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The Influence of External Auditors' Psychological Capital on the Application of International Standard on Auditing 610

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ABSTRACT

This study investigates the influence of external auditors' psychological capital upon their reliance behaviour on internal auditors, as specified by the International Standard on Auditing (ISA) 610. The study employed the Structural Equation Modelling using the Partial Least Squares (SEM-PLS) method to examine the proposed model's measurement and structural elements. The results indicate that external auditors' decisions to rely upon internal auditors, either through the utilisation of work previously accomplished by internal auditors or via engaging internal auditors for direct assistance, are positively connected to positive psychological capital. Specifically, reliance extent on internal auditors can be boosted when external auditors (1) demonstrate a high degree of self-efficacy, reflected in their confidence to perform multifaceted audit tasks and a commitment to employing the necessary effort to achieve audit objectives; (2) maintain optimistic expectations regarding current audit consequences; (3) exhibit a hopeful orientation characterised by perseverance toward goals and the flexibility to modify strategies in response to changing audit conditions; and (4) display psychological resilience by effectively coping with audit-related challenges, reassessing adverse situations, and re-engaging with determination. This research offers empirical evidence on the value of psychological capital in applying ISA 610 that may interest stakeholders, including auditees, external and internal auditors, and standard-setting authorities. These stakeholders are integral to affecting the functional role of internal auditors in the external audit practice, thereby contributing to its overall efficiency and effectiveness.

INTRODUCTION

The social cognitive theory illustrates the significance of efficacy and its direct impact on human behaviour, expectations, and outcomes. According to this theory, behaviour and task completion are enhanced through self-efficacy (internal efficacy) and external efficacy (Agars and Kottke, 2020; Hannah et al., 2010; Khelil, 2023; Bandura, 1999; Eden et al., 2010; Hannah et al., 2010; Khelil, 2023). Self-efficacy has been determined to be an essential element of successful performance. Prior research indicates that practitioners and researchers should value external efficacy as they regard its internal counterpart (Agars and Kottke, 2020; Khelil, 2023). External efficacy means that can be utilised in the execution of the job involves human resources (e.g., leaders, peers, and subordinates), institutional mechanisms (processes, procedures), and tools (computers, equipment, and software) (Bandura, 1999; Eden et al., 2008; Yaakobi and Weisberg, 2020). Accordingly, internal auditors' work can be an external efficacy means for external auditors.

In line with the social cognitive theory and as utilisation of external efficacy means, the International Standard on Auditing (ISA) 610 permits that internal auditors be relied on by external auditors provided that particular quality criteria are met (Albawwat, 2022; IFAC, 2013; Bame-Aldred et al., 2012). The 2013 revised International Standard on Auditing (ISA) 610 supports that the work previously performed by internal auditors and their providing of direct support under the direction of external auditors can be relied on (IFAC, 2013). This reliance decreases the processes needed by independent auditors to gather audit evidence, so improving the efficiency of audits (Barr-Pulliam et al., 2024; Breger et al., 2019; Desai et al., 2017). Internal auditors usually have great awareness of the activities, internal controls, and operational procedures of the entity since they occupy a long period inside the company. Internal auditors' familiarity helps them to spot shortcomings and strengths in fields that might still be unknown to external auditors. Thus, using the expertise of internal auditors could improve the auditee-related knowledge among external auditors, resulting in creating more focused audit strategies and helping to provide more thorough audit coverage (Felix et al., 2001; Nkansa, 2023). Within the framework of worldwide auditing standards, it is abundantly evident how important it is for external auditors to rely on the internal auditing staff of their clients. This reliance helps greatly in minimising the effort needed to wrap up the external examination of the financial reports. Consequently, an important decrease in external audit fees has been observed (ame-Aldred et al., 2012; Felix et al., 2005; Al-Twaijry et al., 2004). Within this framework, internal auditors are considered a part of the external audit's means and operative engagement is conceptualised as a dimension of audit resource utilisation efficiency (Albawwat, 2022; Bame-Aldred et al., 2012; Barr-Pulliam et al., 2024; Felix et al., 2001). However, in certain developing economies, the degree to which external auditors incorporate the work of internal auditors remains limited. This insufficient integration weakens the potential of internal auditor contributions to function as one of the external audit fees determinant (Al-Twaijry et al., 2004; Albawwat, 2022; Said-Suwaidan and Qasim, 2010).

International Standards on Auditing 610 (Revised 2013) explicitly states that the external auditor's obligation towards the contents of the audit report remains intact, irrespective of any reliance placed on the work of internal auditors. In line with this, the standard delineates quality-related criteria that must be rigorously assessed before placing any reliance. The evaluation of internal audit quality and the subsequent reliance decision are subject to the influence of various organisational and individual-level factors, including the cognitive capacities of the external auditor (Brody, 2012; Mapuli, 2023). Among these cognitive resources, psychological capital has emerged as a critical determinant, as it has been empirically linked to variations in employee attitudes and behaviours within organisational settings (Da et al., 2021; Maykrantz et al., 2021). As such, variations in the psychological resources of external auditors could explain variations in the degree to which the internal auditors support the external audit process. This paper aims to add to the body of knowledge by investigating whether psychological capital has a major impact upon the degree of use external auditors make of internal auditors' output. More specifically, it offers concrete evidence of how psychological capital shapes external auditors' opinions of the reliability of internal audits and final reliance choices.

1. BACKGROUND

1.1 Social cognitive theory

Bandura developed Social Cognitive Theory, which is also known as a framework of efficacy beliefs, in 1986. According to this theoretical perspective, efficacy beliefs form a fundamental psychological mechanism affecting personal decision-making procedures and behaviour results. Through influencing behaviour plans, expectations, ambitions, and goal-setting, perceived self-efficacy is fundamental in human agency. Moreover, it affects how people view chances and limitations inside their social and professional settings (Agars and Kottke, 2020; Bandura, 1999; Eden et al., 2010; Hannah et al., 2010; Khelil, 2023). Later developments in this concept have broad their reach to include a model combining internal as well as external efficacy. Task performance and behavioural execution are now shown to be influenced not only by self or internal efficacy but also by external types of efficacy. External efficacy includes means and group efficacy (Eden, 1996; Eden, 2001; Khelil, 2023; Yaakobi and Weisberg, 2020). Means-efficacy is a person's opinion of the value and efficiency of outside resources meant to help them perform tasks. This construct helps to explain the extent to which people credit the supportive function of outside resources for performance results, so either facilitating or hindering task completion (Eden, 1996). Like self-efficacy, means-efficacy is acknowledged as a major motivating factor deserving of consideration from professional practitioners as well as academic researchers (Agars and Kottke, 2020). It covers a spectrum of outside resources: human capital (e.g., supervisors, colleagues, and subordinates); legal frameworks (e.g., organisational processes and standardised procedures); and technological resources (e.g., software, equipment, and information platforms) (Bandura, 1999; Eden et al., 2010; Yaakobi and Weisberg, 2020). Internal auditors could be seen inside this conceptual framework as an example of means-efficacy to external auditors. That is to say, they are a useful outside resource that one can use to help external audit activities to be completed.

1.2 Reliance of External Auditors on Internal Auditors

In response to the growing focus on strong corporate governance systems, the collaboration among external and internal auditors is gaining ever more significance (Hazaea et al., 2022; Paape et al., 2003). The roles and responsibilities of external and internal audit functions are becoming continually interdependent in current audit practice, so deepening the professional connection among these two assurance suppliers (Calvin et al., 2023; Mubako and Mazza, 2023). The International Standard on Auditing 610 defines the circumstances under which internal auditors could participate in the external audit process. In particular, the International Standard on Auditing 610 permits external auditors to make use of the work accomplished by internal auditors, provided that the internal audit function satisfies established criteria relating to systematic and disciplined processes, competence, and objectivity (International Federation of Accountants, 2013). The standard further allows internal auditors to assist the external audit team directly under appropriate supervision. This reliance can influence the extent and character of external audit methods for evidence collection (Bame-Aldred et al., 2012). Nevertheless, since the audited entity employs internal auditors, concerns regarding independence and objectivity necessitate external auditors' heightened professional scepticism and due care when incorporating internal audit work into their procedures (Khalid et al., 2024). Ensuring audit quality requires carefully assessing the degree to which reliance upon the internal audit function is proper in each audit engagement (Bame-Aldred et al., 2012; Barr-Pulliam et al., 2024).

The responsibility for forming an audit opinion in audit engagements rests solely with the external auditor. Reliance upon the work of internal auditors, as anticipated by International Standard on Auditing 610 (Revised 2013), does not excuse the external auditor from accountability regarding the content of the audit report (International Federation of Accountants, 2013). Therefore, any decision to place reliance upon internal audit work must be informed by a rigorous assessment of specific quality criteria delineated within the standard. Among these evaluative criteria, objectivity is paramount. Objectivity is conceptualised as a balanced mental state that tolerates internal auditors to execute their duties with assurance in the integrity and reliability of their outputs, ensuring that audit quality is not compromised by undue influence. Internal auditors are expected to maintain independence in thought and action, resisting pressures that may impair professional judgment during audit activities. Competence constitutes another essential determinant in the evaluation process. This refers to the internal auditors possessing the requisite technical knowledge, professional skills, and behavioural attributes necessary to fulfill their responsibilities within the audit function effectively. Furthermore, for internal auditors to be considered suitable for reliance, the internal audit function must demonstrate the implementation of a systematic and disciplined methodology to its operations. This entails consistently applying structured processes in the planning, execution, supervision, review, and documentation of audit activities (Institute of Internal Auditors, 2015; International Federation of Accountants, 2013). International Standard on Auditing 610 further requires external auditors to evaluate the extent and environment of reliance on the internal auditors' work, particularly concerning tasks significant to the external audit.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Psychological Capital Hope Aspect and External Auditors' reliance on Internal auditors

The evaluations conducted by external auditors concerning the quality of internal auditors are guided by the criteria outlined in the International Standard on Auditing 610. To mitigate the risk of inappropriate reliance that could compromise the integrity and quality of the external audit, the standard mandates that external auditors rigorously assess the internal audit function against the quality dimensions prior to incorporating any of its work into the external audit evidence base (International Federation of Accountants, 2013). Empirical investigations conducted within the Jordanian auditing environment have explored the connection between the quality of internal auditors and the degree of reliance placed upon them by external auditors. Some studies have specifically examined the extent to which external auditors in Jordan adhere to the stipulations of ISA 610 when evaluating internal audit functions, drawing upon perspectives from both external and internal audit practitioners. These studies also investigated the relative importance of external auditors to each quality attribute prescribed by ISA 610. The findings demonstrate that perceptions regarding the degree to which internal audit work conforms with ISA 610 vary significantly between internal audit personnel and external auditors (Albawwat, 2022; Said-Suwaidan and Qasim, 2010). Further research has been done to determine the relative significance of each quality assigned in the external auditors' selection process with reference to reliance upon internal auditors. Based on the outcomes of these investigations, Jordanian external auditors consider objectivity to be the most significant criterion influencing their choices regarding dependence (Al-Sukker et al., 2018).

The central focus of this study is psychological capital, which pertains to the role of positive individual attributes in facilitating effective and efficient job performance. Among various positive psychological constructs, hope, self-efficacy, optimism, and resilience have emerged as the most representative components aligning with the conceptual framework of positive organisational behaviour. These four constructs have been empirically validated as the core dimensions constituting psychological capital (Caldwell, 2004; Luthans et al., 2007; Martin et al., 2005; Luthans and Youssef, 2007;). Theoretically, hope is described as a positive motivational state that is predicated upon an interactively formed feeling of effective objective-directed dynamism and making plans to achieve aims. Hopeful people can create numerous routes to achieving their objectives (Luthans, 2002; Ribeiro et al., 2021). This psychological resource never stops giving hope that the objective will be reached. Maintaining hope in crises and change is essential for employee well-being and a key component of constructive organisational change. To navigate discontinuous and unpredictable change processes, in particular, creating new paths appears crucial (Wright and Cropanzano, 2004; Weick and Quinn, 1999). Moreover, people with a high hope level structure their work to motivate them to complete the task. Agency thinking in hope is significant when people face obstacles (Lupșa et al., 2019). Persons exhibiting a heightened degree of hope are more inclined to receive and interpret information in a manner that enhances the likelihood of desired outcomes materialising (MacInnis and Chun, 2006). In situations where external auditors rely upon the work accomplished by internal auditors, the psychological construct of hope may serve to improve the perceived trustworthiness of the internal audit function. As external auditors develop increasingly favourable attitudes toward the benefits of relying on internal auditors, they are more apparent to perceive the internal auditors as dependable and trustworthy, thereby satisfying the quality criteria outlined in the International Standard on Auditing 610. Consequently, external auditors may exhibit a greater propensity to utilise the work already performed by internal auditors or to engage internal auditors for direct assistance in the audit process. Based on this rationale, the next testable hypothesis is projected:

H1: The psychological capital hope aspect positively influences external auditors' reliance upon internal auditors.

2.2 Psychological Capital Self Efficacy Aspect and External Auditors' reliance on Internal auditors

Self-efficacy represents the second core capability of psychological capital. It denotes to a person's belief or confidence in their capability to organise the enthusiasm, cognitive resources, and paths of action required to successfully accomplish a particular duty within a given setting (Bandura, 1997). According to Avey et al. (2008), self-efficacy encompasses one's confidence in one's capacity to (a) create alternative paths, (b) initiate purposeful action concerning an objective, and (c) finally achieve the intended outcome. Substantial empirical evidence has confirmed a strong positive connection among self-efficacy and Job performance, particularly in organisational change and adaptation. Self-efficacy is developed through four widely recognised factors, each relevant to promoting constructive behaviour. The most influential factor is task mastery, which involves completing a task and reinforcing one's confidence in one's capability to replicate or adapt to similar challenges (Bandura, 1997). A second factor is arousal, referring to emotional and physiological activation that energises individuals to complete tasks or respond to change. Third, verbal persuasion through encouragement and affirmation from credible role models such as supervisors, mentors, or coaches, particularly when individuals are undertaking new responsibilities. Fourth, vicarious learning or modelling occurs when individuals observe others perceived as similar to themselves successfully performing a task. Organisations can foster self-efficacy by facilitating early experiences of task mastery, promoting social support mechanisms, and offering opportunities for role modelling (Gist and Mitchell, 1992). Personnel with high self-efficacy tend to exhibit persistent effort and sustained motivation toward goal achievement, driven by confidence in their capabilities (Li et al., 2019).

This psychological resource is especially critical in dynamic work environments, where employees are frequently required to assume new roles and navigate unfamiliar tasks (Kim et al., 2017). Self-efficacy provides insight into the antecedents of individual performance in situations characterised by ambiguity or difficulty (Bandura, 1997, 1999). Individuals with high self-efficacy perceive complex tasks as challenges to be mastered and are more likely to achieve superior outcomes. Low self-efficacy individuals, on the other hand, frequently react to uncertainty with hesitancy and anxiety, which can impair performance (Bandura, 1997). When relying upon internal auditors who perform services for the audited organisation, external auditors might view the task as complex and unpredictable, requiring a remarkable degree of self-efficacy to complete effectively. The confidence and perceived ability required to exercise this professional judgement and make well-informed reliance decisions are more likely to be possessed by external auditors who have high levels of self-efficacy. Accordingly, the following hypothesis is formulated:

H2: The psychological capital self-efficacy aspect positively influences external auditors' reliance upon internal auditors.

2.3 Psychological Capital Optimism Aspect and External Auditors' reliance on Internal auditors

The third factor of psychological capital is optimism, which is the broad expectation of favourable results. Pessimists are more likely to expect negative outcomes, while optimistic people are distinguished by their expectation of positive outcomes. This expectation framework sheds light on how optimism affects one's ability to effectively deal with uncertainty. Regardless of present competence or situational challenges, highly optimistic persons are more likely to expect success in a situation of ambiguity (Scheier et al., 2001; Guo et al., 2018). Employees who are more optimistic are more likely to act pro-actively at work, which improves task performance and increases organisational productivity. Their optimistic attitude serves as a driving force, inspiring them to aim high and see obstacles as chances for development and creativity (Broad and Luthans, 2020). Furthermore, by encouraging teamwork and others to adopt similarly positive attitudes, optimistic people commonly contribute to a positive atmosphere in organisations (Carver and Scheier, 2014; Hannah et al., 2010).

According to the reviewed literature (Broad and Luthans, 2020; Ziyae et al., 2015; Yu et al., 2019), optimism is a crucial psychological resource for maintaining motivation and perseverance in goal-oriented tasks. People are more inclined to work hard and stick with their goals in the face of difficulty or adversity when they anticipate positive results. When assessing the competence, objectivity, and methodological rigour of internal auditors as set forth by the ISA 610 (Revised 2013), optimism may have an impact on an external auditor's sureness in the quality and utility of internal audit work in the external auditing of financial statements. The afterwards hypothesis is put forth in light of this theoretical foundation:

H3: The psychological capital optimism aspect positively influences external auditors' reliance upon internal auditors.

2.4 Psychological Capital Resilience Aspect and External Auditors' reliance on Internal auditors

The fourth essential component of psychological capital is resilience. Challenges, ambiguity, disagreement, disappointment, and even positive stressors like development, advancement, and increased responsibility can all be overcome by this positive psychological capacity (Avey et al., 2008; Luthans, 2002). This capability is especially relevant in contemporary organisational environments characterised by volatility, restructuring, and continuous change. The essential feature of resilience lies in one's ability to rebound from setbacks, adapt constructively, and thrive in the face of significant challenges (Luthans and Youssef, 2007). In the auditing context, external auditors may encounter uncertainty and complexity when determining whether to rely upon the work of internal auditors, particularly given concerns over objectivity and audit quality. External auditors who demonstrate high levels of resilience are more likely to manage such uncertainties effectively, remain adaptable, and confidently make professional judgments. Thus, resilience may be a facilitating factor in promoting reliance upon the internal auditors during the external audit process. In light of this theoretical reasoning, the following hypothesis is put forth.

H4: The psychological capital resilience aspect positively influences external auditors' reliance upon internal auditors.

3. RESEARCH METHOD

3.1 Data Gathering Technique

Data for this investigation were collected by a structured questionnaire survey. A total of 140 questionnaires were disseminated to external auditors auditing companies listed on the Amman Stock Exchange in Jordan. Of these, 120 completed observations were returned and considered suitable for statistical analysis, producing a response rate of almost 86 per cent. The Psychological Capital Questionnaire's 24-item survey assesses the psychological capital of external auditors. This questionnaire has been rigorously assessed through psychometric evaluations and validation using samples from various business sectors. Six items are graded on a Likert scale to test each of the psychological capital constructs: self-efficacy, optimism, hope, and resilience. Consent and a free copy of the measurements are available to researchers from www.mindgarden.com. The measurement items related to external auditors' estimation of internal auditors' quality aspects and their corresponding reliance decisions were developed in alignment with the guidance provided by the International Standards on Auditing. The construct denoting external auditors' reliance upon internal auditors was developed as a second-order construct. The theoretical foundation for modelling reliance as a second-order concept is grounded in the fact that external auditors need to evaluate four essential characteristics before relying upon internal auditors.

3.2 Analysis Method

Partial least squares structural equation modelling was harnessed in this study to analyse the data. Two steps are involved in the evaluation and analysis of the data using the PLS-SEM method. In the first step, it evaluates the measurement model to ensure its validity and reliability. For hypothesis testing, the structural model is examined in the second stage (Hair et al., 2017). The measurement and structural design of the research model are shown in Figure 1. The numerous items measuring the underlying variables comprise the measurement model. Conversely, the routes illustrating the study hypotheses shape the structural model (see Figure 1). R^2 standards are inspected to appraise the research model's predictive power. It likewise displays the change in the endogenous components that external constructions can enlighten. A value nearer 1 denotes a higher predictive power. The range of values for R^2 is 0.00 to 1.00 (Esposito Vinzi et al., 2010). According to Hair et al. (2017), R^2 figures of 0.75 and higher, 0.25 to 0.75, and 0.25 to 0.25 should be regarded as having high, modest, and low predictive power, respectively. The endogenous components RD in the current investigation have an R^2 value of 0.592. These findings point to the study model's moderate predictive power.

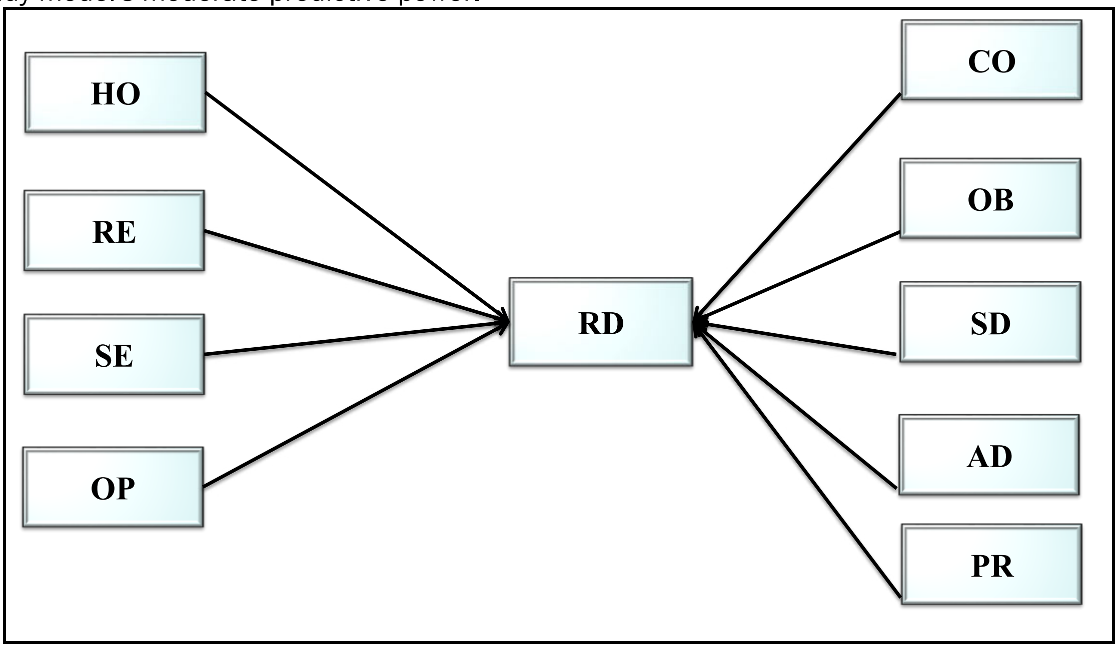

Figure 1. The study model
Note: HO = hope; RE = resilience; SE = self-efficacy; OP = optimism; RD = external auditors decision to rely on internal auditors; CO = competence; OB = objectivity; SD = internal auditors application of a systematic and disciplined approach; AD = the adequacy of internal auditors work for external audit; PR = Planned reliance on internal auditors

3.2.1 Evaluation of Measurement Model

The present analysis evaluates the internal consistency reliability of measurements using Cronbach's Alpha and Composite Reliability. The composite reliability and Cronbach's alpha values for all latent variables should surpass 0.7 to be within the acceptable range that is met for the current study (see Table 1) (Cronbach, 1951; Hair et al., 2017). In contrast, the validity is assessed through convergent validity benchmarks. Convergent validity is attained when a collection of items accurately describes a latent construct. To achieve this, the average variance extracted (AVE) value for each latent variable must be greater than 0.5 (Esposito Vinzi et al., 2010). As shown in Table 1, all latent constructs in the present investigation can account for higher than 0.5 of the average variance of their respective indicators. The loadings of the indicators on their latent variables were also looked at to examine reliability at the item level. Hair et al. (2017) assert that an item must have a loading of at least 0.7 on its construct. Table 1 indicates that the indicator loadings on the corresponding latent variables exceed 0.7. Similarly, to guarantee that each latent variable only captures indicators not represented by other latent variables in the model, the discriminant validity criterion (cross-loadings) was utilised (Henseler and Chin, 2010). Hair et al. (2013) assert that an item's loading on its latent variable must exceed its loadings on all other latent constructs, whereas loadings on unrelated latent constructs or cross-loadings should be below 0.4. The cross-loading for each indicator in the present analysis was below 0.4.

Contrasting the square root of the Average Variance Extracted (AVE) for each construct with its connections with all other constructs helps one to investigate discriminant validity even more. The AVE value of every latent variable had a square root higher than its correlated values with other structures (Hair et al., 2017). As the prerequisites were satisfied; thus, the discriminant validity is, by default, met. Furthermore, the variance inflation factor (VIF) measure was applied to the collinearity inspection between predictor latent constructs. A valid VIF figure must lie between 0.2 and 5.00 (Henseler et al., 2009). The model evaluation outcomes revealed that collinearity is not of concern for this study and that the VIF values are reasonable.

Latent variables and items	Loading	Alpha	CR	AVE
Self-Efficacy (SE)		0.726	0.741	0.519
SE item 1	0.719			
SE item 2	0.724			
SE item 3	0.750			
SE item 4	0.768			
SE item 5	0.802			
SE item 6	0.788			
Optimism (OP)		0.743	0.765	0.552
OP item 1	0.754			
OP item 2	0.709			
OP item 3	0.731			
OP item 4	0.784			
OP item 5	0.748			
OP item 6	0.810			
Hope (HO)		0.795	0.807	0.510
HO item 1	0.782			
HO item 2	0.769			
HO item 3	0.711			
HO item 4	0.803			
HO item 5	0.791			
HO item 6	0.796			
Resilience (RE)		0.768	0.781	0.583
RE item 1	0.752			
RE item 2	0.763			
RE item 3	0.768			
RE item 4	0.752			
RE item 5	0.772			
RE item 6	0.784			
Competence (CO)		0.737	0.762	0.601
CO item 1	0.813			
CO item 2	0.824			
CO item 3	0.808			
CO item 4	0.825			
CO item 5	0.807			
Objectivity (OB)		0.815	0.824	0.613
OB item 1	0.810			
OB item 2	0.788			
OB item 3	0.786			
OB item 4	0.787			
OB item 5	0.768			
Application of a systematic and disciplined approach (SD)		0.750	0.767	0.586
SD item 1	0.743			
SD item 2	0.748			
SD item 3	0.741			
SD item 4	0.753			
SD item 5	0.733			
Adequacy of internal audit work for external audit (AD)		0.804	0.821	0.611
AD item 1	0.812			
AD item 2	0.815			
AD item 3	0.820			

AD item 4	0.806			
AD item 5	0.831			
Planned reliance on internal auditors (PR)		**0.742**	**0.751**	**0.581**
PR item 1	0.805			
PR item 2	0.780			
PR item 3	0.768			
PR item 4	0.795			

Table 1. Reliability and validity of measurement model
Source: Own

Ensuring that the related measuring indicators together and precisely determine the underlying conceptual subject depends on the evaluation of validity convergent for the second-order construct. This study assessed convergent validity in line with Hair et al. (2017), who suggest incorporating a reflective global question reflecting the general essence of the second-order construct. Thus, the global item was included in the questionnaire to represent the extent to which external auditors believe internal auditors' operations of client companies satisfy the criteria of the ISA 610. The convergent validity of the construct assessing external auditors' reliance upon internal auditors was assessed using this global indicator as a criterion. Establishing the connection among an exogenous construct and an endogenous construct symbolised by a global item was the first step in evaluating convergent validity for the high-order latent variable. Convergent validity is maintained, in accordance with Hair et al. (2017), when there is a significant and statistically significant connection among these two constructs, as indicated by a path coefficient greater than 0.80 and an associated coefficient of determination (R^2) higher than 0.64. The reliance upon internal auditors (RD) construct, which was modelled as a formative-reflective second-order construct, was found to have convergent validity empirically, as evidenced by the results of the bootstrapping procedure used in this study, which showed a path coefficient of 0.826 and an R^2 figure of 0.66.

3.2.2. Evaluation of Structural Model

The strength, significance, and positivity or negativity of the research relationships are assessed using the pathway coefficients (Frijat and Al-Hajaia, 2025). A relationship is deemed positive if the path coefficient is greater than zero and negative if it is less than zero. Path coefficient figures range from -1 to +1. As a result, the path coefficient value departs from zero more when the link is more important. Each path coefficient's t-value reveals how significant it is. That is, t-values more than 1.65, 1.96, and 2.57 show a relationship significance at $P < 0.10$, 0.05, and 0.01, respectively (Hair et al. 2017; Hair et al. 2013). Table 2, which contains the outcomes of the structural model evaluation, displays that the psychological capital of external auditors positively influences the reliance on internal auditors. To be more precise, pathways coefficients of 0.562, 0.515, 0.482, and 0.597 with corresponding t-values of 10.841, 11.461, 11.250, and 11.769, respectively, support H1, H2, H3, and H4 at $P < 0.01$. These findings indicate that the dimensions of psychological capital, namely resilience, optimism, hope, and self-efficacy, positively influence external auditors' reliance upon internal auditors.

Hypothesis	Path	Path coefficient	T-value	P-value	H supported?
H1	HO → RD	0.562	10.841	0.000	Yes
H2	SE → RD	0.515	11.461	0.000	Yes
H3	OP → RD	0.482	11.250	0.002	Yes
H4	RE → RD	0.597	12.769	0.010	Yes

Table 2. Results of structural model evaluation
Note: HO = hope; RE = resilience; SE = self-efficacy; OP = optimism; RD = external auditors decision to rely on internal auditors
Source: Own

4. DISCUSSION

The primary objective of this study was to examine the degree to which external auditors' reliance upon internal auditors is influenced by the psychological capital dimensions, specifically self-efficacy, optimism, hope, and resilience. The empirical results provide support for all proposed hypotheses. More precisely, each component of psychological capital was found to be positively linked with external auditors' assessments of internal auditor quality aspects and their willingness to incorporate internal audit work as part of the external audit process. In addition, the model's predictive power analysis demonstrated that the psychological capital dimensions collectively account for a substantial proportion of the variance in external auditors' intentions to either utilise previously completed internal audit work or directly engage internal auditors during the external audit. Resilience emerged as the most influential dimension of psychological capital, positively affecting external auditors' reliance upon internal auditors. The result can be explained by resilience's ability to help external auditors unlock the hidden value of human capital in the audit setting by enabling them to manage the uncertainties and difficulties that come with depending solely on internal audit work. Furthermore, experience and flexible reactions to unfavourable circumstances build resilience, which enables external auditors to go beyond traditional performance standards and participate in creative auditing techniques and constructive deviation.

According to the study, effective reliance necessitates more than just innate technical proficiency; these skills must be combined with an innate feeling of self-efficacy and an optimistic view of possible results. The findings also propose that external auditors' tendency to rely upon internal auditors may be further explained by their optimistic and positive moods. This is because optimistic people believe that they or others can work together to achieve success in the future. As a result, people are more inclined to take chances and investigate novel strategies for handling challenging problems. Hope-filled people remain confident in their skills, stay motivated, and put forth consistent effort while also having faith in others to help achieve common objectives.

CONCLUSION

The primary conclusion of the current study is that the psychological capital of external auditors has a positive impact on their dependence on internal auditors, which enhances the process's overall efficacy and efficiency. By emphasising the psychological capital's positive function in enhancing the relationship among internal and external audit functions, the findings offer insightful information to a number of stakeholders, including governance structures, internal audit functions, and external auditors. These stakeholder groups play a crucial role in determining how much internal auditors contribute to the external audit, which eventually improves the audit's efficiency. The study outcomes also highlight how vital it is to offer external auditors the tools, instruction, and institutional support they need to develop and maintain an elevated level of psychological capital. Such investment promotes a collaborative audit atmosphere and enables more effective professional judgements. Furthermore, the results might be useful to academics and professionals working on theoretical frameworks or multifaceted measurement models that attempt to evaluate the extent of reliance made by external auditors upon internal auditors using a thorough and organised approach.

Although the present study makes an important addition to the corpus of knowledge already in existence, it has several shortcomings, many of which present chances for further investigation. The development of the hypotheses established the theoretical foundations for the connections among psychological resources and external auditors' reliance upon internal auditors; however, the empirical testing required the use of several latent constructs, which are inferred from indicators and are by nature unobservable. This study assessed the individual effects of each psychological capital component separately. As such, future research could advance this work by modelling psychological capital as a higher-order latent construct, thereby enabling a more holistic examination of its aggregated effect on reliance decisions. Additionally, further investigation may explore the relationships between each psychological capital sub-dimension and external auditors' reliance behaviours, possibly through a moderated or mediated model based on the conceptual foundations established herein. The data for the current investigation were gathered exclusively from external auditors auditing companies operating in Jordan and listed on the Amman Stock Exchange. While various characteristics of Jordan's institutional and economic context reflect broader conditions in other developing countries, suggesting some degree of generalisability, the applicability of these findings to more developed economies remain uncertain. Therefore, future research is encouraged to replicate and extend the current model in more advanced economic settings to assess the consistency and transferability of the observed relationships across different regulatory, cultural, and institutional environments.

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