

# Examining the Influence of Role Stressors on Reduced Audit Quality Practices: The Mediating Effect of Burnout

Giang Nguyen Van Truong\*, Anh Tran Thi Kim

*Faculty of Accounting and Auditing, Foreign Trade University, Ha Noi, Viet Nam*

---

## Abstract

This paper aims to make conceptual and empirical contributions to the literature on behavioral audit quality. With reference to cogent, relevant, and complementary theoretical frameworks, a research model has been established, entailing the psychological episodes among auditors exposed to work stress, resulting in dysfunctional behavioral outcomes. The study uses a sample of auditors in Ha Noi, Viet Nam, to obtain empirical evidence of the associations between role stressors, burnout, and reduced audit quality practices using endorsed instruments. Results confirmed all hypothesized associations between role stressors and burnout syndromes, and burnout as an antecedent to reduced audit quality practices; as well as the mediating effects of burnout within the research model. Moreover, statistical analysis of the official sample also provides support for the employed instrument on reduced audit quality practices, confirming its superiority as a designated measure to those adapted from other professions in previous studies. The findings of this study also give rise to practical recommendations to auditors, firms, and regulating bodies to tackle auditors' work stress and burnout in order to enhance audit quality and preserve the integrity of the capital market as a whole. This paper bridges the current research gap in audit quality literature by utilizing sufficient conceptual frameworks, as opposed to previous studies; and concurrently serves as a generational update by the use of a sample comprised of mostly Gen Z auditors.

**Keywords:** Role stressors, Burnout, Reduced audit quality practices

---

## 1. INTRODUCTION

### 1.1 Research rationale

ISA 200 defines the objective of an audit as “enabling the auditor to express an opinion on whether the financial statements are prepared, in all material respects, in accordance with an applicable financial reporting framework.” In other words, quality audits are essential to assure the truth and fairness of financial statements and build trust among stakeholders.

However, audit quality has long been a concern due to various accounting scandals as the capital market continued to progress. The collapse of Arthur Andersen LLP following the Enron scandal is a notable example of the severe repercussions of circumvented audit practices. More recently, in 2023, KPMG USA was criticized for approving Silicon Valley Bank's financial health just weeks before its demise (City A.M, 2023). In China, PwC faces regulatory inquiry over Evergrande's USD 78 billion fraud (CafeF, 2024). In Vietnam, such high-profile scandals as those involving FLC, Tan Hoang Minh, and Van Thinh Phat, have led the public to question the practices of the corresponding auditors, including those among the Big 4.

In Vietnam, concerns about financial reporting and audit quality are heightened by the forthcoming implementation of IFRS as mandated by Decision No 345/QĐ-BTC by the Ministry of Finance. This transition

---

\*Corresponding author. Tel.: +84-972-156-295  
E-mail: [k59.2913820008@ftu.edu.vn](mailto:k59.2913820008@ftu.edu.vn)

exposes auditors to new standards, procedures, and technologies, promising improved audit quality but also necessitating the resolution of current issues to prepare for the new paradigm.

The contemporary literature on audit quality has explored various influencing factors, offering practical solutions regarding the subject matter. Most studies have focused on firm-related factors (DeAngelo, 1981) and audit team-related factors (Schroeder et al., 1986; Carcello et al., 1992). It is important to note that audits are performed by human auditors whose psychological states and behaviors could potentially influence audit quality (Coram et al., 2003). Fogarty et al. (2000), in the expansion of the literature on behavioral audit quality, found that role stress negatively affects audit quality through burnout and coined the model “the beyond the role stress paradigm.” However, current literature on behavioral audit quality, situated beyond the role stress paradigm, exhibits conceptual lacunae and requires refreshed empirical evaluations, especially as Gen Z auditors join and are poised to soon lead the workforce

## **1.2 Research background**

The exploration of psychological phenomena and their implications for both personal wellness and professional effectiveness has long been a subject of intensive scrutiny within the scientific community. A multitude of studies on a global scale have delved into stress and burnout across diverse contexts, professions, and circumstances. In the context of the role stress paradigm within the audit professions, studies by Fogarty et al. (2000) and Smith et al. (2017, 2018) have provided a fundamental understanding of its mechanism and association with dysfunctional auditor behavior.

Fogarty et al. (2000) introduced pioneering research by integrating burnout into the accounting profession, diverging from previous studies by delineating burnout as distinct from work stressors. Central to their study was the application of the inverted-U model (Yerkes-Dodson Law; Broadhurst, 1957) to elucidate burnout as a consequence of role stressors, the employment of such instruments as the multidimensional role-specific burnout (MROB) cultivated by Golembiewski et al. (1983), and established instruments for role conflict, role ambiguity (Rizzo et al., 1970), and role overload (Beehr et al., 1976). Conducted among AICPA members, their survey garnered 188 valid responses, subjected to latent variable structural equation modeling. Results highlighted significant impacts of role stressors on burnout, affirming the mediating role of burnout in influencing auditors' dysfunctional behaviors. Despite these insights, critiques include conceptual gaps in theoretical underpinning and methodological limitations, notably the adaptation of non-auditor performance metrics, i.e., Dubinsky and Mattson's (1979) operationalization of salespeople's performance and the broad categorization of respondents as “accountants” without distinguishing auditors, potentially compromising data reliability and eventually empirical findings.

Smith et al.'s studies, "An Analysis of the Relation between Resilience and Reduced Audit Quality within the Role Stress Paradigm" (2017) and "An Examination of Reduced Audit Quality Practices Beyond the Role Stress Model" (2018), critically extend the foundational work of Fogarty et al. (2000). By employing Otley and Pierce's (1996) tailored instrument for assessing Reduced Audit Quality Practices (RAQPs), Smith et al. address previous methodological deficiencies, achieving heightened reliability and specificity by focusing solely on auditors' responses. Their 2017 study integrates constructs such as role stressors and burnout from Fogarty et al. while introducing the Connor-Davidson Resilience Scale 10 (CD-RISC10; Campbell-Sills and Stein, 2007) to measure resilience. With 245 valid responses, confirmatory factor analysis and EQS structural modeling corroborate positive associations between role stressors and burnout and reveal resilience as a significant moderator. In their 2018 study, expanding the sample to 293 auditors, Smith et al. confirm the direct impact of role conflict and ambiguity on burnout, though the influence of role overload remains ambiguous. Despite reaffirming the mediating role of burnout, both studies are critiqued for lacking explicit theoretical frameworks, raising questions about the validity of their hypotheses and the moderating effects of resilience.

The research by Fogarty et al. (2000) and Smith et al. (2017, 2018) revolutionized the understanding of work stress and auditor behavior by incorporating burnout and refining empirical methods. Despite these advances, gaps remain in the conceptual and empirical understanding of behavioral audit quality beyond the role stress paradigm. This study addresses the generational shift in the audit profession, focusing on Gen Z auditors, who bring diverse perspectives compared to previous generations (Twenge, 2023). It aims to determine whether Gen Z auditors experience RAQPs similarly to older professionals. This research is distinguished by its robust theoretical foundations, integrating multiple frameworks to elucidate relationships between variables, including burnout's mediating effects. Building on Smith et al.'s foundational work, it offers a contemporary examination of Gen Z auditors and represents one of the first efforts in Vietnam to explore RAQPs within the role stress paradigm, crucial given the nascent development of the country's auditing industry since 1991.

## **2. LITERATURE REVIEW**

### **2.1 Role stress**

Role conflict arises when an individual faces two or more concurrent sets of demands, making it difficult or impossible to satisfy one without neglecting the other (Kahn, 1964). This conflict is both an external reality and an internal psychological experience. In auditing, role conflict can manifest through various pressures, such as balancing job demands with personal obligations, the pressure to underreport time on timesheets, or conflicts between auditing standards and firm targets (Smith et al., 2017). The pressure exerted by role senders can alter the behavior of the focal person, disrupting their equilibrium and necessitating substantial effort to cope with the intensified conflict (Kahn, 1964).

Role ambiguity refers to the lack of clear consensus or coordination among role senders, resulting in expectations that are logically incompatible or inadequately considerate of the focal person's needs and capacities (Kahn, 1964). This ambiguity arises when there is insufficient clarity regarding supervisors' or clients' expectations. Role ambiguity has both objective and subjective dimensions, with the former being an environmental condition and the latter a psychological state. In auditing, it manifests as unclear performance criteria, vague procedural directives, or uncertain job descriptions. Effective communication reduces role ambiguity, providing clarity regarding one's role (Kahn, 1964).

The seminal work of Kahn (1964) on role stressors has profoundly influenced the literature on work stress, mental health, and professional efficacy. Mañas et al. (2018) found that high levels of role ambiguity diminish team engagement and job satisfaction among employees. Furthermore, both role conflict and role ambiguity negatively affect work performance and job satisfaction (Üngüren and Arslan, 2021). In the nursing profession, Ho et al. (2009) observed that role stress decreases organizational commitment. Additionally, role stress is linked to stress arousal (Smith et al., 2017), burnout (Örtqvist and Wincent, 2006), and depression (Schmidt et al., 2014). Therefore, elevated levels of role stress detrimentally impact mental capacity and work efficacy.

Contrary to role conflict and role ambiguity, the concept of role overload was first introduced by Kahn (1964) as a subset of role conflict. However, Beehr et al. (1976) later distinguished role overload as a separate construct, finding that it specifically relates to efforts towards quantity and greater work involvement among those experiencing it. Role overload occurs when individuals face numerous compatible tasks but struggle to complete them within a limited timeframe. In the auditing profession, this concept is particularly relevant due to the demanding nature of the work, encompassing multiple client demands, heavy workloads, and frequent overtime, especially during peak periods leading up to report issuance deadlines, such as March 31 in Vietnam.

### **2.2 Burnout**

The concept of burnout, introduced by Freudenberger (1974), initially described a state of fatigue, frustration, and exhaustion resulting from unmet professional expectations. Maslach and Jackson (1981) further advanced this notion, defining burnout as a psychological syndrome comprising emotional exhaustion, depersonalization, and a diminished sense of professional efficacy. According to Maslach, burnout reflects an individual's congruence with their occupation, encompassing three dimensions: emotional exhaustion, characterized by feelings of being drained and unable to cope with work demands; cynicism and depersonalization, marked by detachment and indifference towards work; and reduced personal achievement, reflecting impaired work quality and professionalism (Maslach and Jackson, 1981).

Antecedents of burnout are broadly categorized into organizational and individual factors (Edú-Valsania et al., 2022). Organizational factors, encompassing work content, quantity, structure, and interpersonal demands, are the direct precursors of burnout, conceptualized as a syndrome stemming from specific working conditions. Conversely, individual factors function as moderators in the relationship between work conditions and burnout. Traits such as neuroticism or alexithymia exacerbate the impact of organizational factors on burnout, while traits like extraversion or problem-focused coping are believed to mitigate and decelerate the onset and effects of burnout (Edú-Valsania et al., 2022).

Burnout, inherently a psychological condition, originates as an internal, personal issue but can escalate into significant physical health problems and detrimental work behaviors, ultimately impacting the entire organization. Maslach and Leiter (2016) identified psychological effects of burnout such as memory impairment, reduced coping ability, anxiety, low self-esteem, insomnia, and increased alcoholism. Behaviorally, burnout leads to job dissatisfaction (Rossler, 2012), reduced organizational commitment (Maslach & Leiter,

2016), absenteeism (Aloha et al., 2017), turnover intentions (Han et al., 2016), and diminished work performance (Adriaenssens et al., 2020). On an organizational scale, burnout can trigger the “contagion effect,” fostering conflicts and toxic environments and leading to economic costs through absenteeism, inefficiency, and dysfunctional behaviors (Ugwu et al., 2017).

### **2.3 Reduced audit quality practices**

The IAASB (2014) defines audit quality as the pivotal elements fostering an environment conducive to consistent, high-quality audits executed by teams with proper values, competence, and adequate time under stringent quality controls and timely reporting. DeAngelo (1981) views audit quality as the market's expectation of practitioners to identify and report any accounting discrepancies. These perspectives collectively underscore audit quality's crucial role in ensuring financial statement integrity and bolstering capital markets.

Contrary to the principles of audit quality, audit risk involves the likelihood of auditors issuing inappropriate opinions on materially misstated financial statements (BPP, 2022). This risk encompasses two primary components: material misstatement, dependent on the financial statement preparers, and the auditor's risk of failing to detect such misstatements (BPP, 2022). Within this framework, RAQPs involve auditors intentionally diminishing the effectiveness of evidence collection (Kelley and Margheim, 1990), aligning with Malone and Roberts' (1996) view that RAQPs reflect failures in executing audit procedures. These behaviors compromise audit quality by reducing evidence gathering, risking inappropriate audit opinions, and undermining financial statement integrity and stakeholder interests (Coram et al., 2008).

RAQPS manifests through various actions such as accepting inadequate client explanations, insufficiently researching assigned items or accounting concepts, conducting superficial document reviews, prematurely signing off on audit procedures, neglecting to investigate questionable issues, and reducing workloads to below-acceptable levels (Smith and Emerson, 2017). However, some forms of RAQPs are more prevalent than others; auditors more frequently reduce workloads and overlook key accounting principles than prematurely sign off on audit procedures (Kelley and Margheim, 1990). The frequency of RAQPs acts thus appears contingent on specific circumstances, with premature sign-offs perceived as particularly risky.

A disconcerting trend in the audit profession is the prevalence of RAQPs among auditors. Empirical studies reveal significant proportions of auditors admitting to engaging in RAQPs: 63% (Coram et al., 2003), 89% (Otley and Pierce, 1996), and 70% (Willett and Page, 1996). Specific RAQPs acts also show notable frequencies; for instance, Kelley and Margheim's (1990) research found that 33% of respondents accepted clients' inadequate explanations, and 31% reduced their workload during audit procedures. Coram et al. (2003) identified compliance testing and audit completion, including tests of detail, analytical procedures, subsequent events testing, and dispute settlement, as particularly vulnerable to RAQPs. However, they suggest that auditors might perceive these steps as including low-risk tasks, which are mainly documentation and wrap-ups, rather than high-profile issues like going concern assumptions or opinion qualifications.

The consequences of RAQPs are profound, as they directly heighten audit risk, leading to potentially inappropriate audit opinions on financial statements. This jeopardizes the accuracy and reliability of financial reporting, eroding stakeholder trust and damaging firm reputations, potentially resulting in legal ramifications. In Vietnam, the infamous FLC accounting scandal is partially attributed to RAQPs (CafeF, 2024). Auditors from CPA Hanoi Co., Ltd and TTP Co., Ltd faced criminal charges for fraudulent asset appropriation. Specifically, CPA Hanoi Co., Ltd issued unqualified audit reports for Faros Construction Co., Jsc, despite lacking justification, facilitating its stock listing and subsequent investor fraud by Trinh Van Quyet, amounting to VND 3.621 billion. TTP Co., Ltd auditors failed to verify Faros's investment trusts but still endorsed the company's explanations. These actions were rationalized by the auditors, citing client scale and fee pressure, highlighting the severe impacts of RAQPs on stakeholder interests and market integrity.

## **3. MODEL DEVELOPMENT**

### **3.1 Research model**

Through the review of the extant literature, the research model is laid out in Fig. 1, illustrating the hypothesized direct, positive relationship between role stressors and burnout and burnout's mediating effects within the research model.

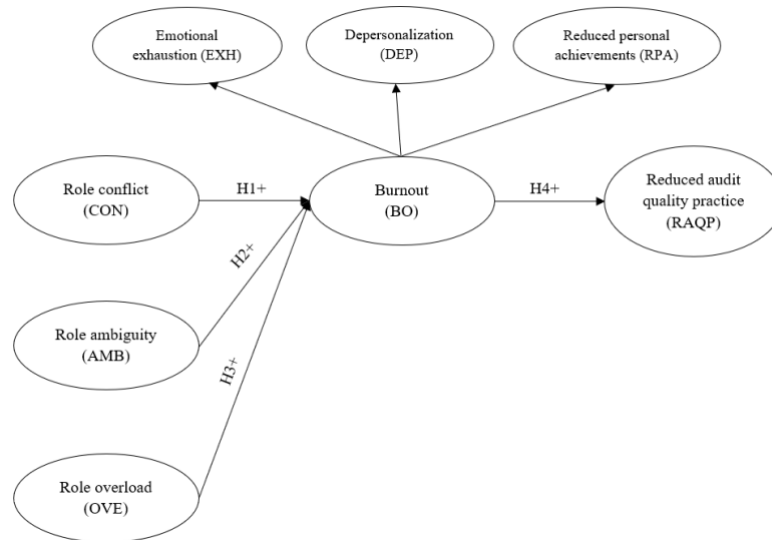


Fig. 1: The research model

### 3.2 Conceptual frameworks for the research hypotheses

The Job Demands-Resources (JD-R) model (Bakker et al., 2007, 2014) underpins the relationship between work stress, psychological strains, and behavioral audit quality (Ariwibowo et al., 2023). Role stressors function as hindrance stressors (Lepine et al., 2005), contributing to burnout and diminished job performance (Demerouti, 2011). This model elucidates how burnout, driven by high job demands and limited resources, negatively impacts audit quality and work behavior through the health impairment process (Cavanough et al., 2000).

Conversely, the COR model (Hobfoll, 1989, 2001) was utilized by Smith et al. (2017) to explore auditor behaviors, positing a link between job stress, stress manifestation, burnout, and adverse job outcomes. The model's mechanisms—resource depletion, resource investments, and the loss spiral—predict auditors' psychological strains due to resource loss. This leads to emotional exhaustion, depersonalization, reduced personal accomplishments, and burnout, resulting in risky RAQPs.

The conceptualization of burnout as a key mediating factor is supported by the Yerkes-Dodson Law (YDL), or inverted-U model (Yerkes and Dodson, 1908; Eysenck, 1955; Hebb, 1955), which asserts that there is an optimal level of stress that enhances motivation and performance. Stress ambivalence means it can positively or negatively impact individuals, making job outcomes unpredictable as stress levels vary. Conversely, burnout invariably has a detrimental effect (Maslach and Jackson, 1981), leading to adverse job outcomes. Thus, considering the mechanism of the inverted-U model and the nature of burnout, it is deduced that burnout mediates dysfunction in role stress paradigms.

### 3.3 Research hypotheses

As per the proposals by Fogarty et al. (2000) and the aforementioned theoretical frameworks, a mediating construct of mental dysfunction is required for RAQPs within the role stress paradigm. Therefore, high levels of role stressors precipitate burnout among individuals, as evidenced by Maslach and Jackson's (1984) empirical studies across various professions. This indicates that environments lacking control and clarity lead to compromised physical and mental health, culminating in burnout. In auditing, role stressors manifest diversely: role conflict arises from conflicting auditor roles as monitors and service providers, exacerbated by discrepancies between audit standards, practices, and market expectations (Mo Koo and Seog Sim, 1999). Role ambiguity stems from unclear work goals, performance expectations, and complex client relationships (Fogarty et al., 2000). The profession itself is recognized for its stress and demands, with studies highlighting heavy workloads and concurrent reporting deadlines as significant contributors to role overload (Weick, 1983). Auditors expend considerable effort, energy, competence, and mental resources to manage these challenges, leading to sustained energy depletion during busy seasons and subsequent psychological strains and burnout. The JD-R model (Bakker et al., 2007, 2014) conceptually supports this phenomenon, as validated empirically (Smith et al., 2017), prompting the following hypotheses:

*H1: Role conflict is positively associated with burnout.*

*H2: Role ambiguity is positively associated with burnout.*

*H3: Role overload is positively associated with burnout.*

On the other hand, extensive research on burnout reveals its detrimental effects at both individual and organizational levels. Psychological consequences manifest as dysfunctional work behaviors, adversely impacting one's perception of work, organizational attachment, and overall work quality (Rossler, 2012; Maslach and Leiter, 2016; Han et al., 2016; Fogarty et al., 2000; Adriaenssens et al., 2020). Such repercussions extend beyond the afflicted individual, imposing operational and financial burdens on the organization and creating a contagious negative influence among coworkers, prompting the following hypothesis:

*H4: Burnout is positively associated with RAQPs.*

The proposed psychological process posits burnout syndromes as a mediator within the beyond-the-role stress paradigm, a notion conceptually supported by the JD-R model (Bakker et al., 2007, 2014) and the COR model (Hobfoll, 1989, 2001). When auditors face demanding work conditions and fail to meet these demands or risk resource loss, they are susceptible to psychological constraints and burnout. This dysfunction leads to impaired professional performance, reduced job satisfaction, and increased turnover intentions, prompting the following hypothesis:

*H5a: Burnout mediates the association between role conflict and RAQPs.*

*H5b: Burnout mediates the association between role ambiguity and RAQPs.*

*H5c: Burnout mediates the association between role overload and RAQPs.*

## 4. RESEARCH DESIGN

### 4.1 Research samples and data collection

This study examines auditors in public accounting in Vietnam, with data collection occurring in two phases. Initially, a pilot survey via Google Forms yielded 88 valid responses, confirming the model's feasibility and instrument validity. In May 2024, the second phase involved voluntary participation, producing 182 valid responses after filtering. Combined, the two phases provided a total sample size of 270 for quantitative analysis. The preliminary phase validated the instrument, ensuring its reliability for the comprehensive survey and subsequent analysis.

### 4.2 Research instruments

From a comprehensive review of literature on role stressors, burnout, and RAQPs, the author developed a research model comprising eight constructs operationalized through the analysis of 24 manifest variables. Each construct includes 3 to 5 items sourced from widely recognized and validated instruments. The survey, conducted in Vietnamese, involved meticulous translation and back-translation to ensure meaning consistency. The author's instructor reviewed the instruments and questionnaires to ensure cohesion, coherence, and clarity. The finalized instrument for empirical studies thus reflects rigorous methodological standards, ensuring its suitability for the research objectives.

Table 1: The research instruments

Construct	Ticket	Items	Source
Role conflict (CON)	CON1	I receive an assignment without the resources to complete it.	Rizzo, et al. (1970); Bowling, et al. (2017)
	CON2	I receive incompatible requests from two or more people.	
	CON3	Overall, I often receive conflicting directions.	
Role ambiguity (AMB)	AMB1	Clear planned goals/objectives exist for my job. (R)*	Rizzo, et al. (1970); Bowling, et al. (2017)
	AMB2	I know how my performance is going to be evaluated. (R)*	
	AMB3	I know exactly what is expected of me. (R)*	
Role overload (OVE)	OVE1	I feel that I just don't have time to take an occasional break.	Beehr, et al. (1977); Thiagarajan, et al. (2006)
	OVE2	I am responsible for an almost unmanageable number of projects or assignments at the same time.	
	OVE3	I simply have more work to do than can be done in an ordinary day.	
	OVE4	Overall, I have too much work to do on this job.	
Burnout (BO)	DEP1	I feel a lack of personal concern for my supervisor.	Singh, et al. (1994); Kristensen, et al. (2005); Bang, et al. (2017)
	DEP2	I feel I'm becoming more hardened toward my supervisor.	
	DEP3	I feel I am becoming less sympathetic toward top management.	
	RPA1	I feel I am an important asset to my supervisor. (R)*	
	RPA2	I feel I satisfy many of the demands set by top management. (R)*	

Construct	Ticket	Items	Source
	RPA3	I feel I make a positive contribution toward top management goals. (R)*	
	EXH1	Working with my boss directly puts too much stress on me.	
	EXH2	I feel emotionally drained by the pressure my boss puts on me.	
	EXH3	I feel burned out from trying to meet top management's expectations.	
Reduced audit quality practices (RAQ)	RAQ1	Accepted weak client explanations	Otley and Pierce (1996)
	RAQ2	Failed to research an accounting principle	
	RAQ3	Made superficial reviews of documents	
	RAQ4	Prematurely signed off on an audit step	
	RAQ5	Reduced work below what you considered reasonable	

(R)\*: These items are reverse-scored to prevent response patterning (Millon, 1987)

Source: The author's compilation

Each item in the research model is operationalized using a five-level Likert scale, ranging from "Strongly disagree"/"Never" to "Strongly agree"/"Often." Previous studies empirically validated these measurements (Smith et al., 2017; Smith et al., 2018). The questionnaire also includes control variables such as gender, age, educational background, and management level.

### 4.3 Statistical analysis

Upon collection, the processed data underwent analysis using quantitative software tools such as SPSS v29.0 and AMOS v20.0. Employing the Likert scale and SEM analysis is fitting for studies with sequential models, as in this research. Furthermore, AMOS v20.0 was utilized to examine the mediating role of burnout symptoms within the role stress paradigm and auditor behavior.

#### 4.3.1 Preliminary assessments

The research instrument's reliability and validity are verified via preliminary assessment using Cronbach's Alpha and Corrected Item-Total Correlation tests. Cronbach's Alpha, an index for evaluating internal consistency, should be 0.6 or higher (Sanders et al., 2007). On the other hand, Cristobal et al. (2007) assert that the Corrected Item-Total Correlation index should be at least 0.3 for satisfactory validity.

Explanatory Factor Analysis (EFA) was also employed in the preliminary assessment to identify underlying correlations among variables. This technique groups correlated items into factors, representing dimensions within the model while maintaining explanatory functions (Hair et al., 2010). The EFA thresholds include:

- KMO Index (Kaiser-Meyer-Olkin) of 0,5 and above ( $0,5 \leq \text{KMO} \leq 1$ );
- Bartlett's test of sphericity yielding a value of less than 0.05;
- Total variance explained of 50% and above;
- Eigenvalue higher than 1; and
- Factor loading of 0,5 and above.

#### 4.3.2 Measurement model analysis

The research model incorporated burnout as a second-order construct, operationalized through three first-order constructs. This higher-order construct was subjected to explanatory factor analysis, confirmatory factor analysis, and evaluations of its reliability, convergent validity, and discriminant validity. The empirical test is followed by an analysis of burnout as a first-order construct (MacKenzie and Podsakoff, 2011).

Confirmatory Factor Analysis (CFA) is utilized to assess the extent to which measured variables accurately represent the constructs, thereby determining model fit (Hair et al., 2010). This method allows researchers to analytically evaluate hypotheses about how various measured items reflect essential psychological, sociological, or business metrics. The CFA criteria for evaluating model fit include:  $\text{CMIN}/df \leq 5$ ,  $\text{RMSEA} \leq 0.08$ , CFI, GFI,  $\text{TLI} \geq 0.9$ , and  $\text{PCLOSE} \geq 0.01$  (Hair et al., 2010; Hu and Bentler, 1999).

The burnout construct is subsequently analyzed using SPSS v26.0 to affirm its validity and reliability. Similar to EFA criteria, factor loading must exceed 0.5 to attain convergent validity. Additionally, Composite Reliability (CR) must surpass 0.7, and Average Variance Extracted (AVE) must exceed 50% to confirm the construct's reliability (Hair et al., 2010).

The first-order items of the burnout construct are defined by recording and integrating the collected data into the database, yielding observable initial first-order constructs. Upon converting the burnout construct into a first-order item, the resultant measurement model is assessed for reliability and validity using AMOS v20.0, adhering to the specified criteria and thresholds.

### 4.3.3 Structural equation model - SEM

The structural model's validity is assessed via path analysis, which aims to evaluate the relationships among constructs within a causal model. This study employs maximum likelihood estimation, wherein parameters are estimated as those most likely to produce the sample covariance matrix (Blunch, 2013). Path analysis thus facilitates the evaluation of the impact of independent constructs on dependent constructs through both direct and indirect causal pathways.

Using SEM analysis with AMOS v20.0, the relationships among constructs are validated, and research hypotheses are confirmed when the p-value is below the threshold of 0.05. Additionally, Standardized Regression Weights and Squared Multiple Correlations are examined to assess the influence of independent constructs on dependent constructs. Higher estimate values indicate a more substantial impact of independent constructs on dependent ones.

## 5. RESULTS

### 5.1 Descriptive statistics

#### 5.1.1 Demographic statistics

Table 2: Demographic statistics

Characteristics	Criteria	Frequency	Percentage (%)
Gender	Male	101	37.4
	Female	169	62.6
Age	Below 28	262	97.0
	28 – 45	8	3.0
Work units	Big 4	221	81.9
	Non – Big & Locals	49	18.1
Management levels	Associate	231	85.6
	Senior	31	11.5
	Manager	8	2.9

The descriptive statistics indicate a lower participation rate of male auditors in this survey, with gender proportions recorded at 37.4% for males and 62.6% for females. Conversely, a substantial majority of the responses were obtained from auditors under the age of 28, accounting for 97.0% of the total. Additionally, the survey garnered a mere eight responses from audit managers aged between 28 and 45, representing a proportional minority of 3.0%. Concerning the professional affiliations of the auditors, 81.9% reported their employment with the Big 4 accounting firms, PwC, Deloitte, EY, and KPMG, equating to 221 responses. The remaining 18.1%, comprising 49 responses, are associated with non-Big and local firms.

#### 5.1.2 Descriptive statistics of latent constructs

Among the three role stressors examined, Vietnamese auditors predominantly encounter role overload and role ambiguity, as evidenced by the highest Likert scale scores in the survey. The mean scores for role overload range from 3.68 to 3.84, while those for role ambiguity span from 3.69 to 3.74. Conversely, role conflict is perceived more neutrally, with an average mean score of 3.07. Auditors also experience various facets of burnout, with depersonalization being the most prevalent (Average Mean = 3.40, SD = 0.822). Emotional exhaustion and reduced personal achievements elicited more neutral responses, with average means of 3.14 and 3.16, respectively. Consequently, it is plausible that participating auditors frequently exhibit all dimensions of burnout, thereby manifesting the syndrome comprehensively throughout their professional activities.



Table 3: Descriptive statistics of latent constructs

Constructs	N	Average Mean	Average Std. Deviation
CON	270	3.07	0.703
AMB	270	3.72	0.758
OVE	270	3.76	0.784
DEP	270	3.40	0.822
RPA	270	3.16	0.812
EXH	270	3.14	0.763
RAQ	270	3.15	0.706

## 5.2 Preliminary assessments of the instruments

In the preliminary evaluation of the research instruments, Cronbach's Alpha was utilized to assess its reliability. Simultaneously, the author performed Exploratory Factor Analysis (EFA) to validate the model's construct. Results are compiled as follows:

Table 4: Results of preliminary assessments

Constructs	Cronbach's Alpha	Lowest Corrected item-Total correlation	KMO	Sig Bartlett's Test	Total variance explained (%)	Lowest factor loading
CON	0.764	0.563	0.690	0.000	68.187	0.748
AMB	0.808	0.600	0.686	0.000	72.551	0.779
OVE	0.798	0.536	0.786	0.000	62.443	0.707
DEP	0.793	0.607	0.695	0.000	70.902	0.771
RPA	0.803	0.635	0.711	0.000	71.856	0.782
EXH	0.816	0.621	0.705	0.000	73.444	0.815
RAQ	0.871	0.646	0.863	0.000	66.420	0.764

Source: The author's compilation

The table indicates that the constructs and dimensions within the research instrument produced Cronbach's Alpha values ranging from 0.764 to 0.871. These values surpass the threshold of 0.6, as stipulated by Nunnally (1978), thereby affirming both the validity and reliability of the instrument.

The preliminary analysis also produced Corrected item-total correlation indices, which represent the correlation between each observed variable and the remaining constructs within the instrument. According to Cristobal et al. (2007), the safety threshold for accepting the Corrected item-total correlation is 0.3. Analysis of the items within the instrument reveals that the lowest Corrected item-total correlations range from 0.536 to 0.646, significantly exceeding the required threshold of 0.3. This confirms the strong correlation among the constructs and their validity and reliability.

In the initial evaluation of the instrument, seven constructs encompassing 24 items were analyzed using Exploratory Factor Analysis (EFA). The findings are as follows: the KMO measure was 0.847 ( $> 0.5$ ); Bartlett's Test of Sphericity was significant ( $p < 0.05$ ), affirming their convergent validity. Furthermore, the total Eigenvalue was 1.099 ( $> 1$ ) when the items were grouped into seven factors, aligning with the number of constructs and dimensions proposed in the research model. Additionally, Total Variance Explained was 70.303% ( $> 50\%$ ). Collectively, the results suggest that the EFA is appropriate and confirms the instrument's convergent and discriminant validity.

## 5.3 Overall fit of the second-order construct of burnout

Explanatory factor analysis for the Burnout construct yielded a KMO of 0.803 ( $> 0.5$ ) and Bartlett's test significance of 0.000, confirming the suitability of EFA. The Promax Rotation and Principal Axis Factoring methods were applied to 9 items across three first-order dimensions. The total variance explained was 72.544% ( $> 50\%$ ), with an eigenvalue of 1.202 ( $> 1$ ), aligning with the second-order construct proposal. Factor loadings ranged from 0.658 to 0.855, all-surpassing 0.5, validating the dimensions and the second-order construct.

Given the established validity and reliability of the second-order construct, Confirmatory Factor Analysis was conducted on the official sample to assess model fit. The results indicated Chi-square/df = 1.902 ( $< 2$ ), GFI = 0.964, CFI = 0.977, TLI = 0.965 ( $> 0.950$ ), RMSEA = 0.058 ( $< 0.08$ ), and PCLOSE = 0.281 ( $> 0.01$ ), all affirming the measurement model's validity and reliability for the second-order construct of burnout.

Table 5: Validity and reliability results for the second-order construct

	CR	AVE	MSV	MaxR(H)	EXH	RPA	DEP
<b>EXH</b>	0.822	0.607	0.219	0.837	<b>0.779</b>		
<b>RPA</b>	0.804	0.578	0.325	0.808	0.468	<b>0.761</b>	
<b>DEP</b>	0.797	0.569	0.325	0.815	0.449	0.570	<b>0.754</b>

Source: Compiled from the AMOS software

Validity and reliability results from AMOS confirmed the convergent and discriminant validity of the construct's dimensions (see Table 5). CR ranged from 0.754 to 0.779, surpassing the 0.7 threshold, thereby reinforcing the construct's reliability. Additionally, AVE ranged from 0.569 to 0.607, exceeding Fornell and Larcker's (1981) optimal 50% level, thus affirming convergent validity.

#### 5.4 Measurement characteristics

Following the validation of the instrument's accuracy and reliability, along with the verification of the second-order construct of Burnout, the study advanced to the Confirmatory Factor Analysis (CFA) using the official research sample. This step aimed to assess the constructs' convergent and discriminant validity, as well as the overall model fit. The analysis revealed the following fit indices: Chi-square/df = 1.631 (< 2), CFI = 0.944; RMSEA = 0.046 (< 0.08); and PCLOSE = 0.608 (> 0.01). Thus, the model fit, along with the constructs' validity and reliability, is affirmed.

Table 6: Reliability and validity tests

	CR	AVE	MSV	MaxR(H)	AMB	RAQ	OVE	CON	BO
<b>AMB</b>	0.817	0.600	0.259	0.845	<b>0.775</b>				
<b>RAQ</b>	0.874	0.581	0.346	0.878	0.377	<b>0.763</b>			
<b>OVE</b>	0.800	0.503	0.396	0.810	0.509	0.418	<b>0.709</b>		
<b>CON</b>	0.769	0.526	0.152	0.775	0.120	0.256	0.344	<b>0.726</b>	
<b>BO</b>	0.748	0.505	0.396	0.807	0.456	0.588	0.629	0.390	<b>0.711</b>

Source: Compiled from AMOS software

The reliability and validity assessment of the measurement model reveals CR ranging from 0.748 to 0.874, exceeding the 0.7 threshold and confirming the constructs' validity and reliability. Additionally, AVE ranges from 0.503 to 0.600, surpassing the 0.5 benchmark, thereby establishing convergent validity. Moreover, MSV for each construct is consistently lower than its AVE, affirming discriminant validity. This is further substantiated by the Fornell and Larcker criterion, where each construct's SQRT(AVE) surpasses the correlation indices with other constructs. Consequently, the research model is demonstrated to be internally consistent.

#### 5.5 Structural equation model

With the instruments verified for reliability and validity through preliminary assessments and the measurement model confirming fit, the subsequent phase involves structural equation model analysis. This evaluates the significance of relationships among constructs within the proposed causal framework using Covariance-Based SEM (CB-SEM) via AMOS software, which is suitable for theory-confirming studies (Hair et al., 2017).

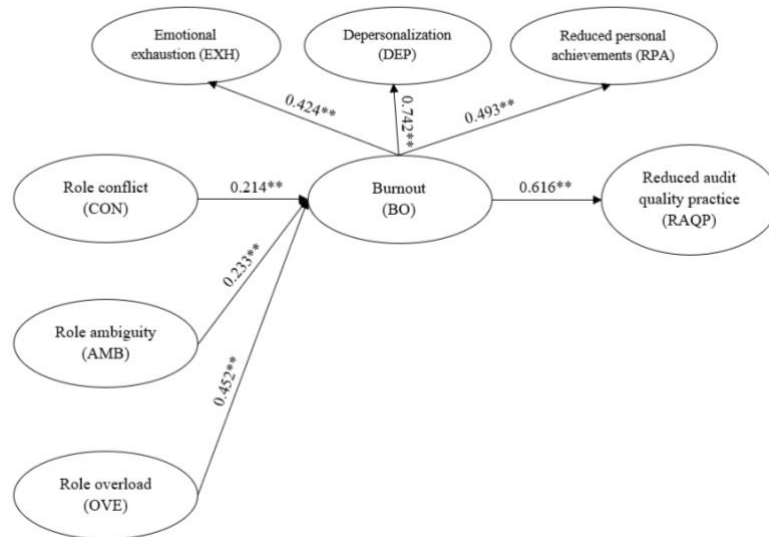


Fig. 2: Structural equation model  
Source: Compiled from AMOS software

Table 7: Compilation of SEM results

Correlations	Direct effect	Indirect effect	Total effect	p-value
CON → BO	0,214	0	0,214	***
AMB → BO	0,233	0	0,233	***
OVE → BO	0,452	0	0,452	***
BO → RAQ	0,616	0	0,616	***
CON → RAQ	0	0,132	0,132	0,008
AMB → RAQ	0	0,144	0,144	0,020
OVE → RAQ	0	0,279	0,279	0,001

Source: Compiled from AMOS software

The analysis of direct causal relationships within the research model reveals p-values ranging from 0 to 0.020, all below the 0.05 threshold, indicating significant interplay among the constructs. The standardized regression weights for the effects of role stressors on burnout are 0.214 for role conflict, 0.233 for role ambiguity, and 0.452 for role overload, demonstrating significant positive influences on the emergence of burnout. This confirms hypotheses H1, H2, and H3, suggesting that increased role stress correlates with a higher likelihood of burnout in auditors. Additionally, burnout significantly impacts RAQPs with a  $\beta$ std of 0.616, validating H4. Burnout serves as a dysfunctional coping strategy, linking role stressors to burnout and resultant dysfunctional behaviors. The analysis also reveals significant indirect associations between role stressors and auditors' dysfunctional behaviors, with  $\beta$ std values of 0.132 for role conflict, 0.144 for role ambiguity, and 0.279 for role overload, confirming H5's components. Overall, structural equation model analysis substantiates the research hypotheses, highlighting the causal links between role stress, burnout, and dysfunctional work behaviors in auditors, with burnout as a crucial mediating factor.

Table 8: Extract of Squared Multiple Correlations

Construct	Estimate (R <sup>2</sup> )
BO	0,491
RAQ	0,380

Source: Compiled from AMOS software

This section of the SEM analysis evaluates the coefficient of determination (R-squared or R<sup>2</sup>), which measures the extent to which independent constructs account for the variation in dependent constructs and the model's predictive capacity. The R<sup>2</sup> coefficient is solely for explanatory and predictive purposes, as its acceptance threshold is indeterminate (Hair et al., 2017). The structural model analysis shows that Burnout (BO) has an R<sup>2</sup> of 0.491, indicating that the independent variables - role conflict (CON), role ambiguity (AMB), and role overload (OVE) - explain 49.1% of the variance in BO. Conversely, the R<sup>2</sup> for RAQ is 0.380, meaning that 38.0% of the variance in RAQ is explained by changes in BO. Overall, the SEM analysis results suggest that the theoretical model is well-suited to the collected data, confirming all hypotheses.

## **6. DISCUSSION**

### **6.1 Discussion of empirical findings**

This study investigates the mediating effect of burnout on RAQPs within the beyond the role stress paradigm. Utilizing data from 270 auditors across Big-4, non-big, and local firms in Hanoi, Vietnam, the results reveal that role stressors positively influence burnout, which subsequently predicts RAQPs. The empirical analysis demonstrates a favorable model fit and supports all hypothesized relationships.

Otley and Pierce's (1996) RAQP instrument comprises five items reflecting auditor behaviors that directly impact audit quality. Each item exhibits strong correlations with the overall construct (minimum  $\beta = 0.700$ ), demonstrating its superiority over the modified Dubinsky and Mattson (1979) measurement used by Fogarty et al. (2000). The preliminary assessment shows a Cronbach's Alpha of 0.871, indicating robust internal consistency. Additionally, the instrument achieved convergent validity, with all items loading onto a single factor, as confirmed by EFA results.

As depicted in Figure 4.1, all components of the role stress paradigm positively correlate with the onset of burnout, with role overload posing the highest impact ( $\beta_{std} = 0.452$ ). This suggests that auditors experiencing high role overload are most susceptible to burnout. The profession is inherently demanding as it entails heavy workloads and long hours, with an urgent focus on meticulousness, which compels the auditor to put in extra effort, especially in peak seasons. This exposes the auditor mainly to role overload and the dysfunctional psychological symptoms that follow. Burnout emerges as a cumulative effect of various role stressors, impairing auditors' mental well-being and work efficacy. Additionally, burnout serves as a precursor to RAQPs, confirming its mediating role within the role stress paradigm. The mediating function of burnout is further substantiated by its capacity to "account for the relation between the predictor and the criterion" (Baron and Kenny, 1986). Within this study's context, components of role stress demonstrate marginally significant direct associations with RAQPs among auditors, with indirect effects of CON ( $\beta = 0.132$ ), AMB ( $\beta = 0.144$ ), and OVE ( $\beta = 0.279$ ) on RAQ. These findings align with previous research (Fogarty et al., 2000; Smith et al., 2017, 2018).

The empirical results are practical for understanding the audit profession in Vietnam, where heavy workloads, long hours, high demands, and meticulousness contribute to stress, especially during busy seasons. Descriptive statistics reveal that auditors frequently experience role overload (Mean = 3.773), explaining its significant association with burnout, consistent with Smith et al. (2017). The study and survey, conducted outside of the busy season, might have understated the role overload items due to the timing gap.

The findings illuminate the true cause of dysfunctional behavior among auditors through the mediating effect of burnout. It is not the role stressors directly causing reduced audit quality but the psychological dysfunction ensuing from attempts to meet job demands. As auditors strive to manage conflicts, ambiguity, and heavy workloads, they expend personal and professional resources. When these efforts exceed their capacity and coping mechanisms fail, auditors face fatigue and reduced efficacy and resort to depersonalization or cynicism as dysfunctional coping strategies. Consequently, burnout leads to RAQPs, reflecting the organizational repercussions of the syndrome.

Verifying burnout as a mediator for RAQPs within the beyond-the-role stress paradigm discredits direct effect models and enriches the overall model, offering actionable insights to enhance audit quality by addressing psychological constraints rather than inherent job demands. Auditors can employ coping strategies to mitigate burnout syndromes. Shin et al. (2014) found emotional exhaustion and depersonalization alleviated by emotion-focused coping, while reduced personal accomplishment can be addressed with problem-focused coping. Emotion-focused coping involves adjusting emotional responses to stressors, whereas problem-focused coping addresses the root causes. Emotion-focused coping, though potentially harmful with strategies like avoidance and denial, can be effective when combined with problem-focused coping, allowing auditors to manage burnout functionally until the stressors are resolved. In addition, with audit transformation underway (CPA, 2024), the integration and ingestion of information technology and CAATs are perceived to enhance audit quality (Noordin et al., 2022), effectiveness, and efficiency (Dennis and Jenkins, 2024). This would have a positive effect on the workload of auditors during peak seasons, hence alleviating the pressure and stress auditors would have to undergo.

The integration of technology also facilitates continuous auditing, which endorses real-time auditing and timely verification of management information, thereby improving audit efficiency in the context of the widespread

emergence and application of new technologies (Hassan et al., 2023). This promises effective time allocation and a more manageable workload for auditors, thereby alleviating their mental constraints on the job. This study also underscores the necessity for firms to proactively address work-related stress and burnout due to their detrimental organizational impacts. Firms should implement healthy lifestyle programs, promote high-quality management practices, and offer training to enhance auditors' adaptability and resilience. Additionally, firms must evaluate their work environments to foster leadership, provide evidence-based stress prevention programs, and ensure organizational fairness and flexibility. Tailored interventions targeting auditors' specific psychological constraints are crucial for mitigating stress impacts, enhancing well-being, and improving organizational performance. Addressing burnout is essential, as effective interventions can significantly reduce the adverse effects of role stressors, fostering a healthier and more productive workforce. The regulatory bodies could also act on the issue to improve behavioral audit quality. Resolutions may include capping the average number of clients per auditor during peak seasons and establishing and regularly updating detailed guidelines and standards for auditing practices. From a legal perspective, the Labor Code 2019 appears to be lacking in regulations on mental health issues. Auditors would benefit from timely and reasonable adjustments to such regulations in order to enhance behavioral audit quality. However, it should be noted that the suggestions are potentially biased and may contain execution difficulties in audit practices, which raise issues that need prompt remedies, further analysis, and more practical solutions.

## **6.2 Limitations, future research, and conclusion**

Despite some moderate achievements, this study faces limitations due to time constraints and the nature of its operationalization. Self-report instruments, while potentially compromising validity, were mitigated by using established, empirically validated tools and verifying their reliability and consistency. The RAQP questionnaire's requirement for auditors to self-report dysfunctional behaviors could lead to understatement, but anonymity was emphasized to encourage objectivity. The primary aim was to explore theoretical associations within the research model, not to assess Vietnam's current situation of behavioral audit quality, which serves as no more than an added value.

Although his paper has made conceptual contributions to the literature on behavior audit quality, it still contains a number of gaps to be overcome by future studies. The coverage of 38.0% of the variance in RAQPs means that the remaining 62.0% remains unexplained, which urges the examination of other antecedents of RAQPs. Moreover, future studies could expand the managerial levels in the samples by approaching managers and partners to ensure generalizability and reliable out-of-sample predictions. In addition, future research could explore the theoretical foundation and empirical assessment of moderating factors within the role stress model, such as resilience, to provide practical recommendations for auditors on how to alleviate the dysfunctional outcomes of excessive role stress.

The global and Vietnamese landscapes are experiencing a technological paradigm shift, significantly impacting both daily life and professional environments. This shift highlights generational differences between Gen Z and older generations, suggesting divergent approaches to work stress and its consequences. From this incentive and conceptual, as well as empirical, research gap, this paper focuses primarily on Gen Z auditors. It evaluates reduced audit quality as an indirect outcome of role stressors and examines burnout's mediating effects within the research model. Using the inverted-U model (Broadhurst, 1957), JD-R model (Bakker et al., 2007, 2014), COR model (Hobfoll, 1989, 2001), and behavioral audit quality literature, a research model was developed to entail the auditor's psychological processes that would lead to dysfunctional work behaviors. Data from 270 responses were analyzed, confirming significant direct associations between role stressors and burnout and their predictive impact on reduced audit quality. Consequently, burnout tendencies serve as a mediator in the research model. Practical recommendations derived from these findings aim to help auditors, firms, and regulatory bodies mitigate work stress, thus enhancing audit quality and the capital market's integrity.

## REFERENCES

### Legal documents:

Decision No 345/QĐ-BTC on the Approving Scheme for Application of Financial Reporting Standards in Vietnam.

### Books and publications:

- Ariwibowo, R., 2023. Nurkholis, & Saraswati, E., 2023. Reduced Audit Quality Practices among Local-Government's Internal Auditors: What to do with Stress and Working Condition. *Jurnal Ilmiah Akuntansi dan Bisnis*, 18 (1), 90-114.
- Bakker, A. B., & Demerouti, E., 2007. The job demands-resources model: State of the art. *Journal of managerial psychology*, 22(3), 309-328.
- Bakker, A. B., & Demerouti, E., 2014. Job Demands-Resources Theory. *Wellbeing*, 1–28. doi:10.1002/9781118539415.wbwell019.
- Bang, H., & Reio Jr, T. G., 2017. Examining the role of cynicism in the relationships between burnout and employee behavior. *Revista de Psicología del Trabajo y de las Organizaciones*, 33(3), 217-227.
- Baron, R. M., & Kenny, D. A., 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.
- Beehr, T. A., Walsh, J. T., & Taber, T. D., 1976. Relationships of stress to individually and organizationally valued states: Higher order needs as a moderator. *Journal of Applied Psychology*, 61(1), 41–47. doi:10.1037/0021-9010.61.1.41.
- Blunch, N.J., 2013. Introduction to structural equation modeling using IBM SPSS statistics and Amos. *Los Angeles, CA: SAGE*.
- Bowling, N. A., Khazon, S., Alarcon, G. M., Blackmore, C. E., Bragg, C. B., Hoepf, M. R., ... Li, H., 2017. Building better measures of role ambiguity and role conflict: The validation of new role stressor scales. *Work & Stress*, 31(1), 1–23. doi:10.1080/02678373.2017.1292563
- BPP., 2022. Audit and Assurance (AA). 3rd ed. *London: BPP Learning Media Ltd*.
- Campbell-Sills, L., & Stein, M. B., 2007. Psychometric analysis and refinement of the Connor–Davidson resilience scale (CD-RISC): Validation of a 10-item measure of resilience. *Journal of Traumatic Stress: Official Publication of The International Society for Traumatic Stress Studies*, 20(6), 1019-1028.
- Carcello, J. V., Hermanson, R. H., & McGrath, N. T. (1992). Audit quality attributes: The perceptions of audit partners, preparers, and financial statement users. *Auditing: A Journal of Practice & Theory*, 11(1).
- Coram, P., Ng, J., & Woodliff, D., 2003. A Survey of Time Budget Pressure and Reduced Audit Quality Among Australian Auditors. *Australian Accounting Review*, 13(30), 38–44. doi:10.1111/j.1835-2561.2003.tb00218.x
- Coram, P., Glavovic, A., Ng, J., & Woodliff, D. R., 2008. The Moral Intensity of Reduced Audit Quality Acts. *Auditing: A Journal of Practice & Theory*, 27(1), 127–149. doi:10.2308/aud.2008.27.1.127
- Cristobal, E., Flavian, C., & Guinaliu, M. (2007). Perceived e-service quality (PeSQ) measurement validation and effects on consumer satisfaction and website loyalty. *Managing service quality: An international journal*, 17(3), 317-340.
- DeAngelo, L. E., 1981. Auditor size and audit quality. *Journal of Accounting and Economics*, 3(3), 183–199. doi:10.1016/0165-4101(81)90002-1
- Demerouti, E., & Bakker, A. B., 2011. The job demands-resources model: Challenges for future research. *SA Journal of Industrial Psychology*, 37(2), 01-09.
- Dennis, A., Jenkins, G. J., 2024. Using technology to boost audit quality. *Journal of Accountancy*, 1(1), 18-21.
- Dubinsky, A. J., & Mattson, B. E., 1979. Consequences of role conflict and ambiguity experienced by retail salespeople. *Journal of Retailing*, 55(4), 70-86.
- Edú-Valsania, S., Laguía, A., & Moriano, J. A., 2022. Burnout: A review of theory and measurement. *International journal of environmental research and public health*, 19(3), 1780.
- Eysenck, H. J., 1955. A dynamic theory of anxiety and hysteria. *Journal of Mental Science*, 101(422), 28-51.
- Fogarty, T. J., Singh, J., Rhoads, G. K., & Moore, R. K., 2000. Antecedents and consequences of burnout in accounting: Beyond the role stress model. *Behavioral Research in Accounting*, 12, 31-68.
- Freudenberger, H. J., 1974. Staff Burn-Out. *Journal of Social Issues*, 30(1), 159–165. doi:10.1111/j.1540-4560.1974.tb00706.x.
- Gil-Monte, P. R., 2011. CESQT Cuestionario para la Evaluación del Síndrome de Quemarse por el Trabajo. *Madrid, España, TEA Ediciones*.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L., 2010. Multivariate data analysis. *New Jersey: Pearson Education*.
- Hair Jr, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M., 2017. PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), 107-123.
- Hassan, A., Salleh, N., Ismail, M. N., & Ahmad, M. N., 2023. Empirical evaluation of continuous auditing system use: a systematic review. *International Journal of Electrical and Computer Engineering*, 13(1), 796.
- Hebb, D. O., 1955. Drives and the CNS (conceptual nervous system). *Psychological review*, 62(4), 243.
- Ho, W. H., Chang, C. S., Shih, Y. L., & Liang, R. D., 2009. Effects of job rotation and role stress among nurses on job satisfaction and organizational commitment. *BMC health services research*, 9, 1-10.
- Hobfoll, S. E., 1989. Conservation of resources: a new attempt at conceptualizing stress. *American psychologist*, 44(3), 513.
- Hobfoll, S. E., 2001. The influence of culture, community, and the nested self in the stress process: Advancing conservation of resources theory. *Applied psychology*, 50(3), 337-421.
- Hu, L. T., & Bentler, P. M., 1999. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, 6(1), 1-55.
- Kahn, R. L., 1964. Organizational stress: Studies in role conflict and ambiguity. *Huntington, NY, USA: Krieger*.
- Kelley, T., & Margheim, L., 1990. The Impact of Time Budget Pressure, Personality, and Leadership Variables on Dysfunctional Auditor Behavior. *Auditing: A Journal of Practice & Theory*, 9(2).
- Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B., 2005. The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & Stress*, 19(3), 192–207. doi:10.1080/02678370500297720.
- LePine, J. A., Podsakoff, N. P., & LePine, M. A., 2005. A meta-analytic test of the challenge stressor–hindrance stressor framework: An explanation for inconsistent relationships among stressors and performance. *Academy of Management Journal*, 48(5), 764-775.
- MacKenzie, S. B., Podsakoff, P. M., & Podsakoff, N. P., 2011. Construct measurement and validation procedures in MIS and behavioral research: Integrating new and existing techniques. *MIS Quarterly*, 35(2), 293-334.
- Malone, C. F., & Roberts, R. W., 1996. Factors associated with the incidence of reduced audit quality behaviors. *Auditing*, 15(2), 49.
- Mañas, M. A., Díaz-Fúnez, P., Pecino, V., López-Liria, R., Padilla, D., & Aguilar-Parra, J. M., 2018. Consequences of Team Job Demands: Role Ambiguity Climate, Affective Engagement, and Extra-Role Performance. *Frontiers in Psychology*, 8. doi:10.3389/fpsyg.2017.02292
- Maslach, C., & Leiter, M. P., 1976. Burnout. *Human behavior*, 5(9), 16-22.

- Maslach, C., 1981. Maslach Burnout Inventory Manual. Palo Alto, CA, USA: Consulting Psychologists Press.
- Maslach, C., 1982. Understanding burnout: Definitional issues in analyzing a complex phenomenon. *Job stress and burnout*, 29-40.
- Maslach, C., & Jackson, S. E., 1984. Burnout in organizational settings. *Applied social psychology annual*.
- Maslach, C., & Leiter, M. P., 2016. Understanding the burnout experience: recent research and its implications for psychiatry. *World Psychiatry*, 15(2), 103-111.
- Maslach, C., & Leiter, M. P., 2017. New insights into burnout and health care: Strategies for improving civility and alleviating burnout. *Medical teacher*, 39(2), 160-163.
- Millon, T., 1987, Manual for the MCMI-II, NCS, Minneapolis, MN.
- Mo Koo, C., & Seog Sim, H., 1999. On the role conflict of auditors in Korea. *Accounting, Auditing & Accountability Journal*, 12(2), 206–219. doi:10.1108/09513579910270110.
- Noordin, N. A., Hussainey, K., & Hayek, A. F., 2022. The use of artificial intelligence and audit quality: An analysis from the perspectives of external auditors in the UAE. *Journal of Risk and Financial Management*, 15(8), 339.
- Nunnally, J.C., 1978. Psychometric theory: 2d ed. New York: McGraw-Hill.
- Örtqvist, D., & Wincent, J., 2006. Prominent consequences of role stress: A meta-analytic review. *International Journal of Stress Management*, 13(4), 399–422. doi:10.1037/1072-5245.13.4.399
- Otley, D. T., & Pierce, B. J., 1996. Auditor time budget pressure: consequences and antecedents. *Accounting, Auditing & Accountability Journal*, 9(1), 31–58. doi:10.1108/09513579610109969.
- Rizzo, J. R., House, R. J., & Lirtzman, S. I., 1970. Role Conflict and Ambiguity in Complex Organizations. *Administrative Science Quarterly*, 15(2), 150. doi:10.2307/2391486
- Sanders, J. O., Harrast, J. J., Kuklo, T. R., Polly, D. W., Bridwell, K. H., Diab, M., ... & Spinal Deformity Study Group. (2007). The Spinal Appearance Questionnaire: results of reliability, validity, and responsiveness testing in patients with idiopathic scoliosis. *Spine*, 32(24), 2719-2722.
- Schmidt, S., Roesler, U., Kusserow, T., & Rau, R., 2014. Uncertainty in the workplace: Examining role ambiguity and role conflict, and their link to depression—A meta-analysis. *European Journal of Work and Organizational Psychology*, 23(1), 91-106.
- Schroeder, M. S., Solomon, I., & Vickrey, D. (1986). Audit Quality: The Perceptions of Audit-Committee Chairpersons and Audit Partners. *Auditing: A Journal of Practice & Theory*, 5(2).
- Shin, H., Park, Y. M., Ying, J. Y., Kim, B., Noh, H., & Lee, S. M., 2014. Relationships between coping strategies and burnout symptoms: A meta-analytic approach. *Professional Psychology: Research and Practice*, 45(1), 44.
- Singh, J., Goolsby, J. R., & Rhoads, G. K., 1994. Behavioral and psychological consequences of boundary spanning burnout for customer service representatives. *Journal of Marketing Research*, 31(4), 558-569.
- Smith, K. J., & Emerson, D. J., 2017. An analysis of the relation between resilience and reduced audit quality within the role stress paradigm. *Advances in Accounting*, 37, 1–14. doi:10.1016/j.adiac.2017.04.003.
- Smith, K. J., Emerson, D. J., & Everly, G. S., 2017. Stress Arousal and Burnout as Mediators of Role Stress in Public Accounting. *Advances in Accounting Behavioral Research*, 79–116. doi:10.1108/s1475-148820170000020004
- Smith, K. J., Emerson, D. J., & Boster, C. R., 2018. An examination of reduced audit quality practices within the beyond the role stress model. *Managerial Auditing Journal*, 33(8/9), 736-759.
- Thiagarajan, P., Chakrabarty, S., & Taylor, R. D., 2006. A Confirmatory Factor Analysis of Reilly's Role Overload Scale. *Educational and Psychological Measurement*, 66(4), 657–666. doi:10.1177/0013164405282452
- Twenge, J. M., 2023. Generations: The Real Differences Between Gen Z, Millennials, Gen X, Boomers, and Silents—and What They Mean for America's Future. *Simon and Schuster*.
- Ugwu, L. I., Enwereuzor, I. K., Fimber, U. S., & Ugwu, D. I., 2017. Nurses' burnout and counterproductive work behavior in a Nigerian sample: The moderating role of emotional intelligence. *International Journal of Africa Nursing Sciences*, 7, 106-113.
- Üngüren, E., & Arslan, S., 2021. The effect of role ambiguity and role conflict on job performance in the hotel industry: The mediating effect of job satisfaction. *Tourism & Management Studies*, 17(1), 45-58.
- Willett, C., & Page, M., 1996. A survey of time budget pressure and irregular auditing practices among newly qualified UK chartered accountants. *The British Accounting Review*, 28(2), 101-120.
- Yerkes, R. M., & Dodson, J. D., 1908. The relation of strength of stimulus to rapidity of habit-formation.

#### Others:

- CafeF., 2024. *Bê bối lớn chưa từng có trong lịch sử kiểm toán: Trung Quốc điều tra trách nhiệm PwC trong vụ Evergrande lừa đảo 78 tỷ USD doanh thu, Big 4 liệu có thành Big 3?* [online] CafeF.com. Available at <https://cafe.vn/be-boi-lon-chua-tung-co-trong-lich-su-kiem-toan-trung-quoc-dieu-tra-trach-nhiem-pwc-trong-vu-evergrande-lua-dao-78-ty-usd-doanh-thu-big-4-lieu-co-thanh-big-3-188240322152817172.chn> [Assessed 10 April 2024].
- CafeF., 2024. *Sai phạm trong kiểm toán báo cáo cho Faros (ROS) của ông Trịnh Văn Quyết, lãnh đạo 2 Công ty kiểm toán bị khởi tố về tội "Lừa đảo chiếm đoạt tài sản"* [online] CafeF.vn. Available at <https://cafe.vn/sai-pham-trong-kiem-toan-bao-cao-cho-faros-ros-cua-ong-trinh-van-quyet-lanh-dao-2-cong-ty-kiem-toan-bi-khoi-to-ve-toi-lua-dao-chiem-dot-tai-san-188240226001040901.chn> [Accessed 15 April 2024].
- City A.M., 2023. *KPMG stands behind audit of Silicon Valley Bank, accounting firm's US chief says* [online] cityam.com. Available at <https://www.cityam.com/kpmg-stands-behind-audit-of-silicon-valley-bank-accounting-firms-us-chief-says/> [Assessed 10 April 2024].
- CPA., 2024. *The path to audit transformation: Cloud, Connect, Create* [White paper] CPA. Available at [https://www.cpa.com/sites/cpa/files/2021-05/Transforming\\_the\\_Audit\\_Whitepaper.pdf](https://www.cpa.com/sites/cpa/files/2021-05/Transforming_the_Audit_Whitepaper.pdf) [Accessed 10 August 2024].
- IAASB., 2014. *A Framework For Audit Quality* [White paper] IAASB. Available at [https://www.iaasb.org/publications/framework-audit-quality-key-elements-create-environment-audit-quality-3?utm\\_source=IFAC%20Main%20List&utm\\_campaign=d328ee44e5-IAASB\\_Audit\\_Quality\\_Press\\_Release\\_12\\_17\\_2015&utm\\_medium=email&utm\\_term=0\\_cc08d67019-d328ee44e5-80394221](https://www.iaasb.org/publications/framework-audit-quality-key-elements-create-environment-audit-quality-3?utm_source=IFAC%20Main%20List&utm_campaign=d328ee44e5-IAASB_Audit_Quality_Press_Release_12_17_2015&utm_medium=email&utm_term=0_cc08d67019-d328ee44e5-80394221) [Accessed 14 April 2024].