

**Professional Scepticism and Tax Ethical Judgement among Malaysian Tax Practitioners:
The Moderating Role of Audit Firm Type**

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Abstract: This study examines whether professional skepticism is associated with tax ethical judgement among Malaysian tax practitioners and whether the association differs across audit-firm settings. The paper uses archived data and preserved statistical outputs from a broader postgraduate research project completed in 2016, comprising 140 usable responses from practitioners in Big Four and non-Big Four audit firms. Professional skepticism was measured using an adapted 30-item Hurtt scale, while two scenario-specific case scores were retained as separate outcomes. Archived hierarchical regression results show a positive association between professional skepticism and the case outcomes in both scenarios (Case 1: $B = 0.133$, $p = 0.012$; Case 2: $B = 0.069$, $p = 0.038$). Audit firm type also moderates the relationship (Case 1: $B = -0.220$, $p = 0.034$; Case 2: $B = -0.305$, $p = 0.007$), with archived firm-specific regressions showing stronger positive slopes among Big Four practitioners. Social Cognitive Theory is used to interpret professional skepticism as a personal/cognitive factor operating within an organizational environment. Because the underlying observations are historical and the respondent-level raw data are no longer available, the findings should not be interpreted as estimates of current Malaysian practice or as newly revalidated measurement evidence. Instead, they provide historical empirical evidence on the relationship among professional skepticism, organizational context and scenario-based tax ethical judgement, considered alongside more recent tax-practice and professional-skepticism research.

Keywords: *Professional Skepticism, Tax Ethical Judgement, Audit Firm Type, Tax Practitioners, Malaysia*

1. Introduction

Tax practitioners frequently make professional judgements under incomplete or contested information. A client's explanation may appear plausible but remain weakly supported, two tax treatments may both be technically arguable, or additional documentation may materially change the interpretation of a transaction. Tax practice is therefore not only a technical exercise; it also requires evidence evaluation and ethical judgement.

The contemporary professional environment reinforces this point. The International Ethics Standards Board for Accountants' tax-planning standards became effective on 1 July 2025 and require professional accountants to apply a principles-based ethical framework, including consideration of whether a proposed arrangement has a credible basis in laws and regulations and of broader consequences associated with the arrangement (IESBA, 2025). In Malaysia, Section 380 of the Malaysian Institute of Accountants' By-Laws, effective from the same date, similarly addresses tax-planning services within the fundamental principles and conceptual framework (MIA, 2025). These developments do not make the empirical observations in this study contemporary; rather, they show that ethical professional judgement in tax practice remains a current concern. Professional skepticism is relevant where judgement depends on the credibility and sufficiency of information. Hurtt (2010) conceptualizes trait professional skepticism as a multidimensional individual characteristic reflected in a questioning mind, suspension of judgement, search for knowledge, interpersonal understanding, self-confidence and self-determination. Nelson (2009) focuses on skeptical judgement and action when a professional assigns a heightened possibility that an assertion may be incorrect. Although these perspectives were developed mainly in auditing, the underlying problem is also present in taxation: practitioners must evaluate client-provided information, consider ambiguity and determine whether the available evidence supports the proposed treatment.

Recent evidence supports the continuing relevance of skepticism while also indicating that context matters. Khalid et al. (2023) found significant direct and indirect effects of skepticism on the professional judgement of 176 Malaysian tax officers. Shirowzhan and Fakhari (2024) reported a positive effect of professional skepticism on auditors' judgement and decision-making quality. Xu and Yang (2025) describe skepticism as a sensemaking

process that develops through interactions with clients and audit-team members. Conversely, Yulianto and Sari (2025) found that professional skepticism did not independently overcome obedience pressure in an ethical audit-opinion setting. Together, these studies caution against assuming that a skeptical disposition produces an identical effect in every professional environment.

The employing firm is one plausible source of contextual variation. Shafer and Simmons (2011) showed that organizational ethical culture can influence tax practitioners' ethical decisions. Lynch and McCullagh (2024), using an international survey of 1,061 tax experts and follow-up interviews with 68 practitioners, identify the employing firm as a significant site of influence on tax practitioners' risk attitudes and show that firm influence is not reducible to firm size alone. Brazel et al. (2025) similarly demonstrate that supervisory expectations can shape whether appropriate professional skepticism is rewarded. These findings support examining organizational setting without assuming that one firm category is inherently more ethical than another.

The present article uses archived data and preserved statistical outputs from a broader postgraduate research project completed in 2016. The exact fieldwork month is not recoverable from the surviving documentation, but the project was completed in June 2016. The current article narrows the broader study to professional skepticism and asks two questions: whether professional skepticism is associated with scenario-based tax ethical judgement, and whether that association differs across Big Four and non-Big Four audit-firm settings. The contribution is therefore deliberately bounded. First, the study extends professional skepticism beyond conventional audit-evidence settings into tax ethical judgement. Second, it treats audit firm type as a contextual moderator rather than as evidence of the ethical standing of either firm category. Third, it places historical Malaysian evidence alongside more recent research on professional judgement in taxation, firm influence and supervisory reinforcement. The study does not claim that the archived sample describes current levels of professional skepticism or ethical judgement among Malaysian tax practitioners.

The remainder of the paper proceeds as follows. Section 2 reviews tax ethical judgement, professional skepticism, audit-firm context and Social Cognitive Theory. Section 3 explains the archived research design, measurement and analytical constraints. Section 4 reports the preserved statistical results and discusses their interpretation. Section 5 concludes with implications, limitations and directions for future research.

2. Literature Review

Tax Ethical Judgement

Ethical judgement concerns the evaluation of whether a proposed action is right, acceptable or defensible. Rest (1986) treats ethical judgement as one stage of ethical decision-making, distinct from recognizing an ethical issue, forming an intention and acting. The distinction is useful in tax practice because professionals may agree that a client's request raises an ethical issue yet differ in whether they regard the proposed treatment as professionally acceptable.

Tax advice sits at the intersection of legal interpretation and professional responsibility. Under the IESBA tax-planning framework, professional accountants are expected to consider whether an arrangement has a credible basis and to take account of broader consequences associated with the advice (IESBA, 2025). MIA's Section 380 applies the fundamental principles and conceptual framework to tax-planning services while also requiring compliance with relevant tax laws and regulations (MIA, 2025). Ethical judgement therefore cannot be reduced to technical legality alone.

Prior research also indicates that tax-related ethical judgements are embedded in organizational and professional contexts. Shafer and Simmons (2011) found that organizational ethical culture affected tax practitioners' behavioral intentions. Johnes Abit et al. (2023), using Malaysian tax agents, reported significant relationships between personal and professional ethics and perceptions of tax evasion. Lynch and McCullagh (2024) subsequently identified the employing firm as an important influence on tax practitioners' risk attitudes. These findings support considering both individual and environmental factors when examining tax ethical judgement.

Professional Skepticism

Professional skepticism is a questioning and critically evaluative orientation toward evidence. Hurtt (2010) conceptualizes it as a multidimensional individual characteristic that may operate as a relatively stable trait or as a situational state. The six characteristics underlying the trait construct are questioning mind, suspension of judgement, search for knowledge, interpersonal understanding, self-confidence and self-determination. The final Hurtt instrument contains 30 items designed to measure overall trait professional skepticism.

Nelson (2009) emphasizes the judgement process and the heightened possibility that an assertion may be incorrect. Nolder and Kadous (2018) caution against equating professional skepticism with indiscriminate distrust and instead locate it in mindset and attitude. This distinction is important in tax work: a skeptical practitioner need not presume client dishonesty, but should recognize inconsistencies, seek appropriate support and avoid premature closure when evidence is insufficient.

Recent research also shows that professional skepticism is shaped by context. Shirowzhan and Fakhari (2024) found that professional skepticism positively affected judgement and decision-making quality among independent auditors, while Xu and Yang (2025) describe skepticism as emerging through actions and interactions with clients and team members. Brazel et al. (2025) show that supervisors' expectations influence whether appropriate skeptical behavior is rewarded. The common implication is that an individual disposition may matter, but the work environment can influence how that disposition is expressed.

Professional Skepticism and Tax Ethical Judgement

The proposed relationship follows from how skepticism changes the treatment of supporting information. A practitioner who questions an explanation, postpones a conclusion when evidence is incomplete and searches for additional support may be more likely to identify inconsistencies that alter the ethical assessment of a tax arrangement. This mechanism is relevant even when a position is technically arguable, because professional judgement may turn on assumptions, evidential sufficiency and consequences that are not resolved by legal permissibility alone.

Direct tax evidence remains limited, but Khalid et al. (2023) found that skepticism significantly influenced the professional judgement of Malaysian tax officers and also operated through the intensity of fraud indicators. Tax officers and tax advisers have different institutional roles, yet both evaluate assertions and evidence under uncertainty. The positive association between professional skepticism and judgement quality reported by Shirowzhan and Fakhari (2024) points in the same direction. The first hypothesis therefore examines whether the archived Malaysian practitioner evidence is consistent with this reasoning.

H1: Professional skepticism is positively associated with tax ethical judgement among Malaysian tax practitioners.

Audit Firm Type as a Contextual Moderator

Professional skepticism is measured at the individual level, but practitioners exercise it inside organizations. Firm settings can differ in review processes, access to consultation, technical resources, training, commercial pressures and supervisory reinforcement. The present study does not assume that these features are uniformly stronger in one firm category, nor does it equate Big Four status with superior ethical culture. Rather, audit firm type is treated as an observable contextual indicator.

This distinction is important because Lynch and McCullagh (2024) show that the employing firm is a significant site of influence on tax practitioners' risk appetite while also finding that firm influence is not simply a function of firm size. Similarly, Brazel et al. (2025) demonstrate that supervisors can reward or discourage appropriate skeptical behavior. These findings make it plausible that the same skeptical disposition could have different associations with judgement across organizational settings even when the underlying mechanisms are not directly measured. Accordingly, the moderation test concerns the strength of the professional-skepticism relationship across firm contexts, not the ethical standing of Big Four or non-Big Four practitioners.

H2: Audit firm type moderates the relationship between professional skepticism and tax ethical judgement.

Social Cognitive Theory

Social Cognitive Theory (SCT) explains human functioning through reciprocal relationships among personal

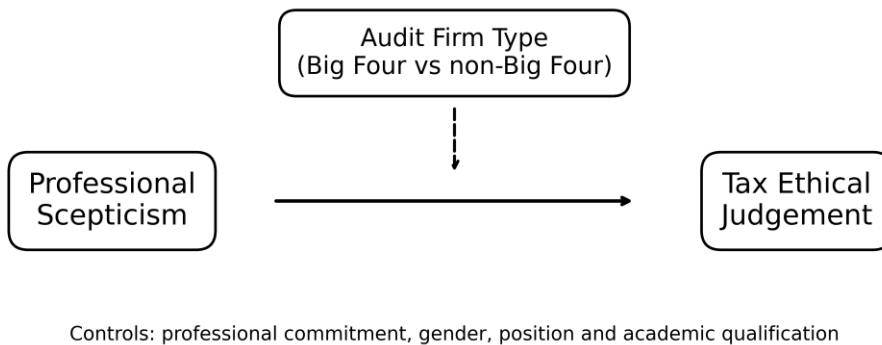
factors, behavior and environmental influences (Bandura, 1986). This framework is useful because the focal individual characteristic in the present study is expected to operate within, rather than apart from, an organizational context.

Within this framework, professional skepticism represents the personal and cognitive component. A skeptical practitioner is more inclined to question information, suspend judgement when evidence is incomplete, seek additional knowledge, and consider alternative explanations. These characteristics shape the cognitive process preceding professional judgement. Tax ethical judgement represents the behavioral or decision-related outcome. Audit firm type represents an observable feature of the organizational environment in which the practitioner works.

The mapping requires an important qualification. The study did not directly measure ethical culture, supervisory support, consultation quality, incentive structures, client pressure or other organizational mechanisms. Audit firm type therefore cannot be interpreted as a direct measure of those mechanisms. It is used only as a contextual indicator that permits testing whether the observed professional-skepticism slope differs across two organizational settings.

SCT consequently supports a person-environment interpretation of H2 rather than a deterministic claim. Professional skepticism may provide the cognitive disposition to question client information, while the extent to which that disposition is reflected in judgement can vary with environmental cues and constraints. The mechanisms underlying any observed difference remain untested and should be measured directly in future research.

Figure 1: Research Framework



Source: Developed from the study hypotheses and Social Cognitive Theory.

3. Methodology

Research Design and Archival Source

The present paper uses archived data and preserved statistical outputs from a broader postgraduate research project completed in 2016. The original project used a quantitative, cross-sectional, scenario-based survey of Malaysian tax practitioners working in Big Four and non-Big Four audit firms. The surviving dissertation confirms completion in June 2016 but does not preserve the exact month of fieldwork. Accordingly, the revised manuscript does not report an unsupported collection date.

The current paper focuses on professional skepticism, audit firm type, and the scenario-based ethical-judgement components of that broader study. No new respondent-level analysis has been conducted for this revision because the original raw dataset and analysis syntax are no longer available. All statistical results reported below are drawn from archived outputs preserved in the original dissertation. This distinction is maintained throughout the paper.

Sample and Recruitment

The target population comprised tax practitioners employed in Big Four and non-Big Four audit firms in Malaysia. The archived methodology records the distribution of 200 hard-copy research instruments. Instruments were personally distributed to participating practitioners in Selangor, while instruments for practitioners outside Selangor were sent by courier to the respective audit firms. Follow-up telephone calls were made after mailing, and respondents were given 20 days to complete and return the instrument.

Of the 200 instruments distributed, 145 were returned. Five were excluded because of incomplete data, leaving 140 usable responses, equivalent to a 70 per cent usable response rate. The final sample comprised 80 Big Four and 60 non-Big Four practitioners. The surviving documentation does not identify every state represented outside Selangor and does not preserve information that would permit formal testing for non-response bias.

The dissertation also contains an inconsistency in the description of sample selection: it refers to 150 practitioners as having been randomly selected while separately documenting distribution of 200 instruments. Because the original sampling frame can no longer be reconstructed, the present article does not claim probability sampling or population representativeness. It reports the recruitment procedure that can be verified from the archived record and treats the final sample as a field sample of Malaysian tax practitioners in the two audit-firm settings.

Table 1: Respondent Profile

Characteristics	Category	n	%
Audit firm type	Big Four	80	57.1
	Non-Big Four	60	42.9
Position	Manager	9	6.4
	Assistant manager	15	10.7
	Senior executive	57	40.7
	Executive	59	42.2
Experience	< 3 years	100	71.5
	4-6 years	32	22.9
	7-10 years	7	4.9
	> 10 years	1	0.7
Qualification	Postgraduate	5	3.6
	Accounting degree	64	45.7
	Non-accounting degree	15	10.7
	Professional qualification	51	36.4
	Diploma	5	3.6

Source: Archived study documentation. Note: N = 140. Percentages may not total 100 exactly because of rounding.

Measures

Professional Skepticism

Professional skepticism was measured using an adapted version of Hurtt's (2010) 30-item trait professional-skepticism scale. Hurtt conceptualizes professional skepticism as multidimensional, with six underlying characteristics, while the 30-item instrument is designed to yield an overall trait measure. The original postgraduate study adapted the response format to a seven-point Likert scale from 1 (strongly disagree) to 7 (strongly agree) and analyzed an overall professional-skepticism score. Higher archived composite scores indicate greater professional skepticism.

The present paper retains that archived overall score because respondent-level data are unavailable to re-estimate a six-factor structure. This should not be interpreted as evidence that the construct is unidimensional. The response-format adaptation and inability to re-estimate the six-dimensional measurement structure are therefore treated as limitations rather than as new validation evidence.

Scenario-Based Tax Ethical Judgement

Tax ethical judgement was represented by two tax scenarios adapted from Shafer and Simmons (2011) and

contextualized to the Malaysian setting. The scenarios were kept separate because they differed in the practitioner's role and degree of agency. In Case 1, a tax preparer knowingly included a service-fee provision even though the associated company had not provided the stated services. In Case 2, a tax practitioner proposed a cross-jurisdictional arrangement that shifted profits to lower-tax locations and then prepared a Malaysian tax return reporting very low profits.

Each scenario contained one direct ethical-judgement item asking respondents to rate, on a seven-point scale, the likelihood that the practitioner acted unethically. That item was followed by ten seven-point items concerning the organizational ethical context, including management discipline of unethical behavior, enforcement of penalties, ethical standards of top management, ethical norms, rewards and obedience to authority.

The archived dissertation reports continuous case-level scores used as the regression outcomes (Case 1 overall $M = 3.70$; Case 2 overall $M = 3.65$). However, the original scoring syntax is no longer available, so the precise item-level transformation used to derive these archived case scores cannot be independently reconstructed. The revised paper therefore describes the dependent variables as archived scenario-based case composites and does not claim that they constitute newly validated unidimensional measures of tax ethical judgement. Treating the two cases separately preserves their substantive differences and avoids assuming that the two scenarios are interchangeable.

Table 2: Scenario Structure and Archived Outcome Use

Elements	Case 1	Case 2
Core tax situation	False service-fee provision used to reduce taxable profit; practitioner knows services were not provided.	Profit-shifting arrangement through lower-tax locations; practitioner proposes the arrangement and prepares a low-profit Malaysian return.
Direct judgement item	Likelihood that Mr. Karim acts unethically (1 = strongly unlikely; 7 = strongly likely).	Likelihood that Mrs. Sara acts unethically (1 = strongly unlikely; 7 = strongly likely).
Additional items	Ten organizational ethical-context items on 7-point agreement scales.	Ten organizational ethical-context items on 7-point agreement scales.
Archived regression outcome	Case-level continuous composite preserved in the dissertation (overall $M = 3.70$).	Case-level continuous composite preserved in the dissertation (overall $M = 3.65$).

Source: Archived questionnaire and statistical outputs. The original scoring syntax is no longer available.

Audit Firm Type and Control Variables

Audit firm type was coded 0 for Big Four and 1 for non-Big Four. The regressions retained professional commitment, gender, position, and academic qualification from the broader original specification. Professional commitment was measured with ten items and is treated here as a statistical control rather than a focal construct. In the archived coding, male = 0 and female = 1; manager, assistant manager and senior executive positions were grouped as 1 and executive as 0; professional qualification was coded 1 and other academic-qualification categories as 0.

Measurement Evidence and Archival Constraints

The archived professional-skepticism score had a mean of 6.67 and a standard deviation of 0.268. The high mean and limited dispersion raise a legitimate concern about restricted variance and a possible ceiling effect. Preserved normality statistics report skewness of -0.354 and kurtosis of -0.478. These values do not themselves rule out ceiling effects. The archived item-level table shows substantial variation across the 30 item means before item-direction adjustment (means from 1.24 to 6.24; standard deviations from 0.426 to 0.864), reflecting the mixture of positively and negatively worded items.

Because the respondent-level dataset is no longer available, the percentage of respondents at the scale maximum, histograms, alternative scoring specifications, and sensitivity analyses cannot be reconstructed. Restricted variance may attenuate correlations or affect regression estimates, so the coefficients are

interpreted cautiously.

Internal consistency for the archived professional-skepticism score was Cronbach's alpha = 0.815. The Kaiser-Meyer-Olkin statistic was 0.759, and Bartlett's test of sphericity was significant (chi-square = 4179.710, df = 435, $p < 0.001$). The dissertation states that retained item loadings exceeded 0.50, but the full loading matrix and a six-factor solution are not preserved. Accordingly, these statistics are reported as reliability evidence and preliminary evidence of factorability only; they are not presented as definitive evidence of the dimensional validity of the Hurtt construct.

Table 3: Archived Measurement and Distribution Evidence

Construct/statistic	Value
Professional skepticism: items	30
Professional skepticism: mean	6.670
Professional skepticism: SD	0.268
Professional skepticism: skewness	-0.354
Professional skepticism: kurtosis	-0.478
Professional skepticism: Cronbach's alpha	0.815
Professional skepticism: KMO	0.759
Professional skepticism: Bartlett	chi-square = 4179.710, df = 435, $p < 0.001$
Big Four professional skepticism	M = 6.633, SD = 0.278
Non-Big Four professional skepticism	M = 6.724, SD = 0.248
Professional commitment (control): Cronbach's alpha	0.896
Professional commitment (control): KMO	0.825

Source: Archived statistical outputs. KMO = Kaiser-Meyer-Olkin measure of sampling adequacy.

Data Analysis

The hypotheses were evaluated using archived hierarchical multiple-regression outputs for Case 1 and Case 2. Model 1 contained demographic controls. Model 2 added professional commitment, professional skepticism, and audit firm type. Model 3 added the interactions Professional Commitment x Audit Firm Type and Professional Skepticism x Audit Firm Type. The focal moderation term in the present paper is Professional Skepticism x Audit Firm Type.

The archived p-values reported in the original output correspond to the displayed t-statistics and are presented here as two-tailed values. Because Big Four was coded 0 and non-Big Four was coded 1, a negative Professional Skepticism x Audit Firm Type coefficient indicates that the professional-skepticism slope is weaker in the non-Big Four category than in the Big Four reference group. The formal interaction is interpreted alongside archived firm-specific regressions and the interaction plots preserved in the original study. No new PROCESS, bootstrap, or respondent-level simple-slope analysis was possible without the raw dataset.

4. Findings and Results

Correlations

Professional skepticism was positively correlated with both archived case outcomes, although the relationships were small (Case 1: $r = 0.181$; Case 2: $r = 0.165$). Professional skepticism was also positively correlated with audit firm type ($r = 0.169$). The reported bivariate correlations were low in magnitude, providing no indication of severe pairwise multicollinearity among the focal variables.

Table 4: Selected Pearson Correlations

Relationship	r
Professional skepticism - Case 1	0.181*
Professional skepticism - Case 2	0.165*
Professional skepticism - audit firm type	0.169*
Professional commitment - professional skepticism	0.154*
Audit firm type - Case 1	-0.188*
Audit firm type - Case 2	-0.255**

Source: Archived statistical outputs. Audit firm type: 0 = Big Four, 1 = non-Big Four. * $p < 0.05$; ** $p < 0.01$.

Direct Association of Professional Skepticism

For Case 1, the control-only model accounted for 7.7 per cent of the variance. After professional commitment, professional skepticism and audit firm type were added in Model 2, R-squared increased to 0.252 (adjusted R-squared = 0.218; $F = 10.257$, $p < 0.001$). Professional skepticism had a positive coefficient ($B = 0.133$, $SE = 0.052$, $t = 2.556$, $p = 0.012$).

Case 2 showed the same direction. Model 2 explained 24.2 per cent of the variance (adjusted R-squared = 0.208; $F = 11.708$, $p < 0.001$), and professional skepticism again had a positive coefficient ($B = 0.069$, $SE = 0.033$, $t = 2.099$, $p = 0.038$). H1 is therefore supported in both archived case models. The result is interpreted as an association with the archived scenario-based case composites, not as a newly reconstructed direct ethical-judgement score.

Table 5: Main-Effects Regression Results - Case 1

Variables	B	SE	t	p
Gender	-0.043	0.027	-1.586	0.115
Position	0.018	0.017	1.023	0.308
Academic qualification	-0.128	0.030	-4.261	<0.001
Professional commitment	0.053	0.030	1.776	0.078
Professional skepticism	0.133	0.052	2.556	0.012
Audit firm type	-0.139	0.031	-4.537	<0.001

Source: Archived Model 2 output. $R = 0.502$; R-squared = 0.252; adjusted R-squared = 0.218; $F = 10.257$, $p < 0.001$.

Table 6: Main-Effects Regression Results - Case 2

Variables	B	SE	t	p
Gender	-0.037	0.030	-1.248	0.214
Position	0.016	0.019	0.857	0.393
Academic qualification	-0.117	0.033	-3.576	<0.001
Professional commitment	0.138	0.057	2.416	0.017
Professional skepticism	0.069	0.033	2.099	0.038
Audit firm type	-0.165	0.034	-4.919	<0.001

Source: Archived Model 2 output. $R = 0.492$; R-squared = 0.242; adjusted R-squared = 0.208; $F = 11.708$, $p < 0.001$.

Moderating Role of Audit Firm Type

Model 3 tested whether the professional-skepticism relationship varied by audit firm type while retaining the original control structure. In Case 1, the Professional Skepticism x Audit Firm Type coefficient was negative and statistically significant ($B = -0.220$, $SE = 0.102$, $t = -2.145$, $p = 0.034$). R-squared increased from 0.252 in Model 2 to 0.313 in Model 3, giving a change in R-squared of 0.061. Case 2 produced the same pattern: the interaction coefficient was $B = -0.305$ ($SE = 0.112$, $t = -2.721$, $p = 0.007$), while R-squared increased from 0.242 to 0.309, a change of 0.067. H2 is supported in both archived case models.

The full Model 3 coefficients are reported in Table 7. The professional-commitment interaction is retained because it formed part of the original model specification, although it is not the focal relationship in this article. Because non-Big Four firms were coded 1, the negative interaction terms indicate weaker professional-skepticism slopes in the non-Big Four category relative to the Big Four reference group. Archived firm-specific regressions provide a direct interpretation. Among Big Four practitioners, professional skepticism was positively associated with the case score in Case 1 ($B = 0.228$, $SE = 0.062$, $p < 0.001$) and Case 2 ($B = 0.269$, $SE = 0.069$, $p < 0.001$). The non-Big Four slopes were close to zero and not statistically significant in Case 1 ($B = 0.004$, $SE = 0.100$, $p = 0.967$) or Case 2 ($B = -0.038$, $SE = 0.102$, $p = 0.708$). These firm-specific regressions are archived slope estimates rather than newly generated formal simple-slope tests. The preserved interaction plots are reproduced in Figure 2 to show the pattern visually.

Table 7: Full Archived Model 3 Moderation Results

Variables	Case 1 B	SE	t	p	Case 2 B	SE	t	p
Gender	-0.037	0.026	-1.401	0.163	-0.031	0.029	-1.090	0.278
Position	0.017	0.017	0.989	0.325	0.014	0.018	0.737	0.463
Academic qualification	-0.127	0.029	-4.379	<0.001	-0.115	0.032	-3.635	<0.001
Professional commitment	-0.027	0.039	-0.685	0.495	0.264	0.070	3.754	<0.001
Professional skepticism	0.226	0.064	3.525	0.001	-0.011	0.043	-0.256	0.799
Audit firm type	0.269	0.732	0.368	0.714	0.824	0.801	1.028	0.306
PC x Audit Firm Type	0.168	0.058	2.928	0.004	0.167	0.063	2.665	0.009
PS x Audit Firm Type	-0.220	0.102	-2.145	0.034	-0.305	0.112	-2.721	0.007

Source: Archived Model 3 output. Case 1: R = 0.560, R-squared = 0.313, adjusted R-squared = 0.271, F = 5.843 (p = 0.004), change in R-squared from Model 2 = 0.061. Case 2: R = 0.556, R-squared = 0.309, adjusted R-squared = 0.267, F = 6.393 (p = 0.002), change in R-squared from Model 2 = 0.067. Intercepts omitted for compactness. PC = professional commitment; PS = professional skepticism.

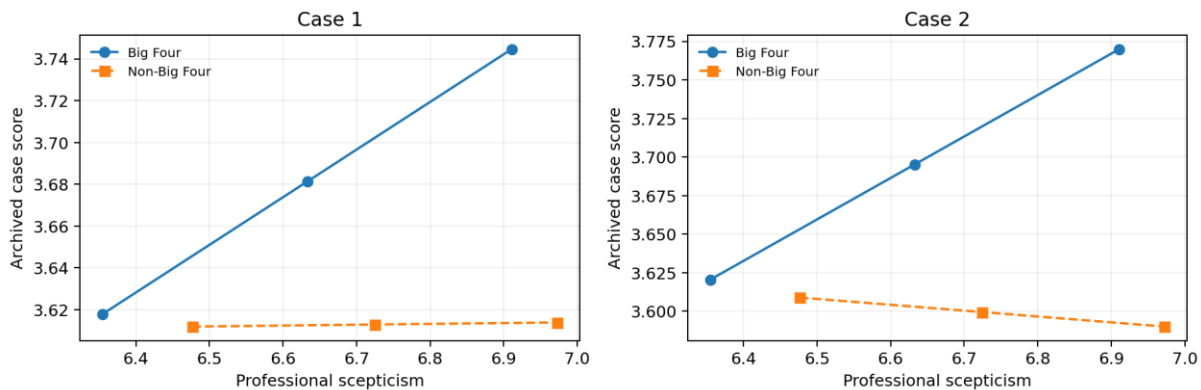
Table 8: Archived Firm-Specific Professional Skepticism Slopes

Case	Firm type	PS B	SE	p
Case 1	Big Four	0.228	0.062	<0.001
Case 1	Non-Big Four	0.004	0.100	0.967
Case 2	Big Four	0.269	0.069	<0.001
Case 2	Non-Big Four	-0.038	0.102	0.708

Source: Archived firm-specific regressions. These estimates interpret the significant formal interaction terms; they are not newly estimated simple-slope tests.

Figure 2: Archived Interaction Plots for Professional Skepticism and Audit Firm Type

Archived Interaction Plots for Professional Scepticism and Audit Firm Type



Source: Reproduced from predicted points preserved in the original study. The figure is descriptive of the archived interaction pattern.

Discussion

The archived results show a positive association between professional skepticism and both scenario-based case outcomes. The finding extends professional skepticism into a tax setting where the professional task involves evaluating the acceptability of a tax position rather than issuing an audit opinion. This interpretation is consistent with Khalid et al. (2023), who found a significant relationship between skepticism and professional judgement among Malaysian tax officers, and with Shirowzhan and Fakhari (2024), who reported a positive association between professional skepticism and judgement quality among auditors.

The moderation result indicates that the archived skepticism-judgement relationship differed across firm settings. Professional skepticism was positively associated with the case outcomes within the Big Four subsample, whereas the archived non-Big Four slopes were not statistically significant. SCT helps interpret this as a person-environment pattern: an individual disposition can have different observable relationships with judgement across organizational environments. The result does not establish which organizational mechanisms produced the difference.

This distinction is important because the study measured only audit firm type, not ethical culture, consultation access, supervisor reinforcement, performance incentives or client pressure. Explanations involving these mechanisms must therefore remain speculative. Recent evidence supports their plausibility without proving that they caused the observed pattern. Lynch and McCullagh (2024) identify the employing firm as an important influence on tax practitioners' risk attitudes, while Brazel et al. (2025) show that supervisors' own expectations can affect whether appropriate skeptical behavior is rewarded. Xu and Yang (2025) similarly emphasize interactions with clients and team members in the exercise of skepticism.

The wider literature also cautions against treating skepticism as uniformly effective. Yulianto and Sari (2025) found that professional skepticism alone did not significantly alter ethical audit decisions under obedience pressure. Such findings strengthen the contextual interpretation of the present moderation result: professional skepticism may be relevant, but its relationship with judgement should not be assumed to be invariant across organizational conditions.

The age of the dataset requires a final interpretive boundary. The empirical observations pre-date current tax-planning standards and contemporary digital tax-administration developments. They therefore cannot be used to estimate present-day Malaysian practitioner attitudes or to claim that current Big Four and non-Big Four environments operate in the same way. The more defensible contribution is historical: the archived results document a person-context relationship that remains theoretically relevant and is broadly consistent with newer evidence showing that skepticism and firm-level influences continue to matter in professional judgement.

5. Conclusion and Recommendations

This study reports archived evidence from 140 Malaysian tax practitioners showing that professional skepticism was positively associated with two scenario-based case outcomes and that the association differed by audit firm type. The formal interaction was significant in both case models, while archived firm-specific regressions showed positive slopes in the Big Four subsample and non-significant slopes in the non-Big Four subsample.

The findings broaden the discussion of professional skepticism beyond conventional audit-evidence evaluation and support a social-cognitive interpretation in which an individual disposition operates within an organizational environment. The results should not be read as evidence that Big Four practitioners are inherently more ethical or that non-Big Four firms have weaker ethical environments. The study did not measure the organizational mechanisms necessary to make those claims. For practice, the historical pattern, considered alongside recent evidence on firm influence and supervisory reinforcement, suggests that organizational arrangements allowing appropriate questioning to be expressed constructively may be valuable. Examples include structured consultation, documentation of unresolved concerns, review processes that recognize appropriate challenge and scenario-based ethics training. These are implications for future practice and research rather than causal prescriptions derived from the archived data alone.

Future studies should move beyond a binary Big Four/non-Big Four indicator and measure ethical culture, consultation quality, supervisory reactions, review intensity, performance incentives, client pressure and professional socialization directly. Contemporary replication with a larger and more experienced Malaysian practitioner sample would allow researchers to determine whether the historical interaction persists under current tax-planning ethics requirements and organizational practices.

Limitations and Future Research

Several limitations materially qualify the findings. First, the dataset is historical. The underlying postgraduate research was completed in 2016 and the exact fieldwork month is not recoverable from the surviving documentation. Consequently, the results should not be presented as evidence of current prevalence, current practitioner attitudes or current organizational conditions in Malaysia.

Second, the original respondent-level dataset and statistical syntax are no longer available. The revised article therefore relies on archived tables, descriptive statistics, regression outputs and interaction figures preserved in the dissertation. New frequency-based ceiling-effect analyses, histograms, alternative scoring specifications, confirmatory factor analysis, six-factor re-estimation, bootstrap inference, and new formal simple-slope tests cannot be produced. Third, professional skepticism had a very high archived mean (6.67 on the adapted seven-point scale) and low standard deviation (0.268). Although archived skewness and kurtosis are not extreme, these values do not rule out restricted variance or a ceiling effect. Restricted variance may have affected correlations and regression coefficients.

Fourth, the professional-skepticism measure adapted Hurtt's 30-item instrument to a seven-point response format, and the original analysis used an overall score. The full loading matrix and six-dimensional factor structure are not preserved. Cronbach's alpha, KMO and Bartlett's test provide useful reliability and factorability information but do not establish the dimensional validity of the adapted scale. Fifth, the two scenario outcomes require caution. Each case contained one direct ethical-judgement item followed by ten organizational ethical-context items, and the archived case-level composite scores were used in the regressions. The scoring syntax cannot now be independently reconstructed. The outcomes are therefore best understood as archived scenario-based case composites rather than newly validated unidimensional measures of tax ethical judgement.

Sixth, the sample is modest and relatively inexperienced: 71.5 per cent of respondents had fewer than three years of taxation experience. The original sampling frame cannot be reconstructed, and the archived documentation contains an inconsistency between a statement that 150 practitioners were randomly selected and the documented distribution of 200 instruments. The present article therefore does not claim probability sampling or representativeness, and non-response bias cannot be assessed retrospectively. Finally, the design is cross-sectional and scenario-based. Audit firm type is only a broad contextual proxy and does not directly measure ethical culture, supervision, consultation, incentives, or client pressure. The results establish associations and differences in slopes, not causality or untested organizational explanations.

Data Availability: The study relies on archived statistical outputs and instrument documentation from a postgraduate research project completed in 2016. The original respondent-level dataset and analysis syntax are no longer available. The full citation to the underlying dissertation can be provided to the editor and restored after blind review if required.

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Appendix A: Archived Item-Level Descriptive Statistics for Professional Skepticism

The following descriptive statistics are reproduced from the archived dissertation. Items include both positively and negatively worded statements; the table reports the original item wording and unadjusted item means as preserved. The original respondent-level scoring syntax is unavailable.

Items	Mean	SD
I often accept other people's explanations without further thought	1.24	.426
I feel good about myself.	6.22	.832
I wait to decide on issues until I can get more information.	6.21	.794
The prospect of learning excites me.	6.09	.864
I am interested in what causes people to behave the way that they do.	6.15	.813
I am confident of my abilities.	5.76	.748
I often reject statements unless I have proof that they are true.	5.94	.784
Discovering new information is fun.	5.99	.749
I take my time when making decisions.	6.19	.776
I tend to immediately accept what other people tell me.	1.50	.502
Other people's behavior does not interest me.	1.24	.426
I am self-assured.	5.99	.749
My friends tell me that I usually question things that I see or hear.	6.19	.776
I like to understand the reason for other people's behavior.	6.24	.764
I think that learning is exciting.	6.17	.822
I usually accept things I see, read, or hear at face value.	1.29	.457
I don't feel sure of myself.	1.48	.529
I usually notice inconsistencies in explanations.	1.41	.535
Most often I agree with what the others in my group think.	1.50	.502
I dislike having to make decisions quickly.	6.22	.832
I have confidence in myself.	6.21	.794
I don't like to decide until I've looked at all of the readily available information.	6.09	.864
I like searching for knowledge.	6.15	.813
I frequently question things that I see or hear.	5.76	.748
It is easy for other people to convince me.	1.41	.535
I seldom consider why people behave in a certain way.	1.50	.502
I like to ensure that I've considered most available information before making a decision.	5.99	.749
I enjoy trying to determine if what I read or hear is true.	6.19	.776
I relish learning.	6.24	.764
The actions people take and the reasons for those actions are fascinating.	6.17	.822

Source: Archived dissertation descriptive-statistics table.