



THE MODERATION EFFECTS OF TASK COMPLEXITY ON PROFESSIONAL SKEPTICISM, INTER-AGENCY COOPERATION, AND TAX AUDITORS' PERFORMANCE RELATIONSHIP

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ABSTRACT

This study examines the influences of professional skepticism and inter-agency cooperation on tax auditors' performance based on the attribution theory. Using expectancy theory, the research further explores the moderating effects of task complexity on the relationship between professional skepticism, inter-agency cooperation, and tax auditors' performance. A quantitative approach was adopted, employing survey questionnaires distributed to tax auditors from the Inland Revenue Board of Malaysia (IRBM) and the Royal Malaysian Customs Department (RMCD). The data underwent analysis using IBM-SPSS-AMOS version 21 for Structural Equation Modelling (SEM) statistical analysis. The results reveal that both professional skepticism and inter-agency cooperation impact on tax auditors' performance. Moreover, task complexity was found to moderate the relationships between professional skepticism, inter-agency cooperation, and tax auditors' performance. It is important to note that this study focused solely on the influence of professional skepticism, inter-agency cooperation, and task complexity on tax auditors' performance, without testing other internal and external factors. This study contributes to theoretical implications in the field of taxation, particularly within tax auditing, by offering empirical evidence on the effects of internal and external factors on tax auditors' performance, along with the moderating influence of task complexity. The findings provide valuable insights for the IRBM and RMCD, emphasizing the significance of professional skepticism, inter-agency cooperation, and task complexity in enhancing tax auditors' performance. Notably, the uniqueness of this study lies in the researchers' exploration of the synergy between direct and indirect taxes to deepen the understanding of factors affecting tax auditors' performance.

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1. INTRODUCTION

Auditors' performance is crucial in determining the accuracy and reliability of audit assessments and compliance enforcement. Performance is considered a fundamental element for an auditor and is commonly used to assess the accuracy of auditors in carrying out audit activities. The success of auditing depends on auditors' performance. Auditors are expected to perform well and execute their duties following standard auditing procedures. The quality of auditors' performance is evaluated based on the audit's quantity and quality and the audit's completion time (Ahmad et al., 2019; Sunyoto, Ghozali, and Purwanto, 2017). However, not all auditors are capable of performing their duties adequately, leading to significant concern in the auditing field, especially regarding poor auditors' performance. This issue has been present since the 1970s (Kusumastuti, Ghozali, and Fuad, 2016).

According to Wistawan and Damayanti (2019), performance is one of the individual achievements usually associated with attitudes or behavior in carrying out work for better performance. Based on the attribution theory developed by Fritz Heider in 1958, it is argued that internal and external factors influence a person's attitudes or behavior. Internal factors are within an individual's control, while external factors are beyond their control. Additionally, the literature emphasizes the importance of auditors' behavior and attributes in conducting audit tasks and standard auditing procedures that can impact auditors' performance (Sulaiman, Shahimi, and Singh, 2019; Hussein and Hanefah, 2013).

Most previous studies on auditors' performance focus on financial audits, internal audits, and external audits, yielding inconsistent results (Falola, Tams-alasia, and Udochukwu, 2018; Sanusi et al., 2018; Sunyoto et al., 2017; Kusumastuti et al., 2016; Alissa et al., 2014). Studies focusing on tax auditors' performance, however, are limited. Although similar studies have been conducted in the Malaysian context, they mainly focus on tax auditors from the Inland Revenue Board of Malaysia (IRBM) handling direct taxes (Rashid et al., 2018; Zandi and Elwahi, 2016; Muhammad, 2013).

Therefore, the current study focuses on direct and indirect taxes from the IRBM and Royal Malaysian Customs Department (RMCD) to better understand and perspective on tax auditors' performance and provide empirical evidence using Structural Equation Modeling (SEM) analysis. Additionally, this study aims at investigating the impact of professional skepticism (internal factors) and inter-agency cooperation (external factors) on tax auditors' performance based on the attribution theory in the context of tax auditing. Furthermore, based on expectancy theory, this study explores the moderating effects of task complexity on the relationship between professional skepticism, inter-agency cooperation, and tax auditors' performance.

This study offers theoretical implications by contributing to the body of knowledge in the area of taxation and tax audits using attribution and expectancy theory. Moreover, this study provides valuable practical insights into the significance of professional skepticism, inter-agency cooperation, and the moderating role of task complexity on tax auditors' performance.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 TAX AUDITORS' PERFORMANCE

Tax auditors are expected to conduct audits in accordance with the objective of tax audits, which is to review taxpayers' business records and financial affairs to ensure that the correct amount of income is reported and the correct amount of tax is calculated and paid in compliance with tax laws and regulations. Ratnawati (2020) underscores the key characteristics of tax auditors who are dedicated, competent, and professional in carrying out their audit duties, leading to a high level of auditor performance. Within the realm of tax audits, proficient tax auditors can successfully finalize audit tasks within the allocated time and deliver high-quality audit reports, thus fulfilling the objectives of tax audits and achieving optimal performance.

Previous research has indicated that the factors influencing auditors' performance can be analyzed through attribution theory, which is grounded in two perspectives encompassing internal and external factors. Attribution theory posits that an individual's conduct is shaped by internal and external factors (Heider, 1958). Consistent with attribution theory, this study delves into the impact of professional skepticism (internal factor) and inter-agency cooperation (external factor) on tax auditors' performance.

2.2 PROFESSIONAL SKEPTICISM

Attribution theory explains that the ability of tax auditors to carry out audit tasks is determined by internal factors such as professional skepticism and their behavior towards the completion of tax audits. Professional skepticism refers to the attitudes of questioning minds and critical assessment in ensuring the adequacy and relevance of information and audit evidence (Wahidahwati and Asyik, 2022).

Auditors are responsible for maintaining the appropriate professional skepticism in auditing activities to reduce potential risks and as a basis for auditing standards that may impact auditors' performance (Chen, Wang, and Liu, 2023). Auditors who demonstrate high professional skepticism increase their ability to detect and gather additional audit evidence in tax audit activities (Fullerton and Durtschi, 2011).

Past studies have found that professional skepticism influences auditors' performance (Hussin et al., 2017; Hurtt et al., 2013; Rose, 2007). Hussin et al. (2017) emphasize the importance of professional skepticism in tax audit activities to investigate audit evidence, ensuring that the information is sufficient for audit judgment and decision-making processes to accomplish tasks. In contrast, Peytcheva (2014) disclosed that professional skepticism does not influence auditors' performance. However, auditing standard practices require appropriate professional skepticism, which leads to better performance. Auditors with high professional skepticism would likely collect more audit evidence to produce a high-quality audit report. Therefore, based on the literature, the following hypothesis is developed:

H1: Professional skepticism positively influences tax auditors' performance.

2.3 INTER-AGENCY COOPERATION

Attribution theory explains that the tax auditors' capacity to perform audit tasks is influenced by external factors beyond one's control. In this context, inter-agency cooperation is an external factor impacting tax auditors' performance. Inter-agency cooperation pertains to collaboration among agencies, organizations, or entities to achieve common objectives and streamline processes in related fields (Curnin and Owen, 2013; Ervin, 2004; Sullivan and Skelcher, 2003). For instance, inter-agency cooperation occurs between IRBM, RMCD,

financial institutions, the Companies Commission of Malaysia, and other pertinent agencies. Generally, inter-agency cooperation in tax audit activities includes sharing and exchanging data and information and participating in joint audit activities. Each agency possesses different data and information that are beneficial to others in the tax auditing process. Moreover, inter-agency cooperation facilitates the exchange of knowledge and expertise among involved parties. This enables the transfer of audit techniques, methods, and systems, especially among tax authorities in Malaysia (IRBM and RMCD), thereby enhancing tax auditors' capabilities in conducting audits.

Recognizing the significance of inter-agency cooperation in financial and tax contexts, the OECD (2017) advocates fostering such collaboration to address tax non-compliance issues such as tax avoidance and evasion. Addressing tax non-compliance is crucial in the context of tax audits. Owens et al. (2017) emphasized the importance of inter-agency cooperation in enhancing the effectiveness and efficiency of the investigation process, particularly in taxation and financial sectors. The topic of inter-agency cooperation has been extensively discussed, especially in complex policies (Costumato, 2021). Studies focusing on inter-agency cooperation and its impact on tax auditors' performance, however, are limited. Therefore, this study aims at examining the concept of inter-agency cooperation, specifically exploring its influence on tax auditors' performance. Consequently, the following hypothesis has been formulated:

H2: Inter-agency cooperation positively influences tax auditors' performance.

2.4 TASK COMPLEXITY

Expectancy theory explains that task complexity can moderate the relationship between effort and performance (Ferris, Beehr, and Gilmore, 1978). In this study, in line with expectancy theory, effort refers to professional skepticism and inter-agency cooperation. Therefore, according to expectancy theory, task complexity will moderate the relationship between professional skepticism, inter-agency cooperation, and tax auditors' performance.

Audits are considered complex tasks due to the difficulty and variability involved (Asmara, 2019). For example, the increasing regulations and rapid technological changes contribute to the complexity of tasks. Bratten et al. (2013) indicated that task

complexity can influence the application of professional skepticism among auditors in auditing activities, especially in highly complex audit tasks. Hence, the level of complexity (low or high) will moderate the relationship between professional skepticism and tax auditors' performance by either strengthening or weakening it. When tasks are highly complex, they might weaken the relationship, whereas a low level of complexity can strengthen it. The expectancy theory proposed by Victor Vroom, explains that the moderation effects of task complexity on the relationship between professional skepticism and tax auditors' performance are based on three important elements, namely (1) Expectancy, (2) Instrumentality, and (3) Valence. Therefore, the following hypothesis was developed:

H3: Task complexity moderates the relationship between professional skepticism and tax auditors' performance.

Furthermore, studies by Klijn et al. (2016) and Yang and Hsieh (2007) have shown that task complexity moderates the relationship between inter-agency cooperation and performance. This implies that in the context of the study, task complexity significantly impacts inter-agency cooperation in tax auditing (Lundin, 2007). According to the expectancy theory, the relationship between inter-agency cooperation and tax auditors' performance can be moderated by task complexity. The theory suggests that individuals' behavior depends on the three key elements in expectancy theory, namely expectancy (effort-performance relationship), instrumentality (performance-outcome relationship), and valence (value of outcomes). These three elements explain how the relationship between inter-agency cooperation and tax auditors' performance can be moderated by task complexity by either strengthening or weakening the aforementioned relationship.

H4: Task complexity moderates the relationship between inter-agency cooperation and tax auditors' performance.

3. RESEARCH FRAMEWORK

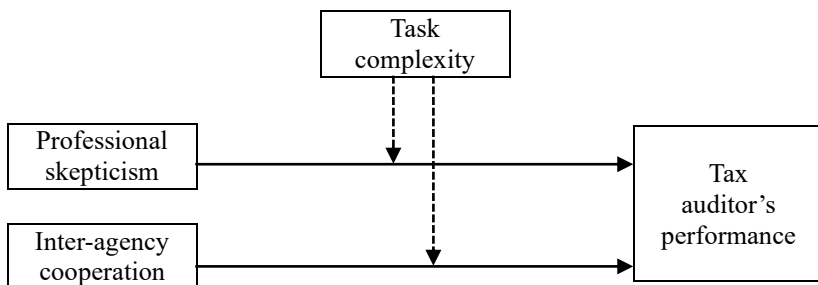
This study employed attribution theory as the theoretical framework. Attribution theory is a behavioral theory that effectively explains the performance of tax auditors. According to the theory, individuals' behavior is influenced by both internal and external factors (Solichin et al., 2021; Widyakusuma, Sudarma, and Roekhudin, 2019; Heider,

1958). In this study, professional skepticism is considered an internal factor, while inter-agency cooperation is seen as an external factor that impacts tax auditors' behavior and performance. As an internal factor, professional skepticism plays a crucial role in influencing tax auditors' behavior for improved performance (Solichin et al., 2021). High professional skepticism encourages tax auditors to critically evaluate and ensure the accuracy of audit evidence (Nazri, Rasib, and Zolkifli, 2019). Furthermore, inter-agency cooperation, as an external factor, enhances the completeness and success of the tax auditing process.

Moreover, this study was also guided by expectancy theory. Expectancy theory, another behavioral theory, explains performance (Muindi and Obonyo, 2015). According to this theory, task complexity moderates the relationship between professional skepticism and inter-agency cooperation concerning tax auditors' performance. The expectancy theory elaborates on how task complexity influences the relationship between professional skepticism and tax auditors' performance based on three key elements: expectancy (effort-performance), instrumentality (performance-outcome), and valence (value of outcomes). Furthermore, the moderation effects of task complexity are elaborated based on the level of complexity (low and high levels) that can either strengthen or weaken the relationship between professional skepticism and tax auditors' performance.

The research framework in Figure 1 was developed based on the discussions presented in the literature review and the theoretical foundations (attribution theory and expectancy theory) relevant to this study.

FIGURE 1
Research Framework



4. RESEARCH METHODOLOGY

4.1 RESEARCH DESIGN

This study employed positivist quantitative measurement and statistical analysis principles suitable for achieving the study's objectives. Quantitative research designs are commonly associated with positivism, especially when utilizing predetermined and highly structured methods for data collection (Saunders, Lewis, and Thornhill, 2019). The quantitative research design aligns with the research objective and mainly focuses on statistical analysis (Queirós, Daniel, and Almeida, 2017).

4.2 POPULATION AND SAMPLE

The population for this study consists of tax auditors from the Inland Revenue Board of Malaysia (IRBM) and the Royal Malaysian Customs Department (RMCD) who have a minimum of one year of experience in tax audits and hold executive levels and above.

This study employed a web-based online calculator to determine the sample size (Raosoft, 2004). The web-based online calculator recommended a minimum of 325 tax auditors, which is deemed a large sample size suitable for SEM analysis (Awang et al., 2023; Hair et al., 2018).

4.3 RESEARCH INSTRUMENTS AND MEASUREMENTS

The research instruments developed were adapted and modified from previous studies to suit the current study, as presented in Table 1. These instruments were validated during the pre-testing stages by academicians and practitioners, such as tax auditors at the managerial level, and were approved by the Ethics Committee for Research Involving Human Subjects at Universiti Putra Malaysia before commencing data collection.

The survey questionnaires comprised five sections: A. Demographic and general section, B. Internal factor, C. External factor, D. Moderating effects, and E. Tax auditors' performance. The research instrument measurements utilized a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

TABLE 1
Research Instruments

Variables	Sources
Professional Skepticism (PS ₁)	Hurt (2010); Hussin et al. (2017)
Inter-agency Cooperation (IAC ₁)	Alzeban and Gwilliam (2014); Linda et al. (2014); Ramesh, Sulaiman, and Zakaria (2021); Susan (2019)
Task Complexity (TC ₁)	Douglas and Milton (1997); Hamza (2020)
Tax Auditors' Performance (TAP ₁)	Linda et al. (2014); Pedro et al. (2019)

4.4 DATA COLLECTION AND DATA ANALYSIS

This study utilized a survey strategy commonly employed in quantitative research, employing online survey questionnaires created using Google Forms for data collection processes (Sekaran, 2003). The online survey questionnaires were disseminated to tax auditors in the Inland Revenue Board of Malaysia (IRBM) and the Royal Malaysian Customs Department (RMCD) through the heads and coordinators of the respective tax audit departments. Several follow-ups were conducted with the heads and coordinators to achieve the minimum sample size of 325. In total, 378 responses to the online survey questionnaires were received. However, only 370 responses met the criteria for validity and were included in the study, meeting the required minimum sample size.

The quantitative data analysis process employed Structural Equation Modelling (SEM) using IBM-SPSS-AMOS software version 21. The SEM statistical analysis encompassed confirmatory factor analysis (CFA), the measurement model, the structural model, and moderation testing.

5. RESULTS AND DISCUSSION

5.1 CONFIRMATORY FACTOR ANALYSIS

CFA involves unidimensionality, model fit, convergent validity, and construct reliability (Awang et al., 2023; Sarwar et al., 2022; Bahkia et al., 2019). The CFA procedures are considered successful when the

unidimensionality is achieved with factor loading values of all items above 0.60, and the model fits within the acceptable range of fitness indices categories, meeting the criteria for absolute fit, incremental fit, and parsimonious fit (Awang et al., 2023; Hair et al., 2018). The final steps in CFA involve ensuring convergent validity with an Average Variance Extracted (AVE) value above 0.50 and a Composite Reliability (CR) value above 0.60.

Initially, the model consisted of 27 items: professional skepticism (six items: PS_1 to PS_6), inter-agency cooperation (nine items: IAC_1 to IAC_9), and tax auditors' performance (twelve items: TAP_1 to TAP_12). Four items were excluded from the model due to low factor loadings of less than 0.60 (PS_1: 0.386, PS_2: 0.300, PS_6: 0.439, and TAP_4: 0.562) during the CFA processes.

These items were removed to improve the model fit in accordance with the CFA criteria (Awang et al., 2023; Collier, 2020; Hair et al., 2018; Kline, R.B., 2016). Additionally, the CFA was utilized to assess the Average Variance Extracted (AVE) and Composite Reliability (CR) (Thottoli and Ahmed, 2023). Removing items with low factor loadings contributes to achieving favorable values for AVE and CR, thereby enhancing the model (Rehman, Bano, and Bhatti, 2019). The remaining twenty-four items, comprising professional skepticism (items PS_3 to PS_5), inter-agency cooperation (items IAC_1 to IAC_9), and tax auditors' performance (items TAP_1 to TAP_3 and TAP_5 to TAP_12), were retained in the model for further steps in SEM.

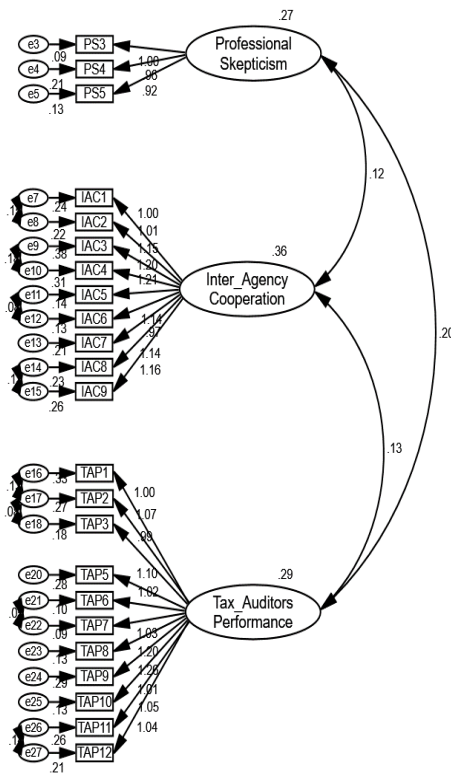
Subsequently, a Modification Index (MI) value exceeding 15.00 indicates redundancy (Yusof et al., 2017). Redundant items were then correlated with a double-headed arrow, for example, $e_8 \leftrightarrow e_7$. The modification process was iterated until the fitness indexes reached acceptable values. The CFA model post unidimensionality and MI process is depicted in Figure 2.

5.1.1 CONSTRUCT VALIDITY

The construct validity was assessed using the fitness indexes based on three categories: absolute fit, incremental fit, and parsimonious fit. In the absolute fit category, the RMSEA was 0.073, which is less than 0.08 and thus accepted. In the incremental fit category, AGFI was 0.827, less than 0.90 (not accepted), while CFI was 0.946, greater than 0.90 (accepted), NFI was 0.921, greater than 0.90 (accepted), and TLI was 0.938, greater than 0.90 (accepted). In the parsimonious fit

category, ChiSq/df was 2.955, less than 3.0, and accepted. For incremental fit, at least one of the criteria (AGFI, CFI, NFI, TLI) must be greater than 0.90 and accepted (Awang et al., 2023; Collier, 2020; Hair et al., 2018; Kline, R.B., 2016). Thus, the construct validity criteria for the CFA model are met when fulfilling all three categories in fitness indexes: (1) RMSEA = 0.073, (2) CFI = 0.946, NFI = 0.921, TLI = 0.938, and (3) ChiSq/df = 2.955.

FIGURE 2
Confirmatory Factor Analysis



Chi-Square=647.153; p value (>.05)=.000
 DF=219
 Relative Chi-Sq (<5.0)=2.955
 GFI (>=.9) =.862
 AGFI (>=.9) =.827
 CFI (>=.9) =.946
 IFI (>=.9) =.946
 NFI (>=.9) =.921
 TLI (>=.9) =.938
 RMSEA (<=.08) =.073
 AIC (lower better)=761.153
 (Unstandardized estimates)

5.1.2 CONVERGENT VALIDITY

Convergent validity was assessed based on Average Variance Extracted (AVE) and Composite Reliability (CR). AVE and CR were assessed in the model to ensure the validity and reliability of the measurement items (Khairi et al., 2024). The minimum value of AVE is 0.50 (Awang et al., 2023; Collier, 2020; Mahfouz et al., 2020). Meanwhile, the minimum value of CR is 0.60 (Sarwar et al., 2022). The results in Table 2 show that all the constructs in the CFA model are greater than 0.50 for AVE and greater than 0.60 for CR. Thus, this study concludes that the CFA model has achieved convergent validity.

TABLE 2
Convergent Validity and Composite Reliability

Constructs	Items	Factor Loadings	AVE	CR
Professional Skepticism (PS_)	PS_3	0.837	0.633	0.838
	PS_4	0.746		
	PS_5	0.801		
Inter-agency Cooperation (IAC_)	IAC_1	0.788	0.675	0.949
	IAC_2	0.800		
	IAC_3	0.762		
	IAC_4	0.806		
	IAC_5	0.917		
	IAC_6	0.909		
	IAC_7	0.769		
	IAC_8	0.814		
	IAC_9	0.812		
Tax Auditors' Performance (TAP_)	TAP_1	0.702	0.638	0.951
	TAP_2	0.756		
	TAP_3	0.794		
	TAP_5	0.741		
	TAP_6	0.887		
	TAP_7	0.891		
	TAP_8	0.857		
	TAP_9	0.770		
	TAP_10	0.824		
	TAP_11	0.752		
	TAP_12	0.790		

5.2 MEASUREMENT MODEL

Discriminant validity was assessed to confirm that the measurement model does not contain redundant items (Sabri et al., 2023). The Fornell and Larcker criterion, based on the Average Variance Extracted (AVE) and the square roots of AVE (r^2), were utilized for this purpose. The square roots of AVE (r^2) should surpass the AVE value for the correlations among constructs (Awang et al., 2023; Fornell and Larcker, 1981; Sabri et al., 2023). Specifically, the diagonal value should exceed the other values in its respective row and column. The findings presented in Table 3 demonstrate that discriminant validity was successfully established for all constructs within the measurement model. These results affirm that redundant items are not present in the measurement model.

TABLE 3
Discriminant Validity

Construct	PS _√	IAC _√	TAP _√
PS _√	0.796		
IAC _√	0.376	0.822	
TAP _√	0.716	0.420	0.799

5.3 STRUCTURAL MODEL

The structural model in Figure 3 depicts the inter-relationship between exogenous and endogenous constructs (Awang et al., 2023; Erlina and Muda, 2018; Rahlin et al., 2020). Exogenous constructs include professional skepticism and inter-agency cooperation, while endogenous constructs encompass tax auditors' performance.

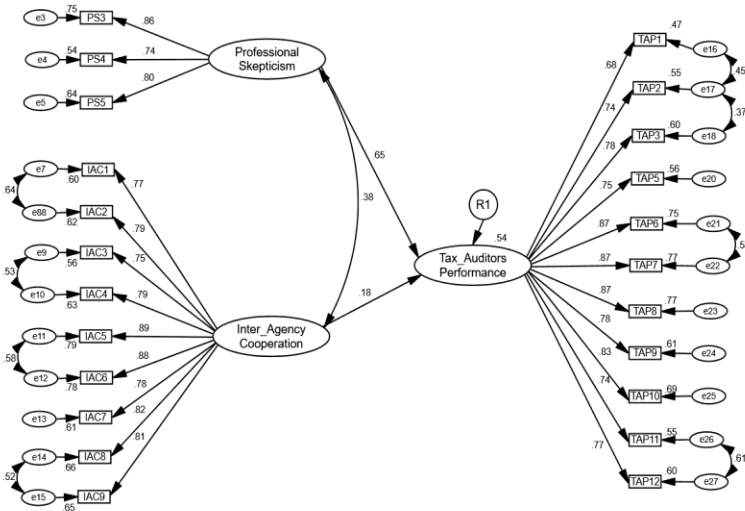
In general, the structural model demonstrates the theoretical and conceptual framework for the path model (Asrami and Aghaei, 2023; Khairi et al., 2024). This model was utilized to test the hypotheses of this study through path analysis in SEM. Specifically, the study employed the structural model to examine the causal effects (direct relationship) between the exogenous constructs (professional skepticism and inter-agency cooperation) and endogenous constructs (tax auditors' performance). Additionally, using the same structural model, the investigation explored the moderating effects of task complexity on the relationship between professional skepticism, inter-agency cooperation, and tax auditors' performance. Table 4 outlines

the standardized estimates derived from the structural model depicted in Figure 3, which was used for hypothesis testing for H1 and H2.

TABLE 4
Standardized Estimates

Hypothesis	Description	Estimate	S.E.	C.R.	P-value	Results
H1	TAP ← PS	0.157	0.043	3.692	***	Supported
H2	TAP ← IAC	0.673	0.066	10.176	***	Supported

FIGURE 3
Structural Model



Chi-Square=647.153; p value (>.05)=.000
 DF=219
 Relative Chi-Sq (<5.0)=2.955
 GFI (>=.9) =.862
 AGFI (>=.9) =.827
 CFI (>=.9) =.946
 IFI (>=.9) =.946
 NFI (>=.9) =.921
 TLI (>=.9) =.938
 RMSEA (<=.08) =.073
 AIC (lower better)=761.153
 (Standardized estimates)

5.4 PROFESSIONAL SKEPTICISM AND TAX AUDITORS' PERFORMANCE

This study provides empirical evidence that examined the influence of professional skepticism on tax auditors' performance. The statistical analysis ($\beta = 0.157$, S.E. = 0.043, C.R. = 3.692, $p < 0.05$) discovered that professional skepticism influences tax auditors' performance. Hence, the hypothesis testing for H1, which indicates professional skepticism is positively significant in tax auditors' performance, is supported as confirmed by the statistical analysis in SEM. This study found that when professional skepticism increased by one unit, tax auditors' performance also increased by 0.157 units. This means that the higher the level of professional skepticism among tax auditors, the higher their performance will be.

Findings of the study are consistent with previous studies confirming that auditors' performance is influenced by professional skepticism (Hussin et al., 2017; Peytcheva, 2014). Professional skepticism is an important factor influencing tax auditors' performance (Septian and Astika, 2019). Standard auditing practices require appropriate professional skepticism among tax auditors in tax auditing activities, which also impacts their performance (Eutsler, Norris, and Trompeter, 2018).

The results are supported by attribution theory developed by Fritz Heider in 1958. According to the theory, internal factors such as professional skepticism are based on tax auditors' abilities and internal strength, influencing their behavior (Yuhertiana, Patrioty, and Mohamed, 2019). Tax auditors are expected to exercise professional skepticism in tax auditing activities, engaging in questioning minds to evaluate audit evidence. This means that in the context of this study, attribution theory explains how tax auditors interpret an event and the causes of their behavior (Juanamasta et al., 2019).

5.5 INTER-AGENCY COOPERATION AND TAX AUDITORS' PERFORMANCE

The findings of this study indicate that inter-agency cooperation influenced tax auditors' performance ($\beta = 0.673$, S.E. = 0.066, C.R. = 10.176, $p < 0.05$). H2 is supported based on the empirical evidence confirming that inter-agency cooperation significantly influences tax auditors' performance. The findings suggest that an increase in inter-agency cooperation by one unit will lead to a 0.673 unit increase in tax auditors' performance.

Inter-agency cooperation plays a pivotal role in tax auditing activities, which can enhance and expedite the tax auditing process. The approaches to inter-agency cooperation in tax auditing activities involve sharing or exchanging data and information among the parties involved. Recognizing the significance of inter-agency cooperation, the Collection Intelligence Arrangement (CIA) has been established in countries such as Malaysia to facilitate data and information exchange. Furthermore, the OECD (2017) highlights the importance of inter-agency cooperation for sharing data and information among tax authorities, government agencies, and relevant bodies. Inter-agency cooperation enhances the effectiveness and efficiency of data and information exchange in tax matters, especially in tax auditing (Nwonyuku, 2017). Therefore, tax authorities are encouraged to leverage opportunities for collaboration with other agencies to ensure the success of tax administrations, including tax auditing (Nagy and LeDrew, 2022; Maslov, 2019).

5.6 MODERATION EFFECTS OF TASK COMPLEXITY

5.6.1 MODERATION EFFECTS OF TASK COMPLEXITY ON PROFESSIONAL SKEPTICISM AND TAX AUDITORS' PERFORMANCE

Hypothesis 3 (H3) posits that task complexity moderates the relationship between professional skepticism and tax auditors' performance. The study's findings utilized Structural Equation Modeling (SEM) analysis with multi-group analysis (MGA). The two categories of task complexity, namely high-level and low-level, are shown in Table 5, confirming that task complexity moderates the relationship between professional skepticism and tax auditors' performance. The Chi-Square differences between constrained and unconstrained for both low and high levels are greater than 3.84 (Awang et al., 2023; Hair et al., 2018). Both levels are significant, hence supporting H3.

Based on the expectancy theory elements, in tasks with lower complexity, tax auditors believe the tasks are easy to predict the desired performance. Professional skepticism may still be maintained in less complex audit tasks; however, the effort-performance expectancy remains high as the tasks are straightforward to complete. Conversely, in more complex audit tasks, the effort-performance expectancy is less clear, leading to concerns about uncertainty regarding the desired performance level. Syafitri (2016) emphasized the importance of applying a higher level of professional skepticism

in complex audit environments. Tasks with higher complexity require a higher level of professional skepticism. Tax auditors may enhance the thoroughness of the review process to complete such tasks. Consequently, the relationship between professional skepticism and tax auditors' performance weakens in more complex tasks (high level of task complexity) as these tasks are more likely to reduce performance levels, limiting the willingness to exert a higher level of professional skepticism.

TABLE 5
Moderation Effects of Task Complexity on Professional Skepticism and Tax Auditors' Performance

Description	Constrained Model	Unconstrained Model	Chi-Square Difference	Result on Moderation
Low-Level of Task Complexity				
Chi-Square	546.581	540.557	6.024	Significant and supported
DF	220	219	1	
High-Level of Task Complexity				
Chi-Square	491.675	484.412	7.263	Significant and supported
DF	220	219	1	

The second element in the expectancy theory pertains to instrumentality. Tax auditors believe that achieving the desired performance will lead to specific outcomes or rewards such as good audit quality reports, personal satisfaction, or career growth. In less complex audit tasks, the belief in instrumentality elements is clearer as there is a direct link between performance and rewards. For instance, tax auditors who meticulously perform their tasks and exercise professional skepticism can easily identify errors or fraud, leading to specific outcomes or rewards. In tasks with high complexity, however, the instrumentality elements are ambiguous. Even when applying high professional skepticism, tax auditors find evaluating the rewards or outcomes challenging, potentially diminishing the belief that performance will lead to a specific outcome or reward.

Lastly, the third element in expectancy theory is the value the individual places on the outcome or reward (valence). The value assigned to outcomes may not significantly change with task complexity, but the perceived achievability of the outcomes can

influence it. In simpler tasks, achieving the desired outcome may be viewed as more probable and valuable, reinforcing the significance of maintaining professional skepticism. Contrarily, in more complex tasks, if the outcomes seem uncertain or the rewards are harder to attain due to inherent challenges, the perceived value of the outcome may decrease. This could reduce motivation to make an effort, even if the individual maintains a skeptical mindset.

5.6.2 MODERATION EFFECTS OF TASK COMPLEXITY ON INTER-AGENCY COOPERATION AND TAX AUDITORS' PERFORMANCE

This study predicts Hypothesis 4 (H4), which posits that task complexity moderates the relationship between inter-agency cooperation and tax auditors' performance. The results of the hypothesis testing using Structural Equation Modelling (SEM) analysis in Table 6 indicate that the Chi-Square differences between constrained and unconstrained for low levels (46.886) and high levels (87.907) are greater than 3.84. Consequently, both levels are significant, with a degrees of freedom (DF) value equal to 1. The findings of this study suggest that task complexity moderates the relationship between inter-agency cooperation and tax auditors' performance. Thus, H4 is supported by confirming the moderation effects of task complexity on the relationship between inter-agency cooperation and tax auditors' performance.

TABLE 6
Moderation Effects of Task Complexity on Inter-Agency Cooperation And Tax Auditors' Performance

Description	Constrained Model	Unconstrained Model	Chi-Square Difference	Result on Moderation
Low-Level of Task Complexity				
Chi-Square	587.443	540.557	46.886	Significant and supported
DF	220	219	1	
High-Level of Task Complexity				
Chi-Square	572.319	484.412	87.907	Significant and supported
DF	220	219	1	

First, drawing from the expectancy theory, tax auditors believe that increasing their efforts, particularly in inter-agency cooperation in tax auditing, will lead to improved performance. In other words, auditors believe that cooperation among tax authorities,

government agencies, and related entities in taxation enhances their ability to perform audit tasks. Task complexity however, can moderate the relationship between inter-agency cooperation and tax auditors' performance. Tax auditors might have less confidence in their abilities in situations of high task complexity, such as financial or banking transactions requiring specific knowledge and skills. In this context, inter-agency cooperation can provide access to specific knowledge and skills, data, information, and technology necessary to accomplish the tasks. For example, collaborating with a financial institution could provide vital information in audits involving complex financial or banking transactions demanding additional evidence. Therefore, such efforts, including support from inter-agency cooperation, can streamline the auditing process, resulting in improved performance and strengthening the relationship between inter-agency cooperation and tax auditors. Conversely, in situations of low task complexity, tax auditors may believe they can handle tasks independently without relying heavily on inter-agency cooperation, leading to a weaker relationship between inter-agency cooperation and tax auditors' performance.

Second, within the instrumentality framework, tax auditors believe that improved performance leads to desired outcomes or specific rewards in tax auditing, such as high-quality audit reports, compliance, and recognition. In scenarios of high task complexity, tax auditors perceive inter-agency cooperation as a pathway to achieving desired outcomes more easily. Accordingly, as achieving desired outcomes becomes more critical in these complex tasks, inter-agency cooperation becomes more significant and influential. The belief that inter-agency cooperation can facilitate the attainment of desired outcomes motivates auditors to focus more on cooperation in completing audit tasks, thereby strengthening the relationship between inter-agency cooperation and tax auditors' performance. Conversely, inter-agency cooperation may not be deemed as crucial for audit tasks in situations of low task complexity where the audit process is relatively straightforward. Tax auditors may view inter-agency cooperation as having minimal impact on desired outcomes, thereby weakening the relationship between inter-agency cooperation and tax auditors' performance.

Lastly, based on the valence element, which denotes the value of desired outcomes resulting from performance, task complexity can enhance the importance of achieving desired outcomes in auditing. In simple audit tasks, auditors may assume that completing the task is

straightforward and does not necessitate inter-agency cooperation. Tax auditors operating in these simple task scenarios believe that involving inter-agency cooperation is unnecessary as it may not yield significant results or value. Consequently, the relationship between task complexity and tax auditors' performance tends to be weak in such situations. Conversely, in more complex audit tasks, auditors may require coordination and cooperation among involved parties to successfully complete the task. This enhances the relationship between inter-agency cooperation and tax auditors' performance in highly complex audit tasks, yielding higher value.

6. CONCLUSION

Using a sample of 370 tax auditors from IRBM and RMCD, this study examined the factors that influence professional skepticism and audit technology on tax auditors' performance based on attribution theory. Attribution theory, developed by Fritz Heider, argues that internal and external factors influence an individual's behavior. Internal factors are originally within an individual's control, such as professional skepticism, while external factors, such as inter-agency cooperation, come from outside an individual's control.

Based on the statistical analysis using SEM, this study concluded that the internal factor of professional skepticism and the external factor of inter-agency cooperation influence tax auditors' performance. This indicates the importance of professional skepticism and inter-agency cooperation in tax auditing activities, implying that higher professional skepticism and inter-agency cooperation leads to better performance.

Further analysis of the moderating effects of task complexity has confirmed that task complexity moderates the relationship between auditor effort and inter-agency cooperation using Expectancy Theory. The moderating effects of task complexity will either strengthen or weaken the relationship based on three key elements, namely: (1) Expectancy (Effort-Performance), (2) Instrumentality (Performance-Outcome), and (3) Valence (Value of Outcomes).

6.1 IMPLICATIONS

This study provides theoretical and practical implications. Theoretically, this study contributes to the body of knowledge in the field of taxation, specifically in tax auditing. The findings offer empirical evidence through Structural Equation Modeling (SEM)

analysis that examines hypothesis testing for the study. By utilizing attribution theory, the study confirms the impact of internal factors (professional skepticism) and external factors (inter-agency cooperation) on tax auditors' performance. Furthermore, expectancy theory verifies the effect of task complexity as a moderator on the relationship between professional skepticism and inter-agency cooperation on tax auditors' performance.

This study is beneficial for the Inland Revenue Board of Malaysia (IRBM) and the Royal Malaysian Customs Department (RMCD) as the tax authorities in Malaysia, by providing valuable insights into the significance of professional skepticism, inter-agency cooperation, and task complexity to enhance tax auditor performance. For instance, tax authorities can develop tailored training programs focused on improving auditors' professional skepticism and their ability to detect potential risks and biases. These programs could include case studies, simulations, and role-playing exercises. Additionally, tax authorities can establish secure platforms for regulatory bodies to exchange or share data and information while maintaining data confidentiality. Moreover, the study's findings are valuable for informing policy making and identifying existing policy gaps to design appropriate training and management support to promote effectiveness and efficiency in tax auditing activities, thereby enhancing tax auditors' performance. Finally, the performance evaluation should integrate professional skepticism, inter-agency cooperation, and task complexity to assess auditors' capacity to collaborate effectively with other agencies, handle intricate audit issues, and demonstrate high professional skepticism. Hence, tax authorities should allocate resources appropriately and pinpoint areas where supplementary support or training may be required.

6.2 LIMITATIONS AND FUTURE STUDY

The limitations of the study solely concentrate on the impact of professional skepticism, inter-agency cooperation, and the moderating effects of task complexity on tax auditors' performance. According to attribution theory, additional variables (both internal and external factors) exist that were not investigated in the study. Therefore, future research should explore other variables by combining internal and external factors to examine their influence on tax auditors' performance.

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