

The effects of audit competency, situational support, and information search on auditors' performance

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ABSTRACT

The competency of an auditor is important when comes to conducting audit tasks particularly one who has extensive knowledge, specific skills and techniques. This study aims to identify the key factors affecting the auditors' performance. Through the lens of the Behavioral Decision Theory (BDT) framework, this study examines the direct effects of audit competency, situational support and information search factors in enhancing auditors' performance. A survey was conducted on audit firms of varying sizes in Malaysia. The data were collected and were analyzed using Structural Equation Modelling-Partial Least Square (SEM-PLS) statistical tools. Based on evidence from external auditors, the results indicate that audit competency, situational supports and information search are important in the efficiency and effectiveness of auditors' performance. This study has several contributions to the literature.

1. Introduction

The audit report should be prepared in accordance with relevant auditing standards because the auditors' review is crucial to guarantee the financial statements of the organization's past financial performance and current financial position (Kassem, 2018). Auditors serve a critical role in the development, management, and dissemination of high-quality financial reports. A review of literature on accounting and auditing compliance requirements emphasises that financial statements should not be described as complying with International Accounting Standards unless they comply with all the requirements of each applicable standard of the International Financial Reporting Interpretations Committee (Kaawaase et al., 2016). Accounting professionals are obligated by their professional code of conduct, such as the Malaysian Institute of Accountants by-laws. The auditors have the information and expertise, as well as the professional abilities, to spot signs of wrongdoing. As a result, one would expect the auditors to be among those with the highest obligation to blow the whistle. Additionally, the Global Economic Crime and Fraud Survey conducted by PwC for the year 2020 indicates that the fraud, corruption, and other economic crimes in Malaysia had increased from 41% in 2018 to 43% in 2020 (PwC, 2020). Hence, instances of fraud and corruption, whether in the public or private sectors, are prevalent. The alarming rate has shocked members

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of the general public to question the auditors' performance. This is because they believe that the responsibility to detect fraud lies in the hands of auditors (Tuan Mansor et al., 2020).

Audit competency of the auditor is essential when the organization is at risk especially when the fraud is complex (Law, 2011; Seol et al., 2017). As mentioned in the International Standard Auditing (ISA) 200, external auditors should be competent. They have the specific skills and professionalism. They used their past experience, integrity and professional judgement to assess the audit processes (Krishnan et al., 2018). Nevertheless, the number of unethical cases makes the credibility and performance of auditors questionable.

The situational support factors may influence the performance effectiveness of auditors. The situational support factors can affect the performance either in positive or negative ways. Simon et al., (2015) believe that the frustration and dissatisfaction of employees will affect their performance. It inhibits them from executing their tasks responsibly (Zeglat & Janbeik, 2019). For instance, some of the factors which determine the satisfaction level of the employees in performing their works are equipment and supplies; information; training; rules and procedures (Bradford et al., 2020; Ghani et al., 2017); team works; (Wu et al., 2017); and ability to manage own tasks (Zeglat & Janbeik, 2019).

The information search process, according to Thottoli and K.V (2020), is described as the process by which someone searches for data or knowledge about an issue, situation, or artefact. Divergent thinking is involved in the process, and it is at this phase that a person's mind is open to new horizons and viewpoints. Mascha and Miller (2010) asserted that searching for knowledge is a necessary aspect of the cognitive process. The primary goal of information gathering is for the auditor to arrive at an informed view that can subsequently be used as the basis for decision-making (Kim et al., 2016).

The behavioral decision theory focuses on individual decision making based on three factors: individual, task and environment. These three factors contribute to the performance and decision making (Edwards, 1954, 1961). This study intends to fill the gap in the previous literature by evaluating the audit competency across situational support and information search during audit process which influence auditors' performance (Kassem, 2021; Mohd Sanusi et al., 2018). Although the professional organisations and industry authorities have offered standards, it is unclear how the audit competence of auditors might impact auditors' ability and affect their performance. Understanding the auditors' performance throughout the audit process is necessary. Additionally, the purpose of this study is to examine the audit competency, situational support and information search of the auditors' performance. The findings of the present study can improve the Behavioral Decision Theory framework

The next section presents the comprehensive overview of research methodology used in this study and the findings from the survey are discussed.

2. Literature Review

2.1 Auditors' Performance

The external auditor monitors and lessens the conflict of interest between the management and shareholders. This increases the reporting reliability (Abdallah, 2018). The opinion of the external auditor gives confidence to the shareholders and other stakeholders. International Standard Auditing (ISA) 200 states that an external auditor must maintain professional skepticism throughout the audit while acknowledging the possibility of material misstatement as a result of fraud. However, the auditor should draw on his or her previous experience. They execute their work honestly and they are people of integrity (International Federation of Accountants, 2014b). Exploring the role of external auditor is crucial. Many economists have tried to identify the role of auditors' performance in post-financial crisis (Tuan Mansor et al., 2021).

The term 'professional' means someone who is responsible whose performance is honorable that can satisfy the decision-makers (Mardijuwono & Subianto, 2018). Every year, at least one widely known accounting scandal has been reported somewhere in the world and often these accounting scandals are associated with audit failures. A common question that follows any such scandal is, "who is to blame?" and often the blame for accounting scandals has been placed on the external auditors (Kassem, 2021). Fraud

risk assessment is an integral part of the audit of financial statements and the provision of quality audit cannot be separated from the effectiveness and efficiency of auditors' performance exercised by the external auditors with high competencies (Kassem, 2021; Nehme, 2017). Therefore, the auditor's competencies are vital in the audit process and audit assessment to produce high quality audit opinions for decision makers that affect the auditors' performance.

Additionally, in performance efficacy, equipment and environmental impacts are taken into consideration to auditors' performance. Contextual performance that contributes toward the maintenance and enhancement of the social and psychological climate supports the organizational technical production systems and task performance. Abilities between jobs can be used to evaluate the company's performance (Hosie & Nankervis, 2016). As defined by Zeglat and Janbeik (2019), there are three criteria for determining effectiveness: (1) Meaningful work, i.e., permits people to excel by encouraging positive social and workplace relationships; (2) Individual Work Performance, which considers the performance of a specific employee that committed and able to task as required; (3) Organization Outcome, emphasizing on the quality or quantity of the activities used to improve the organization performance efficiency (Zeglat & Janbeik, 2019). According to Lin et al. (2010), knowledge sharing, and a cooperative mindset have a direct impact on auditors' performance effectiveness. Employees' perceptions of perks and trust are indirect elements that influence their ability to perform their jobs effectively (Lin et al., 2010).

2.2 Audit Competency

Auditors' competencies play a key role in the performance of auditors as well as the audit functions (Ege, 2015). Competence generally involves the ability of the auditor to carry out tasks professionally and according to the international audit standards (Alias et al., 2019). To prepare high quality audit reports, auditors need to have adequate knowledge, equivalent experience, and technical skills in performing audit tasks. Their audit competency reflects their performance (Alam et al., 2017). Under ISA 250, it is highlighted that the auditors are obliged to respect the rules and regulations. Their abilities, experiences, training, and understanding of the entity or industry are important foundations (International Federation of Accountants, 2014b).

To effectively perform an audit, auditors must have a positive personal quality. They have formal education in the area of auditing and accounting, appropriate knowledge, adequate practices and experience. More importantly, they competent in the field of auditing and accounting (Akbar & Suraida, 2017). When it comes to mitigating the risk of misstatement due to fraud, audit expertise and competencies are critical (Dai & Vasarhelyi, 2016; Kim et al., 2016). As part of their responsibility to provide management information on the subject matter for which management is responsible, auditors must certify the accuracy of the financial records, the dependability of the systems that store, transport, and process those transactions, and to look for fraud and error during the course of their work (Flowerday et al., 2006).

2.3 Situational Support

Situational support refers to employees' overall perceptions of the organization's concern towards their well-being and the importance of their contributions. Employees experience work satisfaction and appreciate this support by displaying positive job performance when they get respect and support from the management (Lee & Chui, 2019). An organisation provides a basic requirement by ensuring and strengthening the supervision activities. Workers are required to carry out the responsibilities efficiently and effectively (Sabir et al., 2022; Singh, 2020). Perceived organisational support is based on three factors: pleasant job conditions and organisational rewards, fairness, and management support. All of which contribute to the job satisfaction and organisational responsibility (Kunasegaran et al., 2016; Sabir et al., 2022).

It is crucial to understand that the infrastructure provided by an organisation and the external environment are believed to be able to influence a person's motivation to adopt a new behaviour. In the context of internal auditors' adoption of computer-assisted audit tools (CAATs), facilitating conditions that

can have an impact on their motivation to adopt include the availability of adequate information on what CAATs can do; support from vendors or software providers; and support from senior management in their companies (Mahzan & Lymer, 2014). Hence, situational support from organizations to understand the auditors' performance throughout the audit process needs to be examined.

2.4 Information Search

It is possible that the audit assessments characteristic has an impact on the auditors' performance (Kassem, 2018; Payne & Ramsay, 2005). Every specific item of work should be identified in the nature characteristics of the auditing task to represent the task profile and features. This is a way to evaluate and estimate the task in order to ensure that the task is completed. The information search process, according to Thottoli & K.V (2020), is described as the process by which someone searches for data or knowledge about an issue, situation, or artefact. As Mascha and Miller (2010) argue, searching for information is one of the most important parts of cognitive processing, particularly in auditing performance circumstances. In line with the earlier remark by Searcy et al. (2003), who were of the belief that information search is a vital stage in seeking answers to difficulties in a wide range of decision-making domains.

Prior to this, Kim et al. (2016) pointed out that the auditors have two kinds of information, namely internal and external information, depending on the situation. Internal information refers to knowledge that is stored in the mind, whereas external information refers to information obtained through client consultations. Working papers, databases, and industry statistics are all examples of sources of external information. The primary goal of information gathering is for the auditors to arrive at an informed view that can subsequently be used as the basis for decision-making (Kim et al., 2016). Similarly, while the International Standards on Auditing (ISA 250) recognises that the management bears primary responsibility for the prevention and detection of non-compliance with laws and regulations, it also requires the auditors to obtain sufficient, lawful and appropriate audit evidence that have an impact on the determination of the number of materials and disclosures in the financial statements (International Federation of Accountants, 2014b).

3. Theory and Hypotheses Development

There are a variety of elements that might influence the auditors' performance in Behavioural Decision Theory (Edwards, 1961). The factors that influence the auditors' individual performance and decision making are discussed. There are two crucial parts in Behavioural Decision Theory (BDT), according to Edwards, and they are as follows: (1) the condition nature of optimum models; and (2) the interaction between task structure, cognitive representations of tasks, and human information processing capacities. According to Einhorn & Hogarth, (1981), accounting research has shifted its focus from accounting to cognitive psychology, which focuses on the behavioural aspect of a person when making a decision. This shift has contributed to a shift in the direction of accounting research. Their argument comprises both internal elements (personal qualities) and external factors (society's environment, professional organisations, or the workplace where the individual is employed) that might influence an individual's performance (Einhorn & Hogarth, 1981).

According to behavioural decision theory, an individual performance is impacted by both internal and external influences, with certain restrictions. The internal elements (personal and behavioural factors) and external factors (environment and circumstance at a job where the individual is working) that exert their impact on individual performance are included in this category of influences (Joyce & Libby, 1981). The process of forming judgements and decisions has been discovered to have a significant impact on an individual's behaviour, according to judgement and decision-making research, which focuses on understanding individuals' and groups' judgments and decisions (Hamdam et al., 2022; Nguyen, 2021). The large number of information search and the complexity of accounting transactions brought on by modern technology advances and improvements will surely alter how the auditors respond to and evaluate the data. Additionally, technology makes it possible for auditors to gather, store, and analyse data more efficiently,

thus improving judgement and decision-making. It will, in fact, fundamentally alter how auditors make decisions and gather evidence in the big data world (Goudarzi et al., 2021; Ogbaisi et al., 2020; Rezaee & Safarzadeh, 2022)

The model of this study is presented in Figure 1. It is adapted from the Behavioural Decision Theory (BDT). It can be hypothesized that the direct effects of audit competency, situational support and information search factors enhance the auditors' performance. This study has a theoretical contribution on auditors' performance based on Behavioural Decision Theory. The present study investigates how audit competency and situational support factor impact the auditors' performance and information search in executing tasks.

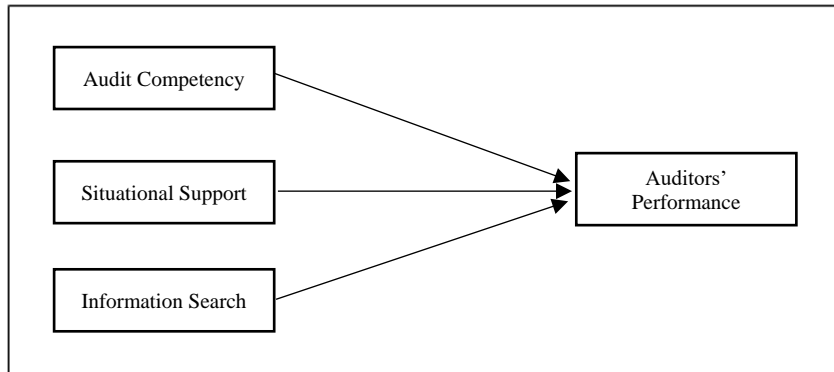


Figure 1: Conceptual Framework

3.1 Audit Competency and Auditors' Performance

In audit competency performance, the intelligence of the auditor, education and training should be value-added to the organization (Chambers, 2014). The level of education, experience and professional certification, computer literacy and communication skills including technical, analytical, appreciative, interpersonal and organization are the criteria in hiring qualified auditors (Palmer et al., 2004). Nevertheless, it has been discovered that the abilities required by employees might have an impact on their performance (Kaawaase et al., 2016). In their studies, Alam (2017) and Kassem (2021) agreed that auditors who possess accounting and auditing skills will be more successful and efficient in their work. Furthermore, by possessing these abilities, it is possible to distinguish between the services provided by an auditor or other investigators. Therefore, the complex audit procedures examine the anomalies or exclusions and handle the audit procedures which generally require competence and professional scepticism (Chan & Vasarhelyi, 2011). According to Tuan Mansor et al. (2021), the combination of auditing, accounting, and investigation skills with competence will increase the confidence level of an auditor in their ability to assess financial data and draw conclusions. Therefore, the following are hypotheses:

H1: Audit competency positively influence auditors' performance.

3.2 Situational Support and Auditors' Performance

Situational support elements have a significant impact on the performance of employees, according to the research conducted by Sabir et al. (2022). Various situational support characteristics, such as teamwork (Wu et al., 2017), information sharing (Widuri et al., 2016), equipment (Bonaiuto et al., 2022), and physical facilities by the organization (Chamber & Odar, 2015) are essential in the determination of employee's performance. In previous research, situational support from team members is crucial that contend communicating information with one's co-workers might help employees gain a better understanding of

their jobs (Tarek et al., 2017). Furthermore, if they are content with their working environment, they will devote their whole attention to the tasks at hand (Wu et al., 2017). Perceived situational support boosts employees' emotional duty to assist the organisation achieve its goals, their affective attachment to the organisation, and their anticipation that greater performance would be rewarded (Singh, 2020). The second hypothesis is shown below:

H2: Situational support positively influences auditors' performance.

3.3 Information Search and Auditors' Performance

Employees can improve their expertise and skills by exchanging information and knowledge with their co-workers, according to Tarek et al. (2017). In fact, information search has been devoted to the elements that influence the quest for knowledge. The information search in audit process especially in fraud risk detection is such a crucial stage in decision-making that affected the auditor performance (Ammenwerth et al., 2006; Dagilienė & Klovienė, 2019). According to Dai & Vasarhelyi (2016) emphasised that information search activities (i.e., identifying relevant information to resolve issues) and variables impacting search performance are critical because information obtained during the search process can influence decision quality for better or worse (Dai & Vasarhelyi, 2016). It has been demonstrated that the quality of information required, and the sources utilised are related to the qualities of the decision-makers and the type of problem being addressed. Many articles have been published that look at information search in accounting and auditing environments that influence the audit efficiency and effectiveness (Bradford et al., 2020; Ghani et al., 2017). Therefore, the following hypothesis is proposed:

H3: Information search positively influence auditors' performance.

4. Methodology

The study has been designed to gather information on the effect of audit competency, situational support and information search on auditors' performance in Malaysia. The questionnaires were distributed to the external auditor to gather the quantitative data. The analyzing data were obtained from primary data for 2021. Quantitative data analysis was made using structural equation modelling-partial least squares (SEM-PLS) using the bootstrapping method.

4.1 Measurement

The auditors' performance as a dependent variable has been adopted and modified to meet the needs of this research (Kim et al., 2016). Individual factors are measured by four indicator variables: one from job relevance, two from output quality, and one from result demonstration. Meanwhile, the measurement of audit competency has been adopted and adapted from the International Accounting Education Standard (IAESB) by International Federal of Accountant (IFAC) (2014a). IFAC is responsible for the development and assessment of the required competence from member bodies, audit firms, regulatory requires all member bodies to comply with their competence standards. The measurement item for situational support factor has been identified and modified according to this study as an influence of the audit competency in the organization (Palmer et al., 2004). The independent variable of information search was measured based on the audit procedure and practices which were adapted from Kaawaase et al., (2016). Appendix 1 shows the measurement items of the study. All the variables are measured with the seven-point Likert scale ranging from "strongly disagree" to "strongly agree".

4.2 Participants

External auditors from small, medium and large size audit firms in Malaysia participated in the study. In this study, an online survey has been used to collect data and a total of 150 usable surveys were collected from the external auditors in Malaysia. Data collected were analyzed. Hair et al., (2019) stated the minimum sample for the analysis should be at least 50 respondents.

In this study, the analyses were conducted at the individual level, thus the unit of analysis was the external auditor. The sample was chosen from firms registered as Malaysia Institute of Accountant (MIA) members. Based on the information provided by the MIA as of 2021, there were 3,260 registered member firms that provided audit services. The auditor certified by MIA can serve as an indicator of professionalism and capacity with a high level of skills or expertise in the accounting and audit field. This study used a probability sampling design by employing a simple random sampling approach. A simple random sample is the technique where a researcher can choose a sample from a larger population. Among the key advantages is that this technique is simple and is not biased.

The majority of respondents were working at small size audit firms (37%) and four big audit firms (35%). Almost 57% of the respondents were female and the rest were males (43%). Most of the respondents were junior auditors (45%). They were the field auditors who performed the technology-enabled auditing directly. The senior auditor (34%) was involved in supervising and monitoring the work of junior auditors. Almost 77% of the respondents had three years of auditing experiences and about 71% of the respondents had over 3 years of experience using audit technology. Table 1 presents a summarised view of the respondents' profiles.

Table 1: Demographic Profile of Respondents

Respondent Profiles		Frequency	Percentage
Gender	Male	65	43.3
	Female	85	56.7
Age	18 - 24	4	2.7
	25 - 34	86	57.3
	35 - 44	44	29.3
	45 - 54	11	7.3
	55 and above	5	3.3
Qualification	PHD	1	0.7
	Master's degree	8	5.3
	Bachelor's degree	75	50.0
	Professional certificate	59	39.3
	Diploma	7	4.7
Audit Firm Size	Big 4 audit firm	53	35.3
	International other than big 4	8	5.3
	Medium size national audit firm	33	22.0
	Small size national audit firm	56	37.3
No. of Partner	Less than 5 partners	66	44.0
	5 - 9 partners	22	14.7
	10 - 20 partners	12	8.0
	More than 20 partners	50	33.3

Position	Junior auditor	67	44.7
	Senior auditor	51	34.0
	Audit supervisor	11	7.3
	Audit manager	14	9.3
	Audit partner	2	1.3
	Senior audit partner	4	2.7
	Other	1	0.7
Experience in Auditing	Less than 3 years	34	22.7
	3 - 6 years	40	26.7
	7 - 10 years	20	13.3
	More than 10 years	56	37.3
Experience in Computerized Auditing	Less than 3 years	44	29.3
	3 - 6 years	39	26.0
	7 - 10 years	22	14.7
	More than 10 years	45	30.0

4.3 Data Analysis

The structural equation modelling technique was a second-generation multivariate data analysis method selected to test the research model. Partial least square (PLS) using SmartPLS (Ringle et al., 2020) was employed as the statistical tool to examine the measurement and structural model. The assessment on the research model was first tested on the measurement model (validity and reliability of the measures) and secondly, the evaluations were done on the structural model (testing the hypothesized relationships) (Hair et al., 2012).

5. Results

5.1 Assessment of Measurement Model

In this study, two types of assessments were performed in assessing the measurement model: construct validity, convergent validity, and discriminant validity. As recommended by Hair et al. (2011), the assessment was done by examining loadings, average extracted (AVE) and composite reliability (Rönkkö & Evermann, 2013). Construct validity signifies how well the results obtained from the use of measure to fit the theories which the test is designed (Zhang et al., 2021). A satisfactory measurement model tends to have internal consistency reliability above the threshold value of 0.708 (Hair et al., 2011). However, Hair et al. (2011) contended that with any outer loading values between 0.4 and 0.7 although considered weak, the researchers should carefully examine the effects of item removal on the composite reliability (CR) as well as the content validity of the constructs and should only consider for removal from the scale those that lead to an increase in CR. There is an issue with CR values of 0.95 and higher since they signal that the items are redundant and that there is a chance of undesired response patterns such as straight line, which leads to inflated correlations between the indicators' error terms and reduces construct validity (Hair et al., 2019; Henseler et al., 2014). If construct reliability is much greater than the specified minimal level, researchers can utilise bootstrap confidence intervals (Hair et al., 2019; Rönkkö et al., 2016). Most of the loading of items were more than 0.70 (significant at $p < 0.01$) and met the fit criteria.

Furthermore, the AVE value of 0.5 or higher indicates the construct achieves adequate convergent validity (Bagozzi et al., 1991; Fornell & Larcker, 1981) and the construct is able to explain more than half

of the variance of its indicators. The loadings for all the items were more than 0.5 and the composite reliabilities were all greater than 0.7 (Hair et al., 2011). The AVE measures the variance captured by the indicators relative to measurement error and the AVE for this study was in the range from 0.701 to 0.897. Table 2 summarizes the results and shows that all four constructs are valid measures for the respective constructs.

Table 2: Results of Measurement Model

Construct	Measurement Items	Loading Range	AVE	CR
Audit Competency	AC1, AC2, AC3, AC4, AC7, AC8, AC9 SS1, SS2, SS3, SS5, SS6, SS7, SS8, SS9,	0.796-0.882	0.613	0.932
Situational Support	SS10, SS11, SS12	0.588-0.876	0.513	0.924
Information Search	IS1, IS2, IS3, IS4, IS5, IS6, IS7, IS8, IS9	0.795-0.946	0.806	0.943
Auditors' Performance	FRE, IMP, USE, PRO	0.898-0.976	0.733	0.926

Note: AC5, AC6, SS4, SS10 & SW were deleted due to low loadings.

The discriminant validity of the constructs of this study was assessed using the Heterotrait-monotrait (HTMT) technique. The HTMT is defined as the mean value of the item correlations across constructs relative to the (geometric) mean of the average correlations for the items measuring the same construct. Discriminant validity problems are present when HTMT values are high. Henseler et al. (2015) propose a threshold value of 0.90 for structural models with constructs that are conceptually very similar, such as cognitive satisfaction, affective satisfaction, and loyalty. The discriminant validity assessment using HTMT techniques as suggested by Henseler et al. (2015) was conducted as per Table 3 which specifies that all the values were less than the HTMT.85 value of 0.85 (Goodboy & Kline, 2017) or HTMT.90 value of 0.90 (Gold et al., 2001), thus specifies that discriminant validity has been met (Gold et al., 2001; Henseler et al., 2015).

Table 3: HTMT Criterion (Discriminant Validity)

	Audit Competency	Auditors' Performance	Information Search	Situational Support
Audit Competency				
Auditors' Performance	0.596			
Information Search	0.861	0.687		
Situational support	0.761	0.613	0.842	

5.2 Assessment of Structural Model

The assessment of the structural model of this study was analysed using five-step procedures proposed by Hair et al. (2014) which includes assessment of collinearity issues; path co-efficient; coefficient of determination (R^2); effect size (f^2); and predictive relevance (Q^2). Even if the discriminant validity requirements are met, issues on lateral collinearity may mislead the results due to the strong causal effect (Kock & Lynn 2012). The variance inflation factor (VIF) measures the collinearity among the indicators. The result as per in Table 4 on the VIF values of each construct indicates that the score of VIF is below the recommended threshold value of 5 (Sarstedt et al., 2014) and there were no collinearity issues in this model.

Table 4: Lateral Collinearity Assessment (VIF)

Construct	Auditors' Performance (VIF)	Information Search (VIF)
Audit Competency	3.387	1
Information Search	4.613	
Situational Support	3.659	

The relationship between variables was investigated by running the SmartPLS 3 Software algorithm and was further analysed using SmartPLS 3 Software bootstrapping of 1000 to test the level of significance and t-statistics for all paths. Table 5 summarizes the results on R^2 , f^2 , Q^2 and the respective t-values and the results of the path analysis as shown in Figure 1. The results indicate that the effective auditors' performance component which consists of the audit competency ($\beta = 0.238$, $p < 0.05$) situational support ($\beta = 0.266$, $p < 0.05$) and information search ($\beta = 0.233$, $p < 0.05$). Thus, the H1, H2 and H3 supported the hypothesis in this study. The R^2 value was above the 0.35 value as recommended by Cohen (1988) indicating this is a substantial model.

Table 5: Hypotheses Testing

Relationship	Std Beta	Std Error	T-Value	P Values	Decision	R^2	f^2	Q^2
Audit Competency → H1 Auditors' Performance	0.238	0.115	2.061	0.002	Supported		0.036	
Situational Support → H2 Auditors' Performance	0.266	0.12	2.223	0.013	Supported		0.055	
Information Search → H3 Auditors' Performance	0.233	0.136	1.708	0.044	Supported	0.447	0.031	0.411

Note: * $p < 0.005$ = significant

Although the p-value is being used to measure the statistical significance of each relationship between exogenous constructs and endogenous constructs, it is unable to reveal the size of the effect which also refers to substantive significance (Sullivan et al., 2021). To measure the magnitude of the effect size, this study employed Cohen (1988) rule of thumb which is 0.02, 0.15 and 0.35, representing small, medium and large effects. Based on the results of f^2 effect size as shown in Table 5, audit competency, situational support and information search have small effect sizes. Hair et al. (2012) have highlighted that the effect size is problematic to establish based on the rule of thumb because the effect size depends on the model complexity and research context as well as the research field (Sullivan et al., 2021).

Furthermore, this study tested the predictive relevance (Q^2) of the model. The predictive Q^2 test is a measure to investigate the predictive power of exogenous constructs over endogenous constructs using the blindfolding technique. A value of Q^2 bigger than zero for a specific reflective endogenous construct shows the path model's predictive relevance for a particular dependent construct (Sarstedt et al., 2016). By applying the blindfolding procedure as suggested by Hair et al., (2014), the result shows that the research model has medium predictive relevance ($Q^2 = 41.1\%$).

6. Discussions and Conclusion

6.1 Discussions

The findings in the present study show that the auditors' performance is influenced by the competencies of the auditor in the audit process. Specifically, this indicates that audit competency, situational support, and information search are key determinants of auditors' performance. Previous research also found that, the external auditors should be competent. They should have specific skills and they have professional scepticism throughout the audit to recognize the possibility existent of material misstatement due to fraud. Auditors' past experience: their honesty, integrity and professional judgement in audit assessment processes are crucial (Krishnan et al., 2018; Alam et al., 2017).

This study reveals that the situational support by the audit firms is essential to influence the auditor's performance during their course of work. Employees develop beliefs of organisational support in order to fulfil their demands for acceptance, esteem, and connection, as well as to appraise the rewards of increased job effort and performance (Singh, 2020; Sabir et al., 2022). Wu et al. (2017) found that team members' support can contribute to the improvement of an employee's knowledge and abilities by sharing and exchanging their expertise and experience with one another. With the support of the organisation, employees will be more productive if they are content with their work environment. (Malaescu & Sutton, 2015; Tarek et al., 2017). Earlier research found that, the main goal of information search gathering is for the auditor to arrive at an informed view that can subsequently be used as the basis for decision-making (Kim et al., 2016; Thottoli & K.V, 2020). These findings confirm that the performance of auditors working in audit firms is influenced by the information search that is essential during the audit process. The findings of the study are equally important for external auditors.

The findings of the present study contributed to the literature particularly broadening the concept of audit competencies, situational support and information search that influence the auditors' performance working in the different sizes of audit firms in Malaysia. The theoretical contributions of this study are manifold. First, the study bridges the knowledge gap and extends the theoretical conceptualization of Behavioural Decision Theory (BDT) in the context of auditor competencies, situational support and information search and how these elements influence the overall of the auditors' performance.

While applying BDT to the auditor competencies and auditors' performance, this study suggested that the personal and professional skills of auditors working in audit firms are crucial resources. In this context, auditors should have a high level of competencies to empower themselves.

The findings of the study show that external auditors contribute greatly to the transparency and effectiveness of audits enhancing their performance. BDT theory suggests that developing and exploiting a unique resource such as situational support to auditors can result in increased auditor's performance. The audit firms are highly influenced by the resources they owned to enhance the auditors' performance. By using the BDT to auditors' performance, the information search is an essential element during the audit assessment process for better auditors' performance.

Finally, the theoretical framework for this study offers a multi-dimensional approach for performance by considering audit competency, situational support and informational search as the encouragement of auditors' performance. The relationship between audit competency, situational support and information search played important roles in the auditors' performance.

From the practical implications perspective, the proposed research model may offer a comprehensive understanding for professional bodies or industry regulators who desire to increase the credibility of auditing services by the external auditor perspective in the audit firms. The professional bodies and industry regulators should focus on the core competencies to improve the role of the auditors. The audit function requires professionals with the requisite qualifications and skills collectively to perform all the audit activities. Therefore, auditors must comply with the minimum guidelines set by the professional bodies, industry regulators and standards for increasing their audit performance. This study appears to show that to enhance the auditors' performance, the auditors need to improve their audit competency. They need to gain

the support from the organization and team members. Their vibrant audit information search is also crucial. This can enhance their career growth opportunities and increased auditors' performance.

Another important practical implication is the delivery and transparency of the auditing services and programs. The services and programs provided should be impartial and unbiased to ensure the audit report is transparent. Competent auditors play a significant role to strengthen the public trust and confidence if they are able to ensure the transparency of the financial statement. The audit firm can also ensure the transparency of audit reports by offering training programs for external auditors to improve their personal and professional competencies. Training and development programs can be conducted to increase their competence level.

6.2 Conclusions

The competencies of the auditor are essential to determine the auditors' performance with the assistance of situational supports and information search in audit process. This study makes two important contributions to the Behavioural Decision Theory (BDT) literature. First, previous studies have been identified new influential factors for situational support and information search that can be added into the BDT framework. The findings show that situational support and information search factors are important antecedents to auditors' performance, whereas the BDT framework has tended to treat all three categories of factors as equally influential (Edwards, 1954, 1961).

In addressing these research questions for this study, the Behavioural Decision Theory (BDT) framework is applied. The online survey was conducted to external auditors in Malaysia. The result shows that the external auditors are more reliant on encouragement and received full support from organizations in the implementation of audit tasks (Kim et al., 2016; Widuri et al., 2016). Another interesting finding is that the information search is essentially in conducting audit tasks (Raudeliuniene et al., 2020; Veerankutty et al., 2018).

This study has several limitations. Firstly, the sample of this study is the external auditors were working in different sizes of the audit firms in Malaysia. Hence, future studies may include auditors from the public sectors and internal auditors. Secondly, this study was limited to the external auditors' perspective. Future studies can widen their research to different countries to validate the results. This study can serve as an initial guideline for further research. A cross-country analysis will boost the generalisation and accuracy of the findings of this study. The present study involved a limited number of participants from one country. Next, the participants could be bias. They might say what they thought the researchers wish to hear. The findings of this study point to future opportunities for research.

In audit field, the senior auditors have greater burdens in terms of the responsibilities assigned to them in an audit engagement as compared to junior auditors. Further, the knowledge and experiences of the senior auditors enable them to detect wrongdoings. The senior auditors are also expected to be courageous in fulfilling their ethical responsibilities due to the positions that they hold in their audit firms. Hence, the findings of this study suggest higher-level professionals, can strengthen their ethical conducts and enhance their performance through training. They can learn the most appropriate approach in audit assessments within the current regulatory framework. The same is true for junior auditors (Liu & Ren, 2017; Tuan Mansor et al., 2021). Therefore, comprehensive investigations involving both senior auditors and junior auditors' competencies may lead to different findings on the impacts on organizations and auditors' performance.

In order to ensure that conclusions are generalizable, future study should investigate the auditors' performance in emerging markets. Future research might be undertaken by employing a mixed-method approach (a combination of qualitative and quantitative methods) to get a comprehensive investigation of auditors' competencies, situational support and information search and how these can contribute to improving auditors' performance. A mixed-method study may offer a voice to study participants and ensure those study findings are grounded in participants' experiences. By considering the above recommendations, future studies can address the evidence-based phenomenon of auditors' performance relationships. Such recommendations will definitely bring a new knowledge-based approach not only to the public audit firms

in developing countries for the improvement of their audit functions but also to the researchers offering new insights. Finally, the framework of this study could be expanded, explored, and investigated from a variety of perspectives. All of the various parts of the idea can be further studied in different contexts in order to enrich it and make it better for all of the stakeholders. Logic dictates that there are various topics of future research that should be investigated.

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Conflict of interest statement

The authors agree that this research was conducted in the absence of any self-benefits, commercial or financial conflicts and declare the absence of conflicting interests with the funders.

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Appendix

The Measurement of Items

Item	Statement
Audit Competency	
AC 1	I am able to demonstrate a clear understanding of the financial risk exposure due to the internal factors of my client.
AC 2	I am able to demonstrate a clear understanding of financial risk exposure due to the external factors of my client.
AC 3	I am able to evaluate and collect information on my client's nature of business, process and documentation.
AC 4	I am able to gather information from people in organizations other than my client for audit investigation procedures.
AC 5	I am able to receive cooperation from my teamwork to complete the audit investigation.
AC 6	I am able to provide any assurance regarding the performance of the entity.
AC 7	I am able to identify strategies that can be applied to provide opportunities for the improvement of quality business processes.
AC 8	I am able to ensure the quality of audited financial statements is useful for decision making
AC 9	I am able to advance the general interests of other individuals (i.e. contact and consultant).
Situational Support	
SS 1	My task requires full support and effort from the top management.
SS 2	My task requires strong Information Technology (IT) support from IT staff.
SS 3	My task requires the availability of IT audit expertise in the organization.
SS 4	My task requires effective and adequate training.
SS 5	My task requires audit technology due to workloads on multiple audit engagements.
SS 6	My task can be done faster as I received enough resources to use the audit technology.
SS 7	My team is contributing expertise in different areas.
SS 8	My team members will share their experiences with others.
SS 9	My team can work together in a well-coordinated manner.
SS 10	My team members can be trusted.
SS 11	My team can combine the best position to achieve the goal.
SS12	My team can accomplish the task smoothly and effectively.
Information Search	
IS 1	My task requires auditing skills to analyse the efficiency and effectiveness of business processes.
IS 2	My task requires communication and interpersonal skills to enhance the delivery of the audit.
IS 3	My task requires investigative skills to assist in detecting and preventing fraud.
IS 4	My task requires a comprehensive working knowledge of related auditing standards and procedures affecting audit engagement
IS 5	My task requires basic leadership skills to influence inspire and motivate others to achieve results.
IS 6	My task requires computer forensic skills and employs technology tools to assist in audit engagements.
IS 7	My task requires analytical skills and the ability to synthesise data and information.
IS 8	My task requires information technology effectively in conducting audits.
IS 9	My task requires a broader context using financial and non-financial information, drawing from a wide variety of data sources.
Auditors' Performance	
SW	Identify the type and performance of audit technology used by the auditor.
FRE	Identify how frequently you use audit technology for the following job-related work in financial statement auditing, investigation auditing, continuous auditing, control monitoring and risk management.
IMP	Identify the extent to which adoption of audit technology features improves your job performance in financial statement auditing, investigation auditing, continuous auditing, control monitoring and risk management.
USE	Identify the extent to which adoption of audit technology feature is useful in your job in financial statement auditing, investigation auditing, continuous auditing, control monitoring and risk management.
PRO	Identify the extent to which the adoption of audit technology features increases your productivity in financial statement auditing, investigation auditing, continuous auditing, control monitoring and risk management.

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Authors' contributions

Nurul Fitri Mohd Noor carried out the research, wrote and revised the article. Zuraidah Mohd Sanusi and Razana Juhaida Johari conceptualised the central research idea, administer and fund the project, and provided the theoretical framework. Both Zuraidah Mohd Sanusi and Razana Juhaida Johari, review, editing, supervised research progress and approved the article submission.



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