

Effects of organizational climate, role clarity, turnover intention, and workplace burnout on audit quality and performance

Audit quality
and
performance

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Abstract

Purpose – This paper aims to examine the effect of the auditors' burnout determinates on audit quality and performance. It also analyses whether the demographic characteristics of gender, age group, education and job positions affect auditors' decisions for burnout, audit quality and performance.

Design/methodology/approach – A questionnaire was distributed on a sample of auditors in the top ten auditing firms in an emerging market including the Big 4. Factor analysis, correlation matrix and structural equation modeling were used for the analysis of the collected data and testing the developed hypotheses.

Findings – The results show that burnout has negative consequences for both the auditor and the auditing firm. While good organizational climate has a negative significant association with audit quality, nonethical decisions and audit performance, role clarity has positive significant association with the audit quality and performance and has an insignificant association with nonethical decisions. Also, turnover intention has significant positive association with nonethical decision, audit quality and performance.

Originality/value – This research is among the first to focus on auditor's burnout determinates on audit quality and performance in an emerging market characterized by different socioeconomic, political and cultural factors compared with those of developed markets. Auditors, regulators and professional policymakers can benefit from the results of this research.

Keywords Auditors' burnout, Audit quality, Turnover intention, Organizational climate, Role clarity, Audit performance

Paper type Research paper

1. Introduction

Burnout in the literature results from emotional exhaustion and physical tiredness (Beck *et al.*, 2013; Utami and Supriyadi, 2013; Tang *et al.*, 2014; Al Shbail and Al Shbail, 2020). Prior literature indicated that burnout (as shown in the emotional and physical exhaustion component in the workplace) is common among auditors who often experience high levels of stress, fatigue and may have cynical attitudes toward their clients and colleagues (Cropanzano *et al.*, 2003; Daugherty and Dickins, 2009; Jones *et al.*, 2010; Herda and Lavelle, 2012; Salehi *et al.*, 2020). Auditing is a profession characterized by specific deadlines,



especially in the busy season and professional exams and work overload causing limited time for auditors to enjoy their personal life. Due to such pressure and continued challenges to meet deadlines, audit firms face high employment turnover rates. External auditors experience burnout exceeding the average level compared to other professions (Danudoro *et al.*, 2021). Burnout is a state of mind faced by auditors when they are extremely tired, causing them not to work effectively and efficiently. Moreover, because of the COVID-19 pandemic, many employees and top-level management were laid off in response to the slowing economy. Auditors face significant mental and health challenges virtually performing their audit tasks with inability to collect sufficient evidence due to social distance and working outside their offices. The problems and challenges affecting auditors during the pandemic lead to a feeling of increased emotional exhaustion among auditors in many audit firms. The accounting literature claims higher job turnover, poor job performance and dissatisfaction as major consequences of burnout for both auditors and audit firms (Herda and Lavelle, 2012; Annelin and Svanström, 2022).

Stovall and Stovall (2009) argue that the accounting profession does not rely on the preliminary knowledge of accounting but requires more enhanced skills like leadership and communication by audit firms' employees in addition to their qualifications. The leadership and communication skills require more emphasize on the decision-making, decision support and new skill sets and training of those employees (Kennedy, 2013). The above skills and knowledge transition place more pressure on both the accountants and auditors in the form of burnout and role ambiguity. Deloitte and Touch issued a report showing the dissatisfaction level in the auditing environment where 50% of the employees are planning to leave their job once they find a suitable opportunity, which, in turn, can affect the auditing firm's quality, profitability and continuity (Cepin, 2011). The work overload and stress pressure, intolerance for errors, continuous update of latest in accounting and auditing standards, the change of regulations and employees' focus to ensure proper financial reporting and audit quality are considered the main drivers behind the increase of burnout and turnover intention in the accounting and auditing working environment (Ozkan and Ozdevecioğlu, 2013; Detzen and Gold, 2021). The current research aims to assess how auditors face all the above challenges and pressures when performing their audit tasks while maintaining the required audit quality. Also, the research investigates how the relationship between auditors and their audit firms can reduce employees' turnover intention and burnout.

Behavioral accounting studies focus on the human elements in the accounting and auditing profession. They assess the impact of the accounting functions on the behavior of the accountants, the effect of the reporting process on the users of the financial information and the impact of the functions done by the accountant on his/her behavior (Hofstedt and Kinard, 1970; Balachandran, 1985). Behavioral accounting studies have recently expanded to include the auditing profession due to the expansion of the audit networks worldwide. Such expansion resulted in increased work stress pressure facing audit practitioners when performing their audit activities, especially during the pandemic (Putra *et al.*, 2020; Samagaio and Felicio, 2022). The results of the above studies were controversial. Some studies found a direct positive relationship between the burnout and the work overload, job satisfaction and performance (Herda and Lavelle, 2012; Guthrie and Jones, 2012). Others indicated a negative relationship between the burnout and the firm commitment and work environment conditions (Fogarty and Kalbers, 2006; López and Peters, 2012). Such studies did not provide concluding evidence on how to reduce fatigue and job burnout in organizations with a high level of pressure at work (Beck *et al.*, 2013; Utami and Supriyadi, 2013; Tang *et al.*, 2014). The current research adds to the behavioral accounting studies by

investigating the burnout phenomenon in an emerging market such as Egypt using few organizational theories to better understand this issue. The research fills the literature gap regarding the test of the burnout in emerging markets. External auditors are selected for this research because the auditing profession is often experiencing role conflict and role ambiguity, causing extreme stress on auditors to undertake their audit duties while maintaining the audit quality (Mardi *et al.*, 2022). The study contributes to auditing firms' management, especially in improving working conditions, protecting auditor health and managing auditor's resources. It also provides evidence of whether demographic characteristics of auditors may have a significant effect on burnout determinates, audit quality and performance. The current research is an empirical reference in the auditing literature, especially for role ambiguity, role conflict, role overload, role stressors, job burnout and audit quality. A questionnaire was distributed on a random sample of auditors in the top ten auditing firms in Egypt with international affiliation including the Big 4. Factor analysis, correlation matrix and structural equation modeling were used to test the developed hypotheses. The results show that organizational climate, role clarity and turnover intention have significant positive and negative correlations with the audit quality and performance.

Corporate governance in Egypt has gained significant importance in recent years due to the integration of the Egyptian economy with the global economy (Samaha and Hegazy, 2010; Hegazy and Ebrahim, 2022). The move toward a free-market economy has been remarkably swift, and the process of privatization has stimulated the stock market activity. The Egyptian Code of Corporate Governance sheds light on the importance of the internal controls, internal and external audit functions to assist the board of directors in achieving their responsibilities including risk management. The Egyptian Society of Accountants and Auditors provides licenses for practitioners as well as training and continued professional education. Egypt follows both the International Financial Reporting Standards as well as the International Standards on Auditing. All Big 4 auditing firms are well represented in the Egyptian market. Other auditing firms have membership and affiliation with the remaining international auditing networks. However, local small auditing firms have low levels of organizational independence, limited financial resources and management support and unqualified audit staff. They are still focused on traditional financial audit and internal controls compliance and has not yet moved toward the value-added and risk-based audit (Hegazy and Farghaly, 2022). Thus, external audit practices may vary significantly among Egyptian auditing firms. The Financial Reporting Authority oversees and monitors the activities of listed companies as well as the performance of external auditors who provide audit services to these companies. Thus, all Big 4 and other auditing firms with international affiliation face challenges associated with auditors' burnout, role ambiguity, role clarity and high turnover intentions among auditors, as the case for auditing firms in other developing countries.

The remainder of the paper is organized as follows. Section 2 reviews prior literature and develops the research hypotheses. Section 3 presents the research design including data collection and statistical analysis followed by a discussion of the empirical results in Section 4. Finally, Section 5 draws conclusions, identify limitations of the research and provides recommendations for future research.

2. Literature review and hypotheses development

2.1 Turnover intentions, organizational climate, role clarity and auditor burnout

Burnout and fatigue were studied extensively in a variety of research literature (Jackson *et al.*, 1986; Lee and Ashforth, 1993; Sweeney and Summers, 2002; Cropanzano *et al.*, 2003;

Herda and Lavelle, 2012; Detzen and Gold, 2021; Annelin and Svanström, 2022). There are three dimensions to job burnout and fatigue: emotional fatigue; low personal achievement; and depersonalization. Emotional fatigue is characterized by a lack of energy and a feeling that emotional resources are consumed. Low personal achievement is related to low motivation and self-esteem, and depersonalization indicates separation and emotional cruelty toward others. Emotional fatigue is the most important dimension of exhaustion and has emerged as a key variable for understanding burnout. Prior research also found that burnout is associated with absenteeism and poor job performance, unfriendly communications or interactions in the workplace, workload, employees' lack of familiarity with the organization's goals and their tasks, unawareness of the importance of their role in the organization and increasing the intention of employees' turnovers (Almer and Kaplan, 2002; Jones *et al.*, 2010; Herda and Lavelle, 2012; Mahdinia *et al.*, 2015; Danudoro *et al.*, 2021). The escalating workload in busy seasons is tied to burnout and fatigue among accountants working in auditing, tax or consulting. Burnout and fatigue are negatively related to job satisfaction and job performance and are positively related to turnover intentions (Gadi and Kee, 2021). Zeffane (1994) defined the turnover intention as the employee desire, either voluntary or involuntary due to the surrounding environment, to stop working in a place and to switch his job to another place. Grohnert *et al.* (2021), using 96 professional auditors over a five-year period, evaluated how organizational, social interaction and individual drivers of workplace learning relate to turnover behavior. The study's survival analysis shows that auditors who work in an environment that fosters learning are less likely to leave their companies or professions. Similar results were also provided in Astuty *et al.* (2022) study. The turnover intention of the employees results in a negative atmosphere within the remaining workforce in the organization. It can also have a negative impact on the company itself like:

- the increase in the training cost for developing the existing or newly recruited workers' skills;
- the overtime cost for the temporary workforce that substitute the vacancies by the left off employees;
- the cost of hiring new employees; and
- the disturbance of the work patterns due to the vacancies of the left employees (Zaim *et al.*, 2012).

Moreover, prior research studies (Jackson *et al.*, 1986; Guthrie and Jones, 2012; Utami and Supriyadi, 2013; Cannon and Herda, 2016; Anugerah *et al.*, 2016; Mardi *et al.*, 2022) indicate a negative relationship between the burnout and turnover intention on one side and the organizational commitment on the other side. For example, Hollingworth and Valentine (2014) indicated that the turnover intention is negatively associated with the organizational commitment. Also, burnout has a positive association with the turnover intention. The known season pressure in the auditing firms is well known as a key reason for burnout among auditors. The workload resulting from such pressure may lead to an increase in the turnover in the auditing firms, which by default affects the audit quality and the firm's performance. Danudoro *et al.* (2021) found that auditors who work at the Big 4 audit firms significantly experienced higher levels of exhaustion and mental distance as non-Big 4 rarely audit large companies, so there are less audit procedures. They also indicated that external auditors who worked for only one-year experienced higher level of social support compared to those who worked for over three years, as experienced auditors are required to guide their junior colleagues. Similar results were found in El Deeb and Hegazy (2016).

The social exchange theory explains that the firm treating their employees fairly can decrease the burnout and the turnover rate. This happens because of fairness perceived by the auditors that lead to increase in the organizational commitment and organizational support, which, in turn, decrease the turnover intention and the burnout. Other variables which may have strong association with the burnout are low level of performance, role ambiguity, negative organizational climate, role stressors and flexible work environment (Anugerah *et al.*, 2016; Putra *et al.*, 2020).

At the same time, Tsahuridu (2018) defined the organizational climate as the force of individual's identification against his involvement in the organization. The individual's involvement in the organization is affected by three factors:

- (1) the acceptance of the values and goals of the organization;
- (2) the individual desire to stay in the organization; and
- (3) the desire to do everything in the sake of the organization (Porter *et al.*, 1974).

Hollingsworth and Valentine (2014) state that the organizational climate has a negative relation with the turnover intention of the employees in any organization. Such findings follow those reached by Schwepker (1999), who indicated that the lower the climate commitment, the higher the turnover intention of the employees. The organizational climate commitment is divided into three categories in the literature (Meyer and Allen, 1991). First, the normative commitment that describes the individual beliefs toward the employee's responsibilities in the organization. Second, the continuance commitment describes the decision of the employee to stay in the organization because of his fearing to lose the advantages and benefits received from the organization. Finally, the affective commitment describing the desire of the individual to stay in the organization because of his emotional attachment to the place. The three types of commitments are showing the intention of the employee to stay within the organization for varied reasons and that most of the companies should encourage these kinds of feelings within the working environment. Based on the above discussion, one may conclude that the higher the level of commitment, the higher the desire of the employees to stay in the organization.

Similarly, there are several types of roles related with a person behavior. In various situations and conditions, the role played by a person can often turn into pressure for the person himself. Role stress is the pressure experienced by someone because of work environmental factors. If an individual is faced with the demands of a role that goes beyond individual abilities, this individual experience role stress. Annelin and Svanström (2022), using interviews with junior to senior auditors in three distinct audit firms, found team stress (both for individuals within a team and the entire team) can be experienced during an audit and is generated by diverse team experiences that have different consequences. Uncertain audit planning, lack of communication, team changes and attachment can lead to interteam tension and audit errors. Incompetence, autonomy and severe workloads can cause intrateam hostility and auditor burnout or departure. The quality of an audit can also be jeopardized because of the stress that comes with performing an audit. Workplace burnout was positively correlated with job stress which is negatively correlated with intention to stay (Lan *et al.*, 2020). Role stress shows how the expectations of the organizational members is facing in different uncertain situations, such as uncertainty to conduct a job (role ambiguity); mismatch between roles contradicts one with others (role conflict); and the many roles to play in a certain time (role overload) (Elinda *et al.*, 2019). Tang and Chang (2010) indicated that role ambiguity refers to uncertainty regarding the lack of clear information to conduct the required role in an organization. It represents a gap

between the amount of information a person has with what he needs to conduct his role appropriately in accordance with the users' expectations. External auditors are vulnerable to role ambiguity as they are required and forced to build relationships with many people from inside and outside their firms who also have diverse needs and expectations (Danudoro *et al.*, 2021). On the other hand, role clarity is known as the level to which employees clearly perceive and understand their duties, tasks, goals and expectations for their required job. Therefore, the role ambiguity and the role clarity are opposites to each other. The role ambiguity is considered a negative concept as it portrays a lack of effective knowledge of job behavior and is characterized by a lack of information and, thus, unpredictability. The role clarity is a positive concept for individuals as clear roles encourage employees to harmonize with their organizations and goals, in contrast to the ambiguous roles of employees that harm organizational success (Bolumole *et al.*, 2016).

At the same time, role conflict occurs because of several roles that must be conducted by an individual at once or at the same time (Shbail, 2018). Because auditors usually play multiple and diverse roles, they can easily encounter role conflicts. Zulaikha and Istiqomah (2021) found that:

“[. . .] the auditor' incompatibility with his duties, resources, work rules, or policies may also cause role conflict [. . .] the auditor's emotional composure will lead to job burnout will be increased in working circumstances with role conflicts”.

They showed that auditors who are unable to meet the expectations of those around them may burn out due to role conflict. They also indicated that role conflict may be reduced if the auditor acts professionally and follow the code of ethics. They recommend better and well-organized work schedules, and audit assignments for auditors by the audit firm management so that auditors can better manage roles to reduce the impact of conflicting roles on job burnout. Similarly, López and Peters (2011) showed that role overload refers to workload or excessive roles in which an individual is exposed to many jobs or roles to be implemented at a certain time. Role overload in the auditor's work environment, usually occurs at the time of the arrival of the busy season. Auditors face excessive workloads when they are confronted with various audit tasks for diverse types of clients to complete in a predetermined period with limited resources and work environment capabilities (Danudoro *et al.*, 2021). Most of the research studies found evidence that role ambiguity, role conflict and role overload have significant effects on burnout (Cropanzano *et al.*, 2003; Fogarty and Kalbers, 2006; Guthrie and Jones, 2012; Shbail, 2018 Annelin and Svanström, 2022). However, Zulaikha and Istiqomah (2021) did not find evidence of the effect of role ambiguity and role overload on burnout. They indicated that auditors' personalities, arranging work schedules and assignments and explaining the accounting and auditing standards to auditors at all levels are set out to prevent job burnout. In their study, only role conflict and job insecurity significantly resulted in auditors' burnout.

It is important to note that organizational theories provide interpretations and explanations related to people's behavior in an organization. For example, Birnberg *et al.* (2006) discussed the role theory, which emphasizes individual nature as a social actor who studies behavior according to one's position it occupies in the work and community environment. It assumes that individual behavior is influenced by expectations and norm roles that are owned by others about how individuals are expected to behave. Role theory is based at the stages of the role, that is, the process cycle between the conveyer of the role with the individual in question. According to this theory, the conveyor of the role has expectations of the intended behavior of individuals and tries to influence individual behavior by conveying information about expecting the role he must play. This individual

can respond by receiving or refusing to act based on his perception of the person delivering the role. It is common there is no success in an individual carrying out his role because of the various role stressors (i.e. role ambiguity, role conflict and role overload), causing job burnout. In an audit situation, the above role stressors affecting auditors when performing their audit tasks resulting in reduced audit quality practices. [Danudoro et al. \(2021\)](#) found evidence that job demands has positive and significant effect toward burnout, with role ambiguity having the most contribution toward such burnout. Moreover, attribution theory provides scientific clarifications for people's behavior when faced with conflicting roles and expectations. Attribution theory is determined by a combination of internal forces that originate from within someone, such as his ability or effort to undertake a particular task, and external strength forces, such as job difficulties or good or bad luck ([Birnberg et al., 2006](#)). This theory considers a behavior is a result or effect that occurs because of a cause. It provides an explanation regarding how to determine the cause or motive for someone's behavior and directed to develop an explanation of the ways we judge different people, depending on the meaning of what we connect (attribute) to a certain behavior. Researchers can use attribution theory as a basis for understanding why auditors conduct reduced audit quality practices, specifically the causes of role stressors. This theory can be used to assess the attribution of auditor behavior relating to role stressors and audit burnout.

2.2 Audit quality and ethics

Auditors provide reasonable assurance about the fairness of the financial statements and that they are free from material misstatement. The level of reliance on the auditor report depends on the quality of the audit performed. While the audit quality is essential to the capital market stability and the well-being of investors, creditors and other stakeholders, no precise definition was provided for this term ([DeFond and Zhang, 2014](#)). Standards setting bodies are contributing to the process of defining and measuring the audit quality aspects like the International Auditing and Assurance Standards Board (IAASB), the Public Company Accounting Oversight Board (PCAOB) and the American Institute of Certified Public Accountants to facilitate the process of regulating this aspect in the audit process ([IAASB, 2013](#); [Public Company Accounting Oversight Board \[PCAOB\], 2014](#); [PwC, 2014](#); [Detzen and Gold, 2021](#); [Astuty et al., 2022](#)). Research surveys were used to determine the main attributes of the good audit quality from within the auditing profession and practice ([Carcello et al., 1992](#); [Ghafran and O'Sullivan, 2017](#); [Samagaio and Felicio, 2022](#)). The results of prior studies identified the main attributes of audit quality as the compliance to the auditing standards, the on-time completion of audit, the number of the audit committee meetings, fair treatment with employees, partners appropriate workload and the additional disclosure in the financial statements ([Herda and Lavelle, 2012](#); [Knechel et al., 2013](#); [DeFond and Zhang, 2014](#); [Ghafran and O'Sullivan, 2017](#); [Hegazy et al., 2020](#)). The quality of the audit also includes the adherence to the code of ethics and the auditor being independent ([Agusti and Pertiwi, 2013](#); [Samagaio and Felicio, 2022](#)). On the other hand, one of the main negative signs of low audit quality level is the financial statement restatements as studies pointed out that this action is sending bad signals to investors and creditors of the company ([Knechel et al., 2013](#); [Cheng et al., 2021](#)). Prior studies also used proxies for the audit quality like abnormal accruals, the number of the legal suits against the auditor, the going concern opinion and the audit fees. These studies aimed to find the most reliable measures of the audit quality and, at the same time, indicated the insufficiency of any single proxy to individually reflect the whole audit quality construct ([Stanley and DeZoort, 2007](#); [Lambert et al., 2017](#); [Austin, 2017](#)).

Moreover, reducing the audit quality can be deliberate because of dishonest act by the auditor to deliver a wrong image about the fairness of the financial statements to the shareholders (i.e. audit and fraud case scandals (Elinda *et al.*, 2019; Detzen and Gold, 2021) or unintentionally through the effects of the auditors' surrounding environment such as work overload or the role ambiguity or the lack of organizational commitment (Glover *et al.*, 2017; Cheng *et al.*, 2021). Cannon and Herda (2016) stated that the undeliberate acts like role ambiguity and the overload of work and the role conflict and the burnout are the main reasons behind the reduced audit quality. Salehi *et al.* (2020) indicated that work stress is the most significant factor affecting the audit profession and related audit quality and burnout is among the major stressors causing such work stress of auditors. Cheng *et al.* (2021) found that partner workload is positively related to audit quality. They indicated that partners with larger but fewer clients conduct higher quality audits for non-Big 4 firms. Partners who have larger workloads had smaller discretionally accruals and were less likely to have small earnings increases to meet clients' performance benchmarks and less delays to release audit reports. At the same time, Putri *et al.* (2017) stated that the audit quality is attached with the ethical decision of the auditor within the auditing process. The ethical issues have been tested in the Big 4 audit firms to understand the relationship between the auditors feeling of justice and their ability to take ethical decisions and their impact on the audit quality. Several studies stated that the implementation of penalties and good ethical environment emphasize better norms and are negatively correlated with the acts of reduced audit quality (Schwepker, 1999; Robbins and Timothy, 2015; Mitchell *et al.*, 2018).

On the other hand, the enforcement to comply with authorities' requirements is correlated in a positive way with the acts of reduced audit quality. The unethical decision may result from the burnout, intention of turnover, the inappropriate organizational climate and the lack of the role clarity. Mitchell *et al.* (2018) stated that there is a correlation between the level of the auditor's independence and the level of the work pressure on one hand and the risk of litigation on the other hand. The study indicated that in some cases, the level of independence is not impaired due to the pressures from the clients not to assign the auditors in the future for any audit engagements. In addition, the study emphasized the ethical and moral characteristics of the auditors in facing the risks related to the turnover intention and the change in the business climate. The study findings relate the enhanced level of auditors' independence, competence and reduced work pressure associated with auditors' burnout with increased audit quality. Finally, Detzen and Gold (2021) indicated that audit quality cannot be judged solely by looking at negative consequences like restatements or fraud events. They believe there are three factors that determine the quality of audit services: the method, personnel and motivation. Audit practices must be considered as a collection of social interactions nested in an array of organizational and environmental elements that jointly influence audit judgments and auditor conduct. They recommend that audit function should be regarded as a people's business, a social practice that is essential to the operation of capital markets and the wider business processes of the economy.

2.3 Audit firm's performance

The audit firm's performance includes several measurement aspects. These aspects can include efficiency, client and quality concerns. The client is usually concerned with the inappropriate behavior of the auditor. Efficiency relates to performing the audit in cost-effective way within the planned timetable of the audit engagement. Finally, quality requires compliance with auditing standards in performing the audit engagement (Hoang *et al.*, 2019). Hu *et al.* (2018) indicate that the main challenge for measuring the audit firm's performance is the difficulty of defining the right measures for the various audit activities.

The management of staff is a significant element as they are the key performance driver in the audit process. The other prominent issue in audit firm's performance evaluation is the efficient use of resources to decrease the total cost of the audit. [Knechel et al. \(2013\)](#) explain that the performance of the auditors in audit firms is divided into professional and commercial performance indicators. The first one is concerned with the contribution to the audit quality by the auditors and the second is concerned with the profitability and the growth of revenue along with keeping a good relationship with the clients. Consequently, audit performance should include both financial and nonfinancial measures. Few research assessed the relationship between the burnout components and the performance of the audit firms. [Johansen and Christoffersen \(2017\)](#) state that the auditor burnout, organizational climate, role clarity of audit tasks and the turnover intentions have a significant association with the audit quality and, by default, on the audit firm's performance. The audit firm's performance is measured by the annual revenue, the compliance to the scheduled timetable of the audit and the cost reduction of performing an audit assignment. In a more recent study, [Putra et al. \(2020\)](#) defined auditor performance as the act or implementation of audit tasks by the auditor within a defined time frame. They indicated that ineffective auditing practices and a lack of organizational commitment can affect auditor performance. The auditors' effectiveness in their work is influenced positively and significantly by the level of organizational commitment. The study finds a favorable relationship between organizational commitment and audit performance, while audit dysfunctional behavior could not significantly mitigate that relationship. As a result, an auditor who is already committed to his or her work will do his or her best, resulting in a rise in performance. Moreover, audit behavior is worsened by a lack of or reduced organizational commitment. Also, auditor performance is negatively impacted by audit dysfunctional conduct, which indicates that the less dysfunctional behavior there is, the better auditors perform.

Based on the above discussion of the burnout, organizational climate, role clarity and turnover intentions and their relationship with audit quality and performance, the researchers developed the following hypotheses:

- H_{a1} . Organizational climate has a significant total effect on audit quality.
- H_{a2} . Organizational climate has a significant total effect on nonethical decisions.
- H_{a3} . Organizational climate has a significant total effect on audit performance.
- H_{b1} . Role clarity has a significant positive effect on audit quality.
- H_{b2} . Role clarity has a significant positive effect on nonethical decisions.
- H_{b3} . Role clarity has a significant positive effect on audit performance.
- H_{c1} . Turnover intention has a significant total effect on audit quality.
- H_{c2} . Turnover intention has a significant total effect on nonethical decisions.
- H_{c3} . Turnover intention has a significant total effect on audit performance.

3. Research methodology

3.1 *The design of the questionnaire and data collection and analysis*

This section describes the population and sample, the questionnaire design and data analysis methods. [Remler and Van Ryzin \(2021\)](#) stated that exploratory research is used to solve problems that are not clear and have not been studied before. The researchers

conducted exploratory research and interviewed few academics and practitioners to get their opinions about organizational climate, role clarity and turnover intention on audit quality, nonethical decisions and auditing performance. A structured questionnaire was designed, piloted and revised to ensure both reliability and validity of the items (Cronbach's alpha coefficient test was undertaken). The questionnaire was designed to investigate the perception of the respondents about the impact of organizational climate, role clarity and turnover intentions as determinates of audit burnout on the audit quality and performance. Nonparametric tests were used to examine whether there is a significant association among developed variables. Factor analysis was used to reduce the number of research variables to a lesser number of surrogated variables called latent constructs. It helps reveal patterns between research instruments and remove redundancy between items which may cause Multicollinearity when modeling data. The research population consists of auditors who work at various positions in the top ten auditing firms in Egypt with international affiliation including the Big 4. A random sample of auditors was selected from the identified audit firms during the first half of the year 2021, where 300 questionnaires (30 questionnaires per every audit firm) were distributed among senior auditors, audit managers and partners. Only 231 questionnaires were received in complete forms to make the response rate 77%. The auditors' responses were considered high given that auditors usually are busy and unwilling to answer the questionnaire during the beginning of the year peak season. The questionnaires were delivered directly to the auditing firms to obtain the highest response rate. The researchers have applied Likert scales 1 to 5 in the questionnaire. An initial 30 questions were developed from the review of the literature for presentation to participants auditors. Based on the interviews made with two professors of auditing in leading accredited schools of businesses and two qualified and experienced partners from the selected audit firms under investigation, only a total of 21 questions were presented to participants auditors representing the determinates of burnout (i.e. organizational climate, role clarity, turnover intention) as well as ethics, audit quality and audit performance. The selected questions were considered a good representation of the key issues of auditors' burnouts determinates. The survey was also designed to capture the opinion of all management levels within the selected auditing firms (i.e. senior auditors, audit managers and partners).

3.2 Demographic profile of the respondents

The analysis of respondents' demographic characteristics indicates that 126 auditors were males and 105 were females, 195 were bachelor's degree holders and 36 were postgraduate. Regarding the distribution of auditor's age groups, 28 in the age group 20–25, 21 in the age group 26–30, 85 in the age group 31–40, 77 in the age group 41–50 and 20 in the age group 50 and above. Also, 40 are audit partners, 140 are audit managers and 51 are senior auditors. The statistical techniques used in the research include factor analysis, the structural equation model, the correlation matrix and the path analysis to verify the proposed hypotheses. The average working experience of the external auditors at all management levels was 8.5 years.

4. Results and discussion

4.1 Factor analysis

Table 1 provides statistical summary measures including the reliability and variance extracted of each construct, the mean, standard error and the *p*-value of testing whether the value is 3 (neutral) in a five-Likert scale measure. As shown in Table 1, the reliability of constructs is more than 77% and the extracted variances are at least 71%, providing high

Construct	Factor loadings	Variance extracted (%)	Cronbach α coefficient (%)	The average	Standard error	p -value
<i>Organizational climate</i>		80.35	95.6			
My current job responsibilities are fair	0.897			3.07	0.088	0.406
Overall, the rewards I receive now are fair	0.897			2.89	0.092	0.243
I consider my current workload is fair	0.921			3.00	0.093	0.963
The firm values my contribution to its well-being	0.882			3.32	0.080	0.000*
The firm really cares about my well-being	0.901			3.26	0.084	0.002*
The firm takes pride in my accomplishments at work	0.881			3.28	0.080	0.001*
<i>Role clarity</i>		79.92	86.9			
I know exactly what is expected of me	0.896			4.06	0.055	0.000*
I know that I have divided my time properly	0.923			4.09	0.055	0.000*
Clear, planned goals and objectives exist for my advancement	0.861			3.96	0.064	0.000*
<i>Turnover intention</i>		80.05	87.9			
In the next few months, I intend to leave this firm	0.893			2.35	0.076	0.000*
In the next few years, I intend to leave this firm	0.927			2.19	0.064	0.000*
I occasionally think about leaving this firm	0.881			2.14	0.068	0.000*
<i>Ethics</i>		88.6	93.3			
I have been pressured to place profitability ahead of ethical issues	0.947			2.61	0.078	0.000*
I have been pressured to underreport number of my working hours	0.945			2.54	0.079	0.000*
To succeed, it is sometimes necessary to compromise one's ethics	0.926			2.61	0.082	0.000*

(continued)

Audit quality and performance

Table 1.
Factor analysis for data reduction

Table 1.

Construct	Factor loadings	Variance extracted (%)	Cronbach α coefficient (%)	The average	Standard error	<i>p</i> -value
<i>Audit quality</i>		71.4	79.9			
The technical quality of the audit team may affect the audit quality	0.848			4.36	0.049	0.000*
Audit firm experience with the client may affect the audit quality	0.874			4.37	0.048	0.000*
Industry expertise within the audit team may enhance the audit quality	0.812			4.24	0.045	0.000*
<i>Audit performance</i>		69.7	77.8			
Growth in fees	0.872			4.26	0.050	0.000*
Meeting the engagement timetable deadline	0.817			4.27	0.041	0.000*
Cost reduction	0.815			4.13	0.053	0.000*
Overall		78.5	81.5			

Note: *Means that the difference between the sample average and the true mean 3 is significant at $\alpha < 5$

internal consistency between instruments. The results in Table 2 show that auditors have a neutral opinion regarding the organizational climate (mean 3.138, p -value = 0.0776), but they have a positive attitude regarding the organizational role clarity (mean = 4.039, p -value = 0.000), the auditing quality (mean = 4.289, p -value = 0.000) and audit performance (mean = 4.221, p -value = 0.000). An interpretation of the above results may be the existence of differences among the auditors in the various management level within the selected auditing firms. While audit managers and partners may see that the responsibilities and work overload is considered fair given the good reward and remuneration they receive, senior auditors may have some negative opinion about their organizational climate factors. At the same time, auditors at all management levels in the selected auditing firms understand well their role within their organizations; therefore, their answers to the questions in the survey were positive. On the other hand, auditors have negative attitudes toward turnover intention (mean = 2.225, p -value = 0.000) and ethical decisions (mean = 2.584, p -value = 0.000). This is due to the extent of daily pressure and possible burnouts, especially for seniors and audit managers forcing them to change their jobs and join companies in specific industries given their experience and expertise accumulated through their years of work at the auditing firms.

4.2 Effect of demographic characteristics

The research also tests whether different demographical levels have significant differences in perceiving research variables. Since the sample size is quite large (231) justifying the normality behavior of the research variables, several parametric tests were used to achieve this objective. So, in case of two independent groups, the case of gender, for example, the t -test was used to verify whether different genders have different perceptions to the research variables, while in case of more than two independent groups, we used the analysis of variance test (ANOVA) to check these significances.

4.2.1 Effect of gender. Table 3 shows a positive perception to all research variables (averages > 3), but with no significant differences between males and females' auditors regarding their perceptions to organization climate, role clarity and turnover intention. Such result is because there is no difference between male and female auditors concerning the challenges and issues they face during their work in auditing firms for burnout determinates. Both male and female auditors face similar pressures, stressors and work overload related to meeting clients' deadlines as well as the requirements to pass CPA exams and continue to acquire CPEs to proceed in their auditing career. At the same time, males' auditors are more positive than females' auditors regarding their perceptions to nonethical decisions (p -value = 0.001) and audit performance (p -value = 0.002). The above findings are not consistent with the results of prior research, which indicated that female is

Research variables	N	Mean	Std. error mean	p -value
Climate	231	3.138	0.078	0.077
Clarity	231	4.039	0.052	0.000*
Turnover	231	2.225	0.062	0.000*
Ethical	231	2.584	0.075	0.000*
Performance	231	4.221	0.040	0.000*
Quality	231	4.289	0.036	0.000*

Note: * Means that the difference between the sample average and the true mean 3(neutral) is significant at $\alpha < 5\%$

Table 2.
Statistical measures
of the main research
variables (constructs)

Gender		N	Mean	Std. error mean	P-value
Organization climate	1	126	3.040	0.105	0.166
	2	105	3.256	0.114	
Organization clarity	1	126	3.974	0.080	0.167
	2	105	4.117	0.061	
Turnover intention	1	126	2.291	0.084	0.247
	2	105	2.146	0.092	
Nonethical behavior	1	126	2.368	0.095	0.001*
	2	105	2.844	0.114	
Audit performance	1	126	4.339	0.060	0.002*
	2	105	4.079	0.048	
Audit quality	1	126	4.323	0.051	0.292
	2	105	4.248	0.051	

Note: *Differences are significant at $\alpha < 5\%$

Table 3.
Testing the
significance between
gender (*t*-test)

more positive compared to men when it comes to complying with ethical principles and rules and gender-diverse audit teams have an advantage over all-male audit teams and are proven to limit earnings management (Nekhili *et al.*, 2022).

4.2.2 Effect of educational levels. Table 4 highlights the differences between auditors' perceptions of the research variables from their education perspective. There are significant differences between bachelor's degree and postgraduate holders (MBA, master's degree, PhD) regarding their perceptions to organization climate (p -value = 0.000), turnover intention (p -value = 0.020), nonethical behavior (p -value = 0.025), audit performance (p -value = 0.049) and audit quality (p -value = 0.000). However, the analysis also revealed that there is no significant difference between the bachelor's degree holders and auditors with postgraduate degrees in their perception of the role clarity. An interpretation for the above results is that qualifications and competence of auditors may have a significant effect on how they consider the factors associated with organizational climate, turnover intention and audit quality and performance. The more auditors advance in their studies and experience, the more competent they become, and therefore, they tend to be more affected by

Research variables	Educational level	N	Mean	Std. error mean	P-value
Organization climate	Postgraduate	36	3.787	0.141	0.000*
	Bachelor	195	3.018	0.085	
Organization clarity	Postgraduate	36	3.843	0.159	0.104
	Bachelor	195	4.075	0.054	
Turnover intention	Postgraduate	36	1.889	0.132	0.020*
	Bachelor	195	2.287	0.069	
Nonethical behavior	Postgraduate	36	2.194	0.164	0.025*
	Bachelor	195	2.656	0.083	
Audit performance	Postgraduate	36	4.037	0.124	0.049*
	Bachelor	195	4.255	0.041	
Audit quality	Postgraduate	36	3.979	0.120	0.000*
	Bachelor	195	4.346	0.035	

Note: *Differences are significant at $\alpha < 5\%$

Table 4.
Testing the
significance between
educational levels
(*t*-test)

burnouts determinates given their ability, based on their acquired expertise, to change their careers to reduce such burnouts in their audit jobs.

4.2.3 *Effect of different age groups.* Table 5 shows that there are no significant differences between different age groups in their rating to role clarity (p -value = 0.052) and audit performance (p -value = 0.225). Regarding these two constructs, all perceptions are positive across all age groups. The analysis also revealed that young and middle-aged auditors (less than 30 years of age) have negative perceptions to the organization climate, while old-age auditors have positive attitudes toward the organization climate (p -value = 0.025). Old-age auditors are receiving fair and significant remuneration and profit share to compensate for the extensive pressure and challenges associated with auditors' burnout. Also, old-age auditors are more aware of the goals and strategies related to their audit firms compared to young and middle-aged auditors. All age groups have negative perceptions to turnover intention, where young age auditors are more negative than old-age auditors (p -value = -0.005). Young age auditors are in the stage of getting married and start families, and therefore, they are more affected by the pressure, various stressors and work overload associated with burnout and have more intentions to change careers to protect their personal life. Regarding the nonethical decisions, perceptions of different age groups are negative, but their attitude ranges between very negative and neutral (p -value = 0.019). The code of professional conduct for auditors provides strict requirements for auditors' independence and compliance with the requirements of the code and auditing standards, and therefore, auditors at various management levels tend to consider the importance of ethics when performing their audit tasks. On the other hand, all age groups have strong positive attitudes toward the audit quality, but their ratings are significantly different (p -value = 0.026).

Age Groups ¹	Statistics	Research variables					
		Organization climate	Organization clarity	Turnover intention	Nonethical decisions	Audit performance	Audit quality
20–25	Mean	2.720	4.417	1.869	2.429	4.333	4.563
	<i>n</i>	28	28	28	28	28	28
26–30	Mean	1.496	0.592	0.516	0.874	0.444	0.358
	<i>n</i>	21	21	21	21	21	21
31–40	Mean	2.841	4.048	2.333	3.016	4.127	4.191
	<i>n</i>	1.193	0.570	0.667	0.934	0.582	0.530
41–50	Mean	3.157	4.012	2.133	2.337	4.169	4.327
	<i>n</i>	85	85	85	85	85	85
50 and more	Mean	1.214	0.789	1.064	1.132	0.595	0.456
	<i>n</i>	3.182	3.900	2.255	2.671	4.312	4.185
<i>P</i> -value	Mean	1.032	0.905	0.846	1.114	0.678	0.635
	<i>n</i>	3.783	4.150	2.883	3.067	4.033	4.250
Total	Mean	0.744	0.577	1.196	1.501	0.591	0.669
	<i>n</i>	0.025*	0.052	0.005*	0.019	0.225	0.026*
SD	Mean	3.138	4.039	2.225	2.584	4.221	4.289
	<i>n</i>	231	231	231	231	231	231
SD	Mean	1.178	0.788	0.947	1.138	0.610	0.548
	<i>n</i>						

Note: *Means differences are significant at $\alpha < 5\%$

Table 5.
Testing the
differences between
different age groups
(ANOVA)

4.2.4 *Effect of job positions.* Viewing the effect of job positions (Partners, Managers, Seniors), we noticed that all positions have positive perceptions to organization climate, role clarity, audit performance and audit quality. At the same time, auditors have negative perceptions to turnover intention and nonethical decisions behavior (see the *p*-values in Table 6 for details).

4.2.5 *The conceptual model.* Figure 1 depicts the relationship between the exogenous factors, organizational environment, role clarity and turnover intention, and the result variables, endogenous variables, audit quality, ethical dictions and performance, as anticipated by the research hypotheses:

4.2.6 *The fitted model and path analysis.* Table 7 presents the correlation structure between research variables (constructs). As shown in Table 7, audit quality has significant weak correlation with nonethical behavior ($r = -0.22, p\text{-value} = 0.000$), has strong significant positive correlation with audit performance ($r = 0.67, p\text{-value} = 0.000$), weak significant negative correlation with organization climate ($r = -0.11, p\text{-value} = 0.028$) and strong positive significant correlation with role clarity ($r = 0.53, p\text{-value} = 0.000$). The above results set the tone for the importance of audit quality and related audit performance in relation to having good organization climate; employees are aware of their responsibilities and more adherence to ethical behavior. On the other hand, nonethical decisions have weak significant negative correlation with audit performance ($r = -0.34, p\text{-value} = 0.000$), weak significant positive correlation with turnover intention ($r = 0.27, p\text{-value} = 0.000$), weak significant negative correlation with organizational climate ($r = -0, 29, p\text{-value} = 0.000$) and no correlation with role clarity. The above results show the importance of ethical

Table 6. Testing the differences between different positions groups (ANOVA)

Position	Statistics	Climate	Clarity	Turnover	Ethical	Performance	Quality
Partners	Mean	3.688	4.175	2.308	2.625	4.050	4.500
	n	40	40	40	40	40	40
	SD	1.087	0.585	0.923	1.125	0.498	0.340
Manager	Mean	2.927	3.957	2.245	2.712	4.229	4.216
	n	140	140	140	140	140	140
	SD	1.074	0.830	0.908	1.181	0.634	0.610
Senior manager	Mean	3.284	4.157	2.105	2.203	4.333	4.324
	n	51	51	51	51	51	51
	SD	1.368	0.790	1.070	0.948	0.604	0.454
Total	<i>P</i> -value	0.001*	0.146	0.551	0.022*	0.086	0.013*
	Mean	3.138	4.039	2.225	2.584	4.221	4.289
	n	231	231	231	231	231	231
	SD	1.178	0.788	0.947	1.138	0.610	0.548

Note: *Means differences are significant at $\alpha < 5\%$

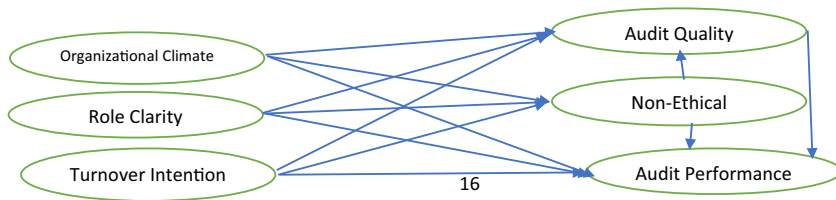


Figure 1. Conceptual model

Research variables	Auditing quality	Nonethics decisions	Performance	Turnover intention	Organizational climate	Audit quality and performance
Auditing quality <i>P</i> -value	1.00					
Nonethical decisions <i>P</i> -value	-0.22 0.000	1.00				
Audit performance <i>P</i> -value	0.67 0.000	-0.34 0.000	1.00			
Turnover intention <i>P</i> -value	-0.21 0.000	0.27 0.000	-0.32 0.000	1.00		
Organizational climate <i>P</i> -value	-0.11 0.028	-0.29 0.000	-0.16 0.003	0.25 0.000	1.00	
Organization clarity <i>P</i> -value	0.53 0.000	0.08 0.083	0.31 0.000	0.080 0.083	0.040 0.244	

Note: *Means correlation is significant at $\alpha < 5\%$

Table 7.
Correlation matrix
between research
variables

behavior for audit quality, audit performance and organizational climate with the existence of code of conduct to penalize employees whenever they violate any of the company's rules or provide low audit quality and performance. At the same time, role clarity did not have any effect on ethical decisions due to participants auditors showing in their responses good understanding of their required duties and responsibilities. Audit performance has weak negative significant correlation with turnover intention ($r = -0.32$, p -value = 0.000), weak negative significant correlation with organizational climate ($r = -0.16$, p -value = 0.003) and weak positive significant correlation with role clarity ($r = 0.31$, p -value = 0.000). Turnover intention has weak positive significant correlation with organization climate ($r = 0.25$, p -value = 0.000), and no correlation with role clarity. Finally, organizational climate has no correlation with role clarity showing the independence of those two variables as determinates of auditors' burnouts.

4.2.7 *The bath analysis and the verification of research hypotheses.* Table 8 presents the diverse types of causal effects whether direct, indirect and total effects of the research exogenous variables (organization climate, role clarity and turnover intention) on the outcome variables (audit quality, audit performance and nonethical decisions).

The direct effects: Organizational climate has -38% significant direct effect on nonethical behavior (p -value = 0.000), -13% significant direct effect on audit performance (p -value = 0.033) and -18% significant direct effect on audit quality. Role clarity has no direct effect on nonethical decisions and audit performance and has 52% significant direct effect on audit quality. Turnover intention has 36% significant direct effect on nonethical decisions (p -value = 0.000), no direct effect on audit performance and audit quality, audit quality has 61% significant direct effect on audit performance (p -value = 0.000), nonethical decisions have -31% significant direct effect on audit performance (p -value = 0.000), and finally nonethical.

The indirect effects: Organization climate has no indirect effect on audit performance, and 8% significant indirect effect on audit quality. Organization climate has 33% significant indirect effect on audit performance (p -value = 0.000) and no effect on audit quality.

Effects	Path coef. (%)	Std. error	t-value	p-value
<i>Direct effects</i>				
Org. climate → Nonethical decisions	-38	0.07	-5.50	0.000*
Org. climate → Audit performance	-0.13	0.07	-1.84	0.033*
Org. climate → Audi quality	-18	0.07	-2.46	0.007*
Role clarity → Nonethical decisions	-3	0.07	-0.51	0.305
Role clarity → Audit performance	-3	0.08	-0.43	0.334
Role clarity → Audi quality	52	0.07	7.28	0.000*
Turnover intention → Nonethical decisions	36	0.07	5.11	0.000*
Turnover intention → Performance	-11	0.07	-1.52	0.064
Turnover intention → Audi quality	-6	0.07	-0.84	0.200
Audit quality → Audit performance	61	0.09	6.68	0.000*
Nonethical decisions → Audit performance	-35	0.08	-4.46	0.000*
Nonethical decision → Audit quality	-21	0.07	-2.89	0.002*
<i>Indirect effects</i>				
Org. climate → Audit performance	2	0.06	0.42	0.337
Org. climate → Audi quality	8	0.03	2.56	0.005*
Clarity → Audit performance	33	0.07	4.99	0.000*
Clarity → Audi quality	1	0.01	0.5	0.309
Turnover intention → Audit performance	-16	0.05	-3.02	0.001*
Turnover intention → Audi quality	-8	0.03	-2.53	0.006*
<i>Total effects</i>				
Org. climate → Nonethical decisions	-38	0.07	-5.50	0.000*
Org. climate → Audit performance	-10	0.07	-1.46	0.072
Org. climate → Audi quality	-10	0.07	-1.46	0.072
Org. clarity → Nonethical decisions	-3	0.07	-0.51	0.305
Org. clarity → Audit performance	30	0.07	4.10	0.000*
Org. clarity → Audi quality	53	0.07	7.25	0.000*
Turnover intention → Nonethical decisions	36	0.07	5.11	0.000*
Turnover intention → Audit performance	-27	0.08	-3.59	0.000*
Turnover intention → Audi quality	-14	0.07	-2.01	0.022*

Table 8.Bath analysis results **Note:** *Means the effect is significant at $\alpha < 5$

Turnover intention has -16% significant indirect effect on audit performance (p -value 0.001) and -8% significant indirect effect on audit quality (p -value = 0.006).

Total effects and the verification of research hypotheses: Organization climate has -38% significant total effect on audit quality, which supports *Ha1*, no effect on audit performance and audit quality, which failed to support *Ha2* and *Ha3*. Thus, *Ha* is partially supported. Role clarity has no effect on nonethical decisions; thus, no support for *Hb2*, 30% effect on audit performance, validating *Hb3* and has 53% effect on audit quality supporting *Hb1*. Therefore, *Hb* is partially supported. Turnover intention has -14% significant total effect on audit quality, supporting *Hc3*, -27% significant total effect on audit performance confirming hypothesis *Hc1* and 36% significant total effect on nonethical decisions supporting *Hc2*. Thus, *Hc* is supported.

5. Discussion and conclusion

The audit profession is one of the high-stress level professions. Auditors face critical stress sources in their workplace causing several problems and challenges. Such challenges

presented in role conflict, role ambiguity, role overload associated with organizational climate and role clarity in addition to high turnover intentions causing work burnout of the auditor and reduced audit quality and performance. Previous studies have assessed the burnout with many variables to indicate its negative consequences on employees and organizations. This paper examines the impact of the burnout determinates on the audit outcomes in auditing firms.

The results of the current study indicate that role ambiguity contributed toward burnout among external auditors affecting both the audit quality and performance. The complex and technical nature of the auditing profession also makes things more difficult for the auditors when undertaken their job duties and meeting the clients' deadlines. Also, there is a negative significant total effect between the organizational climate and the nonethical decisions but an insignificant total effect with the audit performance and audit quality. The results support that organizational climate was negatively correlated with employees' intention to leave. The higher the level of positive perception of employees toward the organizational climate, the lower the employees' commitment to leave and help to achieve organizational goals and strategies. These results are consistent with [Lan et al. \(2020\)](#) findings. On the other hand, the role clarity has insignificant total effect on nonethical decisions and significant total effect on the audit quality and audit performance. Also, turnover intention has a significant total effect on audit quality, audit performance and nonethical decisions. The above results show that the good organizational commitment affects negatively the nonethical decisions, which is consistent with the results of [Tsahuridu \(2018\)](#) and [Putra et al. \(2020\)](#) studies. Moreover, the role clarity shows a significant association with audit performance and audit quality consistent with the results obtained from [Smith and Emerson's \(2017\)](#) study. Similarly, turnover intention has a significant positive total effect with the nonethical decisions and negative significant total effect on audit performance and audit quality, which is consistent with the results obtained from [Anugerah et al. \(2016\)](#), [Anita et al. \(2018\)](#) and [Lan et al. \(2020\)](#) studies. Finally, the behavioral aspects of the auditors are considered key factors in determining the quality of the audit as they affect their ability to make ethical decisions. These behavioral aspects are affecting the quality of the audit and, in turn, the auditing firm's performance and such results support the current research hypotheses.

Turning to the demographic characteristics of the auditors, the results show no significant differences between male and female auditors for most of the burnout determinates except where male auditors tend to strongly comply with ethical decisions compared to female auditors to protect their jobs and continue to support their families and minimize the risk of being dismissed due to lack of integrity and honesty in performing their audit duties. The results also confirm the importance of postgraduate studies to enhance the knowledge and competence of auditors who positively perceive the organizational climate, turnover intentions, nonethical behavior and their effects on audit quality and performance. Role ambiguity would have negative effects for auditors whether they have bachelor or postgraduate degrees. The young-aged auditors who always seek motivation and encouragement to advance in their jobs have negative perceptions for organizational climate compared to old-aged auditors who have a positive attitudes toward such burnout factor. Also, all age group auditors have negative attitude and perceptions to turnover intentions and nonethical decisions and positive attitudes toward audit quality. Finally, audit partners, managers and senior auditors have positive perceptions toward organizational climate and clarity, audit quality and performance as they understand the importance of these burnout elements for their job advancement and financial benefits.

The research has several contributions. First, the results complement previous research aimed at identifying the relationship between job burnout and audit quality by investigating and analyzing several job burnouts factors and auditors' characteristics. Second, we document why job burnout elements have positive and negative relationships with audit quality and performance. Accordingly, the current research provides a baseline for comparison against past and future research results. Third, the results of this research may help to create a long-term bond between auditors and their audit firms given the need of these firms to maintain those who are highly skilled, talented and are motivated to proceed in such a career. Fourth, the current study demonstrates the evidence of auditors' burnout practices and how the understanding and control over their factors may result in long-term relationship between all parties involved in the provision of the audit services. The authors are not aware that other researchers have endeavored to relate:

- these behavioral drivers of auditors' burnout that the authors explore with.
- external audit quality and performance in a rigorous, empirical study.

Fifth, Egypt is an interesting setting since is one of the MENA countries where efforts are made to reduce corruption and enhance the effectiveness of governance and audit quality. In the authors' opinion, this study has a potential contribution to the literature and society to suggest a positive and ethical mindset of external auditors. Finally, the study thoroughly reviews how each behavioral factor can affect the external auditor's behavior and effectiveness. The findings of this study may guide management of auditing firms to establish a friendly and healthy workplace environment, improve their firms' organizational climates, reduce auditors, managers and seniors job stress and workplace burnout, thereby enhancing the quality of audit services and ensure auditors' intentions to stay. Also, to reduce turnover intention among auditors, management in audit firms must have a good insight into how job burnout factors can be reduced to enhance audit quality. The above results may minimize one of the hottest issues affecting audit firms' high job burnout of how to maintain qualified, highly skilled and talented staff.

There are several practical implications for the current research. The researchers recommend that audit firms provide sufficient resources to train their seniors, managers and other employees to minimize role ambiguity among them, simplify audit procedures needed to gather audit evidence as an effort to make work processes run smoother and reduce assignments deadlines that are too short in timeframe to decrease work pressure. Specific administrative measures need to be implemented to reduce potential job burnout and improve work environment for emotional health including competence-based performance appraisals and reward and career recognition. Bilateral communication should be followed to seek consensus, facilitating improvement of the organizational work atmosphere. Future research should play a role in refining measures for job burnout and their effect on audit quality as well as other auditors and audit firms' characteristics to better understand their role on audit quality. Finally, the limitations of this study include the uniqueness of the sample selected related to audit firms in an emerging economy where audit firms in developed countries may have other characteristics related to auditors and job burnouts.

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