Saudi Arabia"

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IMPACT OF AUDITOR CHARACTERISTICS ON AUDIT QUALITY DURING COVID-19: EVIDENCE FROM SAUDI ARABIA

Abstract

This study aimed to analyze the impact of auditor characteristics on audit quality in Saudi Arabia during the COVID-19 pandemic by assessing how auditor characteristics (such as gender, age, education level, professional certificate, sector, size of the employees, revenue, experience, and region) impact audit quality in crisis conditions. It employed a descriptive-analytical approach and quantitative regression analysis of cross-sectional data. The survey was conducted in 2021 among 203 auditors in Saudi Arabia. Data collection was facilitated through the assistance of the Saudi Organization for Chartered and Professional Accountants (SOCPA) to make the sample more structured and representative. The results reveal that auditor characteristics played a significant role in determining audit quality during the pandemic. Gender, education level, audit firm size, and professionalism experience showed a strong correlation (r = 0.619) between professional experience and adaptability to remote auditing conditions. The regression analysis indicates a positive impact on audit performance. The results suggest practical implications for improving auditor selection, training programs, and regulatory frameworks to enhance audit resilience in times of crisis. It offers theoretical contribution by validating existing models under pandemic conditions and providing insights for the future of auditing practices. It also assists in establishing confidence in financial reporting together with control, making investors feel secure, and maintaining stability in the business world.

Keywords COVID-19, auditor characteristics, audit quality,

financial reporting, risk management, Saudi Arabia

JEL Classification M41, M42, G01

INTRODUCTION

Since its emergence in 2020, the COVID-19 pandemic has deeply affected the auditing profession worldwide. Companies have faced various challenges, including financial strain, operational changes, economic instability, and increased susceptibility to fraud; these challenges have raised new demands on auditors and brought new challenges to the table. These circumstances provide a critical examination of how auditors' characteristics influence audit quality (IFAC, 2020).

In the Saudi context, these challenges are pronounced due to the country's main reliance on the oil and petrochemical sectors, which are crucial to its economy. These industries were affected severely by the pandemic and experienced changes in demand, disrupted supply chains, and a loss of financial sustainability. This unstable situation has intensified the focus on the auditors' role in verifying sustainability and integrity. The Saudi Organization for Chartered and Professional Accountants (SOCPA) in responses issued guidelines in 2021 on how to manage these new challenges, maintain the quality of audits and address the risks associated with financial fraud that result from remote working (SOCPA, 2021).



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Conflict of interest statement: Author(s) reported no conflict of interest This prompted the needs of further explorations on auditors' characteristics in relation to audit quality, including gender diversity, education, professional training, and firm size (Al-Ghanem & Hegazy, 2011; Abdullah & Saleh, 2021; Riguen et al., 2021; Abdo et al., 2022). This significantly enhances auditors' adaptability during crises, enabling them to navigate the complexities of remote auditing more effectively.

1. LITERATURE REVIEW

The COVID-19 pandemic has profoundly impacted global markets, causing significant financial instability and underscoring the importance of accurate financial reporting. This has highlighted the urgent need for innovative audit practices, such as remote auditing (Khan et al., 2020; Gould & Arnold, 2020; Marzouk et al., 2021). In this context, auditor performance has become crucial in ensuring the accuracy and reliability of financial statements. Auditors who demonstrated competence and adaptability in response to sudden changes proved their ability to manage crises effectively. The pandemic emphasized the necessity of enhancing auditors' skills under unprecedented circumstances to maintain high-quality financial reporting and auditing practices despite the challenges (Al Shetwi, 2020). As a result, experience, adaptability, and professional judgment have become essential for sustaining financial stability and ensuring audit quality (Alessa & Shalhoub, 2023).

Auditors' experience, education, and regulatory knowledge have proven particularly important in addressing these challenges. Experienced auditors were better prepared to manage the complexities of the pandemic and were more aware of the increased financial risks (Haddad et al., 2023). Carungu et al. (2021) suggest that aligning auditors' skills with stakeholders' needs enhances audit outcomes. Moreover, auditors with specialized knowledge in sectors significantly affected by the pandemic, such as hospitality and retail, were instrumental in identifying unique risks (Wang et al., 2023). The crisis also underscored the need for strong ethical standards and professional skepticism, given the increased likelihood of misreporting or fraud, making auditor vigilance critical (Rashwan & Alhelou, 2020; Johnsonss & Persson, 2021).

Adaptability and flexibility became critical traits for auditors during the pandemic. The use of e-auditing methods and digital tools allowed auditors to maintain the quality of their work, collect digital evidence, and conduct au-

dits without physical access to documents. This shift has emphasized the growing importance of technological skills alongside traditional audit competencies. Auditors who demonstrated adaptability in using digital platforms were better equipped to meet the heightened demands of the crisis, reinforcing the importance of soft skills in complementing technical expertise (Pasolo, 2021; Hossain, 2021; El-Mousawi & Kanso, 2020; Haddad et al., 2023).

Furthermore, it was essential to examine the regulatory frameworks and challenges that emerged during the pandemic. Tibalajul and Lin (2015) noted a strong correlation between audit quality and adherence to regulatory standards. The regulatory changes adopted during the crisis, both globally and in Saudi Arabia, were instrumental in maintaining audit quality. Gould and Arnold (2020) emphasized that these regulatory shifts helped uphold standards during the pandemic.

In Saudi Arabia, the effectiveness of financial reporting was closely linked to auditors' experience and professional judgment, which played a crucial role in maintaining investor confidence. Strong audit committees also contributed by mitigating risks associated with aggressive tax strategies and improving audit quality. These sector-specific challenges highlighted the importance of specialized knowledge and expertise among auditors (Almutairi & Quttainah, 2020; Alzeban, 2019; Sansa, 2020).

To better understand the significance of auditor characteristics during crises, several theoretical frameworks offer valuable explanations. Signaling theory, for example, helps elucidate how auditors use their data and competencies to send strong signals of trustworthiness to investors and other stakeholders (Mujalli, 2024). Auditor characteristics such as education, experience, and firm size function as key signals that enhance credibility and trust in financial information during periods of uncertainty (Musleh Al-Sartawi & Reyad, 2018; S. Papadopoulou & K. Papadopoulou, 2020).

Agency theory further explains the relationship between auditors and the beneficiaries of financial reports, emphasizing the challenges posed by divergent interests. Auditor characteristics become crucial in promoting transparency and accountability, as they address potential conflicts of interest and help ensure credible audits, especially during crises like the pandemic (Carungu et al., 2021; Syahputra & Saraswati, 2020).

Institutional theory offers insights into how environmental and legal factors influence audit performance. The implementation of e-auditing in Saudi Arabia during the pandemic, for example, not only addressed immediate logistical challenges but also aligned with broader goals of increasing transparency and credibility in auditing. This shift reflected evolving expectations for audit quality and regulatory compliance, with institutional norms guiding auditors' adaptation to the new circumstances (Mujalli, 2024). Collectively, these theoretical perspectives underscore the critical role of auditor characteristics in maintaining high audit standards during the pan-

demic, whether through signaling trust to stakeholders, resolving agency conflicts, or adhering to institutional standards (Al-Zoubi, 2021).

Thus, this study aims to examine the impact of auditor characteristics on audit quality in Saudi Arabia during the COVID-19 pandemic. The conceptual framework draws from signaling, agency, and institutional theories to investigate how auditors maintained high audit performance standards despite unprecedented challenges.

2. METHODOLOGY

This study applied a quantitative methodology to assess the influence of various auditor characteristics on audit quality during the COVID-19 pandemic in Saudi Arabia. Data were collected through an online questionnaire administered from June to November 2021. The sample comprised 203 auditors, all of whom possessed professional auditing experience within Saudi Arabia.

Table 1. Demographic characteristics (n = 202)

	Characteristics	Frequency	Percent	
Gender	Female	19	9.4	
Gender	Male	183		
	18-24 years old	2	1.0	
A	25-34 years old	51	25.2	
Age	35-44 years old	73	36.1	
	More than 45 years old	76	37.6	
Marital status	Unmarried	33		
Marital Status	Married	169	83.7	
	Accounting diploma	9	4.5	
Educational level	Bachelor of Accounting	132	65.3	
Educational level	Master or higher diploma	53	26.2	
	Ph.D.	8	4.0	
Professional Certificate	Certified Management Accountant CPA	152	75.2	
(if applicable)	Certified Internal Auditor CIA	50	24.8	
Business sector	Governmental sector	5	2.5	
	Private sector	197	97.5	
	Small, with less than 50 employees	64	31.7	
The size of the facility in	Medium, ranges between 50-499 employees	67	33.2	
which you work	Large, ranges between 500-2999 employees	28	13.9	
	Giant with 3000 or more employees	19 183 2 51 73 76 33 76 33 169 9 132 53 8 t CPA 152 50 5 197 s 64 employees 67 employees 28	21.3	
	Less than 5 years	8	4.0	
Number of years of	5 to 9 years	47	23.3	
experience/work	10 to 14 years	41	20.3	
	15 and above	106	52.5	
	Eastern Region	32	15.8	
Dogion	Central Region	93	46.0	
Region	Mecca Region	69	34.2	
	Other than that	8	4.0	

The Saudi Organization for Chartered and Professional Accountants (SOCPA) facilitated the distribution of the survey via email.

To ensure compliance with ethical standards, participants were informed about the purpose of the study and assured that their confidentiality would be maintained. To enhance the instrument's validity and reliability, a pilot test of the questionnaire was conducted in May 2021, integrating feedback from accounting experts, scholars, and researchers.

The final survey was organized into several sections. The initial section outlined the research objectives and was followed by demographic questions regarding the participants, as presented in Table 1. The primary content of the survey consisted of 40 statements categorized into two main domains.

The first domain examined the pandemic's impact on auditors in Saudi Arabia, specifically addressing how the crisis altered their work practices. Due to imposed restrictions and the transition to remote work, auditors were required to exhibit flexibility and adaptability in navigating these sudden changes. The second domain focused on the work environment and the shift to remote operations, investigating how the move to home offices influenced auditors' capacity to uphold audit quality. This section also explored the personal and professional challenges faced by auditors, including the need to balance work and family responsibilities. During this period, resilience emerged as a vital characteristic, enabling auditors to effectively manage the stress associated with rapidly changing circumstances. Furthermore, critical thinking skills became increasingly essential as auditors encountered novel challenges that demanded innovative and effective solutions.

Table 2. Reliability results (n = 202)

DimensionsN of itemsCronbach's AlphaThe first domain: The impact of the COVID-19 pandemic on auditors in Saudi Arabia140.858The second domain: The influence of work environment and remote work on auditors during the COVID-19 pandemic in Saudi Arabia260.928Overall40498.0

3. RESULTS AND DISCUSSION

The demographic analysis of the 203 participants reveals that the majority are male (90.6%), with a huge portion over the age of 45 (37.6%), and most are married (83.7%). The highest educational attainment is a bachelor's degree in accounting, with 65.3% of participants holding this qualification. Additionally, 75.2% of the respondents possess the Certified Management Accountant (CPA) certification. Most participants work in the private sector (97.5%), with a substantial proportion employed in medium-sized organizations (33.2%). More than half (52.5%) have over 15 years of professional experience. The Central Region of Saudi Arabia is particularly well-represented, accounting for 46.0% of the sample (see Table 1).

The reliability of the questionnaire was assessed using Cronbach's Alpha, resulting in scores ranging from 0.829 to 0.858. These values indicate strong reliability, with all scores exceeding the accepted threshold of 0.70 (Table 2).

The questionnaire used a 5-point Likert scale to measure participants' perceptions, ranging from "strongly disagree" to "strongly agree." Based on Pimentel's (2010) physiological thresholds, the mean intervals were further divided into very low (1 to less than 1.80), low (1.80 to less than 2.60), medium (2.60 to less than 3.40), high (3.40 to less than 4.20), and very high levels of agreement (4.20 to 5.00).

The score shown in Table 3 also shows that the respondents' average perception of how the pandemic impacted the typical professional activities of accountants was on the moderate side, with a mean score of 3.87±0.594, which clearly shows that they highly endorse the statement. The mean scores for the fourteen items ranged with the highest mean score being 4.31±0.912 for the opinion that 'COVID-19 limited the scale of business and impacted on working capital', the lowest mean response score given was

Table 3. Descriptive statistics for participants' answers toward the first domain (n = 202)

Statements	Min	Max	Mean	Std. Deviation	Level
COVID-19 has affected your professional activity.	1.00	5.00	3.97	0.997	High
COVID-19 influenced the preparation and audit of the financial statements.	1.00	5.00	3.84	1.063	High
The enterprise discloses its assumptions about the future, considering aspects of continuity and uncertainty.	1.00	5.00	3.89	0.880	High
Essential disclosures are included in financial statements to aid users in making well-informed decisions.	1.00	5.00	4.04	0.851	High
COVID-19 has limited business scope and impacted liquidity.	1.00	5.00	4.31	0.912	Very High
COVID-19 has influenced the approved budget for 2019, specifically before the release of the first-quarter report in 2020.	1.00	5.00	3.82	1.171	High
Has the 2019 budget been revised after the issuance of the first- quarter report in 2020, amid the pandemic?	1.00	5.00	3.65	1.017	High
Effects of COVID-19 are disclosed after the date of the financial statements but before approval for publication.	1.00	5.00	3.94	0.955	High
Facing challenges in meeting professional deadlines was prevalent before COVID-19.	1.00	5.00	3.52	1.103	High
Struggling to meet professional deadlines has become more pronounced during COVID-19.	1.00	5.00	4.06	0.881	High
The expected credit losses have been determined.	1.00	5.00	3.75	0.920	High
COVID-19 has affected the attendance for physical inventory count.	1.00	5.00	3.80	1.165	High
Alternative audit procedures have been enacted during Covid-19 to secure sufficient and appropriate evidence concerning the existence and condition of stock.	1.00	5.00	3.74	1.025	High
COVID-19 has impacted the group reviewer's ability to participate in the component review.	1.00	5.00	3.80	1.022	High
The professional activities of accountants have been disrupted in connection with COVID-19 in Saudi Arabia.	2.57	5.00	3.87	0.594	High

3.52±1.103 for "Before the outbreak of COVID-19, some professional activities were challenging to complete on time with a high level of difficulty." Such a variation considers there is a general understanding of the pandemic's effect on professional activities.

Furthermore, Table 4 revealed that the respondents agreed regarding the impact of the workplace and remote working on the accounting personnel during the pandemic, with a mean score of 3.55 ± 0.468 . The results of the mean scores of the

twenty-six items obtained and varied in the range of 4.32±0.217, the maximum attained reading for 'An increase in the level of psychological stress concerning fear of isolation and disease during the COVID-19 pandemic' to 2.15±1.114 and the minimum score of the response "Monthly income during the COVID-19 pandemic is more compared to before the pandemic." Such findings can be seen as evidence of the multiple and severe impacts of the pandemic on one's psychology and financial status, which the respondents were aware of.

Table 4. Descriptive statistics for participants' responses toward the second domain (n = 202)

Statements	Min	Max	Mean	Std. Deviation	Level
Working hours have been reduced during the COVID-19 pandemic compared to the pre-pandemic period	1.00	5.00	3.50	1.328	High
There is no change in daily working hours between the COVID-19 pandemic and the period before it	1.00	5.00	2.69	1.123	Medium
Daily working hours have increased during the COVID-19 pandemic compared to the time before the pandemic	1.00	5.00	3.27	1.337	Medium
Telework negatively affected the flexibility of working hours	1.00	5.00	3.85	1.096	High
Income has decreased during the COVID-19 pandemic compared to the period before it.	1.00	5.00	3.98	1.155	High

Table 4 (cont.). Descriptive statistics for participants' responses toward the second domain (n = 202)

Statements	Min	Max	Mean	Std. Deviation	Level
There is no variation in monthly income between the COVID-19 pandemic and the time before it.	1.00	5.00	2.51	1.320	Low
Monthly income has risen during the COVID-19 pandemic compared to the period before it.	1.00	5.00	2.15	1.114	Low
Telecommuting has influenced an increase in work-related expenses, such as the provision of mobile devices and internet connectivity.	1.00	5.00	3.50	1.210	High
Telecommuting has contributed to a reduction in time and costs associated with commuting to work.	1.00	5.00	3.59	1.130	High
The lack of a private workspace at home during the COVID-19 pandemic affects work.	1.00	5.00	3.70	1.084	High
Work-related stress levels have heightened during the COVID-19 pandemic.	1.00	5.00	3.96	0.977	High
The fear of isolation and disease during the COVID-19 pandemic has led to an increase in psychological stress.	1.00	5.00	4.32	0.872	Very High
Job insecurity was prevalent before the COVID-19 pandemic.	1.00	5.00	2.84	1.195	Medium
Job insecurity is a concern during the COVID-19 pandemic.	1.00	5.00	4.12	0.949	High
Effective communication with colleagues was present before the COVID-19 pandemic.	1.00	5.00	4.11	0.711	High
Effective communication with colleagues is maintained during the COVID-19 pandemic.	1.00	5.00	3.45	1.037	High
Effective communication with customers was established before the COVID-19 pandemic.	1.00	5.00	4.13	0.728	High
Effective communication with customers is sustained during the COVID-19 pandemic.	1.00	5.00	3.20	1.117	Medium
You engaged in remote work before the onset of the COVID-19 pandemic.	1.00	5.00	2.93	1.277	Medium
Remote work has been part of your experience during the COVID-19 pandemic.	1.00	5.00	4.07	0.895	High
Possessing experience in utilizing contemporary technology.	3.00	5.00	4.16	0.631	High
Provision of suitable accounting software for remote work is ensured.	1.00	5.00	4.09	0.818	High
Educational and rehabilitation programs are provided to support work during the COVID-19 pandemic.	1.00	5.00	3.75	1.027	High
Telecommuting has negatively impacted the quality of reports.	1.00	5.00	3.42	1.136	High
A visual display technique is utilized to confirm the existence and condition of stock presently.	1.00	5.00	3.21	1.149	Medium
Do you anticipate that remote work during the COVID-19 pandemic will mark the initiation of a qualitative shift in the profession?	1.00	5.00	3.84	1.081	High
The second domain: Examining the influence of the work environment and remote work on accountants during the COVID-19 pandemic in Saudi Arabia	2.65	5.00	3.55	0.468	High

3.1. Ordinary least squares regression analysis

An ordinary least squares (OLS) regression model was developed to examine the relationship between various auditors' characteristics (the individual elements of auditors that power their performance) and audit quality during the COVID-19 pandemic. The model includes the independent variable Audit quality during the COVID-19 pandemic and nine dependent variables of auditor characteristics (gender, age group, marital status, educational level, professional certificate, business sector, size of the facility, experience, and region.

The regression model specified is as follows:

$$\begin{split} AQDC &= \beta_0 + \beta_1 G + \beta_2 AG + \beta_3 MS \\ &+ \beta_4 EL + \beta_5 PC + \beta_6 BS + \beta_7 S + \beta_8 E \\ &+ \beta_9 R + \varepsilon, \end{split} \tag{1}$$

where AQDC = Quality of the audit during COVID-19; G = Gender; AG = Age Group; MS = Marital Status; EL = Educational Level; BS = Business Sector; S = Size; E = Experience; R = Region; ε = Stochastic error term.

One major change during the pandemic was the necessity for auditors to demonstrate adaptabil-

Table 5. Correlation results between the study variables (n = 202)

Statements		The COVID-19 pandemic has had an impact on auditors' activities in Saudi Arabia	The work environment and remote work adoption have had a significant impact on auditors during the COVID-19 pandemic in Saudi Arabia, resulting in changes to their professional activities		
The COVID-19 pandemic has had an impact on	Pearson Correlation	1	.619**		
auditors' activities in Saudi Arabia	Sig. (2-tailed)		<.001		
	N	202	202		
The work environment and remote work adoption have had a significant impact on	Pearson Correlation	.619**	1		
auditors during the COVID-19 pandemic in	Sig. (2-tailed)	<.001			
Saudi Arabia, resulting in changes to their professional activities	N	202	202		

Note: **. Correlation is significant at the 0.01 level (2-tailed).

ity in transitioning to remote auditing practices and digital tools. The shift from traditional inoffice work to virtual platforms required greater technological proficiency, as auditors navigated virtual audits and employed digital collaboration tools. Additionally, this transition underscored the importance of effective communication skills, enabling auditors to maintain client relationships and coordinate effectively with teams despite physical separation.

The correlation coefficient analysis done in Table 5 established a strong positive correlation (0.619) between the encouraging professional activities of accountants and how the work environment and remote work during the pandemic impacted Saudi Arabia. This elevated level of association, which, according to Cohen's (1988) categorization, is high, produces evidence that the pandemic escalation reached advanced levels affecting clients'

professional engagements and the work environment, complicating the transition to remote work.

Table 6 shows deeper insight into the regression analysis about how auditors can improve audit quality within the context of the COVID-19 pandemic regarding various personal information factors. The regression model proved to be meaningful, as Table 6 shows, with R = 0.301, F = 2.131, and p = 0.029 < 0.05. This means that these factors had a real effect on audit quality. Specifically, male auditors boosted audit quality more than female auditors (B = 0.291, T = 2.295, p = 0.023 < 0.05).

Auditors who are more educated had a significant positive impact on the audit quality, as compared to those who are not so educated (B = 0.272, T = 1.283, p = 0.020 < 0.05). In contrast, the size of auditors' facilities significantly declined in the quality of auditors, enhancing audit quality in small

Table 6. Regression for auditors' positive impact on the quality of the audit during COVID-19

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		В	Std. Error	Beta			Tolerance	VIF
	(Constant)	3.605	.350		10.290	<.001		
	Gender	.291	.127	.178	2.295	.023*	.789	1.268
	Age group	043	.064	074	672	.502	.395	2.531
	Marital status	.061	.100	.047	.608	.544	.786	1.272
4	Educational level	.272	.056	.263	1.283	.020*	.896	1.116
1	Professional certificate	002	.082	002	030	.976	.864	1.157
	Business sector	.124	.219	.040	.567	.571	.931	1.074
	Size of the facility in work	149	.032	116	-1.545	.024*	.846	1.182
	Experience at work	081	.059	159	-1.378	.170	.355	2.817
	Region	052	.044	084	-1.201	.231	.966	1.035

Note: *. Correlation is significant at the 0.01 level (2-tailed). a. Dependent Variable: the positive impact of auditors on the audit quality during COVID-19.

rather than large facilities (B = -0.149, T = -1.545, p = 0.023 < 0.05). Other factors like age group, marital status, professional certificate, business sector, and work experience did not seem to make a noticeable difference in audit quality (p > 0.05).

The findings of this study highlight the leading role played by auditors' characteristics in ensuring a vital level of audit quality during the COVID-19 pandemic in Saudi Arabia. It reiterates that audits conducted in this period focused on ethical integrity, adaptability, communication skills, mindfulness, risk assessment, team collaboration, time management, competence, and judgment of auditors as the pandemic increased complexity and risk in financial reporting. Similar findings are seen by Al-Ghanem and Hegazy (2011), Alessa and Shalhoob (2023), and Pasolo (2021), who assert the role of auditors' characteristics during COVID-19. These findings align with signaling theory (Musleh Al-Sartawi & Reyad, 2018; S. Papadopoulou & K. Papadopoulou, 2020) and agency theory (Carungu et al., 2021; Syahputra & Saraswati, 2020).

In terms of the regression analysis, gender, education level, and the size of the audit firm are significant determinants of audit quality, particularly in the pandemic period. Anjarwi et al. (2024), Khan et al. (2023), and Abdullah et al. (2015) emphasize the importance of professional competencies and educational background. The findings also identified that smaller audit firm entities had more problems sustaining audit quality compared to larger ones. Bartik et al. (2020) and Khan et al. (2020) stressed that this pandemic was virulent for small enterprises and required governance particularly to be strong.

A strong correlation between remote work and audit quality reinforces technological competency. El-Mousawi and Kanso (2020) and Mujalli (2024) emphasized the use of digital work to maintain audit quality during a pandemic. Rashwan and Alhelou (2020), Tepalagul and Lin (2015), and Widyadhana and Feliana (2023) discovered that auditors need to uphold high ethical standards while working with technology in virtual environments. Pasolo (2021) looked at the challenges of virtual audit in maintaining audit quality in a remote working environment. This aligns with the institutional theory of maintaining audit quality in the face of evolving circumstances (Alzoubi, 2021; Mujalli, 2024; Rashwan & Alhelou, 2020; Widyadhana & Feliana, 2023).

The findings suggest several potential directions for future research. First, there is a need for further investigation into gender and education since they significantly affect audit quality. Second, a deeper understanding of how technological skills could improve the audit as digital technology is progressively influencing the auditing profession. In addition, studies should compare Saudi Arabia to other regions and industries to reveal whether the trends seen in the Saudi context are universal or if they are particular to the region.

In practice, the study provides relevant recommendations and lessons for audit firms and regulators regarding the auditors' competencies during recruitment and training to guarantee the effectiveness of audits during crises. Further, it emphasizes the need to hire and train auditors for specific attributes, including computer skills, flexibility, and education levels. This may assist firms in being ready for future crises and help in sustaining extraordinary audits.

CONCLUSION

This paper explores the auditor characteristics that influenced audit quality during the COVID-19 pandemic, providing insights into their practical and theoretical implications. The findings stress the importance of characteristics such as adaptability, technological proficiency, and the use of professional judgment as crucial for maintaining audit quality in the context of the COVID-19 crisis. Characteristics like gender, education level, and audit firm size were especially instrumental in determining audit performance. It also points out that the factors associated with higher remote work capacity and more technical competencies had a positive impact on audit quality. The regression analysis provided further confirmation of the importance of these attributes, highlighting auditors' experience and their ability to adapt to the new circumstances related to remote auditing due to the pandemic. These findings pro-

vide a better understanding of how auditor characteristics impact audit performance during crises and typify the significance of having such attributes in maintaining high standards in auditing during such conditions.

The novelty is a focus on specific auditor characteristics that were crucial during the pandemic and the emphasis on new corresponding skills, such as technological competencies and stress-related sustainability. Focusing on the highlighted characteristics in the recruitment, training, and development processes of auditors is beneficial for audit firms and regulators.

This study, therefore, recommends that future research examine how these characteristics will further define auditing practices, considering innovations such as technology and remote auditing. It is also important to widen the research scope to a variety of settings and dynamic factors that may contribute more significantly to understanding the link between auditor attributes and audit quality in crisis scenarios.

AUTHOR CONTRIBUTIONS

Conceptualization: Hebah Shalhoob. Data curation: Hebah Shalhoob. Formal analysis: Hebah Shalhoob. Investigation: Hebah Shalhoob. Methodology: Hebah Shalhoob.

Project administration: Hebah Shalhoob.

Resources: Hebah Shalhoob. Software: Hebah Shalhoob. Supervision: Hebah Shalhoob. Validation: Hebah Shalhoob. Visualization: Hebah Shalhoob.

Writing – original draft: Hebah Shalhoob. Writing – review & editing: Hebah Shalhoob.

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