

The Moderating Effect of Professional Skepticism on the Relationship Between Tone at the top & Management's Accountant Fraud Prevention and Detection

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ABSTRACT

Purpose – This study examines the moderating role of professional skepticism in the relationship between tone at the top and fraud prevention and detection among Management Accountants (MAs) in Malaysia. Additionally, it explores whether behavior that may help MAs detect fraud more successfully are linked to higher degrees of skepticism with working experience and holding professional licence as moderating effect.

Design/methodology/approach – A total of 237 Management Accountants Malaysia participated in an audit judgement experiment, which required them to indicate their beliefs about the tone of the top at their company (poor or good) and evaluate the ability of Managements Accountant's to detect fraud. This study is grounded in Attribution Theory as the underpinning theory and this quantitative study employed Partial Least Squares (PLS) analysis to analyze the data. PLS-SEM is selected over Covariance-Based SEM (CB-SEM) due to its superior suitability for predictive modeling and its ability to effectively manage moderation effects in complex structural models.

Findings – The study reveals that professional skepticism significantly enhances fraud prevention and detection among MAs, particularly for less experienced accountants and those holding professional qualifications. However, professional skepticism does not moderate the relationship between tone at the top and fraud prevention and detection.

Originality/value – This research contributes to the limited literature on Management Accountants in Malaysia, specifically addressing how professional skepticism influences the impact of tone at the top on fraud prevention and detection. By incorporating a theoretical framework and a robust SEM analysis, this research provides novel insights into the behavioural mechanisms underlying fraud prevention. Notably, this study is the first to employ PLS-SEM in this context, providing a more comprehensive and robust analysis of the factors affecting fraud detection. Future studies could expand this investigation to include MAs from diverse geographical contexts and explore additional moderating variables for broader applicability.

Keywords: Professional Skepticism, Tone at the top, Management Accountant's, Fraud Detection and Prevention, Working Experience and Professional Qualification

INTRODUCTION

The inability of management accountants (MA's) to effectively judge fraud risk can result in failures to detect fraud and scandals, which could have serious consequences for the profession. As the primary professionals involved in the preparation and oversight of financial reports, MAs play a vital role in maintaining their

professional skepticism in detecting and preventing fraud, without succumbing to external biases (Mohd Ali et al., 2023).

The ethical atmosphere and behaviours established by senior management, known as the "tone at the top", have a significant influence on both the organizational culture and financial integrity of a company (D'Aquila & Bean, 2011). A positive tone at the top is expected to foster an environment that supports diligent fraud prevention and detection efforts. On the other hand, a negative tone can foster an environment that increases the likelihood of fraud and leads to its oversight.

MA's work environment is critical due to their role in liaising with top management to prevent and detect fraud. However, this relationship often presents challenges, as top management may be at a higher risk of engaging in fraudulent behavior, potentially leading to conflicts with MA's (Rubasundram, 2015). MAs frequently face pressure from top management, making the tone at the top essential for creating a conducive working environment (Julian et al., 2021). Despite the expectation for management accountants to maintain objectivity and independence, studies suggest that MAs may favor management in conflict situations (Sivabalachandran & Gooneratne, 2023).

Professional skepticism is an essential quality for conducting thorough audits and detecting fraud. This trait should not only be exhibited by auditors, but also by other party (Bagshaw, 2018). It entails having an attitude of skepticism and not readily accepting information without challenging its validity (Tana, 2024). Prior studies have confirmed that skepticism plays a crucial role in detecting fraudulent activity. Nevertheless, the correlation between professional skepticism and the tone at the top in the realm of management accountants' efforts to prevent and identify fraud has not been thoroughly investigated (Hurt, 2010).

This study seeks to fill these gaps by examining the moderating role of professional skepticism in the relationship between tone at the top and fraud prevention and detection among Management Accountants (MAs) in Malaysia. Additionally, it explores whether behavior that may help MAs detect fraud more successfully are linked to higher degrees of skepticism with working experience and holding professional licence as moderating effect.

This research seeks to gain significant insights into strengthening fraud risk management and improving the overall effectiveness of financial reporting methods by examining the impact of professional skepticism on this dynamic.

LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

The Attribution Theory

The Attribution Theory explains the process of assessing the reasons and motivations behind an individual's behaviour (Heider, 1958). Two elements affect behaviour: situational attribution (external influences) and dispositional attribution (internal causes) (Syed Mustapha Nazri et al., 2023)

Dispositional attributions that which naturally shapes a person's behaviour that include personality, self-perception, ability, and motivation (Fauzi et al., 2024). Situational attributions, on the other hand, centre outside factors such public perceptions, social situations, and society ideals. In essence, both internal and external factors shape a person's behavior and decision-making.

Using Attribution Theory, internal and external factors affect fraud detection and prevention in the framework of management accountants. Examples of dispositional attributions in this research are professional skepticism, professional qualifications, and job experience. Conversely, tone at the top is an instance of dispositional attributions that might compromise the capacity of a management accountant to detect and halt fraud. According to the study, in management accounting fraud prevention and detection depend critically on both situational and dispositional attributions.

Role of Management Accountant in Fraud Detection

Management accountants play an inevitable role in organizations operating in today's dynamic business world by devising appropriate strategies, enriching an innovative climate and enabling a platform for value creation. Management accountants do not merely handle money but make more of it (Nielsen, 2018) and are considered critical figures behind their organizational success (Fadhilah et al., 2015). One of the primary roles of management accountants is to prepare financial statements (Sivabalachandran & Gooneratne, 2023). This financial statement is being used not only internally but to different stakeholders such as investors, creditors, government and etc. Stakeholders rely on this financial statement to make an informed decision. Companies in obtaining good financial reports need to detect fraudulent financial statements first (Silvia Dewi et al., 2024). Financial statement fraud can have a negative impact on investors and creditors as it presents an inaccurate representation of a company's financial performance.

Management accountants should embrace a heightened level of skepticism in order to detect instances of fraud within their organizations, regardless of the fact that they are not bound by the same obligations as external auditors. Management accountants often possess insights that external or internal auditors may overlook (Ala-Heikkilä & Järvenpää, 2023). Their in-depth knowledge of business processes, organizational culture, and employee behavior provides them with a unique perspective. Due to their insider perspective, they can often identify indicators of fraud not visible to external observers. Therefore, management accountants are better positioned to detect behavioural and organizational warning signs than individuals with limited engagement in the company (Dahal, 2017).

Tone at the Top

Financial reporting decisions are shaped by both environmental and individual factors. An important environmental factor is the example set by management (Felo & Solieri, 2023). People learn from looking at others and their surroundings (De Felice et al., 2023). The behavior of upper management is constantly monitored by all personnel, including management accountants (Julian et al., 2021). This daily behavior of upper management establishes the "tone at the top," which influences employees to make judgments and decisions that align with it (D'Aquila & Bean, 2011).

Tone at the top refers to high management and the board of directors' dedication to being ethical, exhibiting integrity, and being honest; a negative tone at the top makes a corporation more vulnerable to fraud and tends to lead to a higher incidence of fraud within a company (Onesti & Palumbo, 2023). Onesti and Palumbo (2023) also found that top-down tone is emerging as one of the primary drivers of corporate governance sustainability in preventing fraud. This research divides the tone at the top into two categories: one that promotes ethical behavior (good) and another that does not (bad).

Management accountants (MA's) often exhibit a favourable disposition towards management and are more inclined to make judgments that are in line with management's anticipated outcomes (Wolf et al., 2020). The top management's support and tone are critical for MA's performance in evaluating fraud risk. The attitude and behavior of top-level executives have a significant impact on the ability of management accountants to prevent and detect instances of fraud as well as assess the risk of fraud (Oommen & Buys, 2015). Nevertheless, Julian et al (2021) study concluded that the impact of the tone at the top on fraud risk judgment was not statistically significant. In contrast, Silvia Dewi et al (2024) found a positive and significant relationship between the tone at the top and the detection of financial statement fraud.

Professional Skepticism

Professional skepticism is an attitude that entails questioning and critically examining evidence, assumptions, and assertions made by others. It is typically understood as not assuming either honesty or dishonesty on the part of managers (Dharmasiri & Phang, 2023). Professional Skepticism is the skeptic attitude possess by an individual which will not accept things at the face value. According to Hurts (2010), professional skepticism consist of six (6) characteristics which is having questioning mind, search for knowledge, suspension of judgment, interpersonal understanding, self-confidence, and self-determination.

Julian et al (2021) has recognized a deficiency in professional skepticism as a factor leading to poor fraud detection outcomes. While Indrasti and Sari (2019) shows that managements accountants's with higher levels of professional skepticism are more proficient at assessing fraud risk. Waromi et al (2024) found that whistle blowing and professional skepticism have a significant effect on fraud detection and fraud audit training does not act as moderator in the relationship between professional skepticism and fraud detection.

In contrast, Shahibah et al (2020) studied auditors in Indonesia and examined whether professional skepticism moderates the effect of independence on audit quality. The study concluded that professional skepticism moderate the influence of relevant ethical factors on audit quality. Al-Rawashdeh et al (2024) focused on accountants in Jordan and explored the relationship between time budget pressure and external audit quality through the mediating role of professional skepticism. Their findings indicated that high professional skepticism positively affects audit quality, while time budget pressure negatively impacts skepticism, reducing its effectiveness among external auditors in Jordan.

Additionally, Endrawes et al (2023) investigated how culture moderates the relationship between accountability and professional skepticism. The study revealed that professional skepticism varies significantly across different cultural contexts.

Working Experience & Holding Professional Qualification

Working experience is often considered a key factor that enhances the effectiveness of professional skepticism in fraud detection. Experience provides management accountants with the practical knowledge and insight necessary to apply scepticism more effectively. Lilyana et al (2024) explored how working experience moderates the relationship between professional skepticism and fraud detection skills among internal auditors in Indonesia. Their findings indicate that increased working experience enhances the moderating effect of skepticism on auditors' ability to identify fraud. This aligns with the results from Limbong (2023). Experienced auditors are better equipped to apply their skepticism effectively due to their accumulated knowledge and exposure to various fraud schemes. On the other hand, Sulistyawati et al (2024) found that auditor expertise, including working experience, did not significantly impact their capacity to identify fraud. This finding suggests that while experience might provide practical knowledge, it does not necessarily translate into enhanced fraud detection.

A professional certification is a formal recognition granted by a professional association, signifying that an individual has met the prescribed criteria in academic, practical, and vocational competencies essential for a specific occupation (Abdulrahmon et al., 2018). Some widely recognized professional certificates for accountants include ACCA, ICAEW, CIMA, and others. Gandhi and Solanki (2024) conducted a study on the influence of professional qualifications on auditors' capacity to identify fraud. The study revealed a notable disparity in fraud detection abilities between Chartered Accountants (CAs) and individuals without CA certification.

Thus, the research hypothesis offered are:-

H1: The positive relationship between professional skepticism and the management accountant prevention and detection of fraud is stronger (weaker) for more (less) experienced auditors

H2: The positive relationship between professional skepticism and the management accountant prevention and detection of fraud is stronger (weaker) for more (less) those who have professional qualification

H3: The positive relationship between tone at the top and the management accountant prevention and detection of fraud is stronger (weaker) for those who have high(low) professional skepticism

Framework

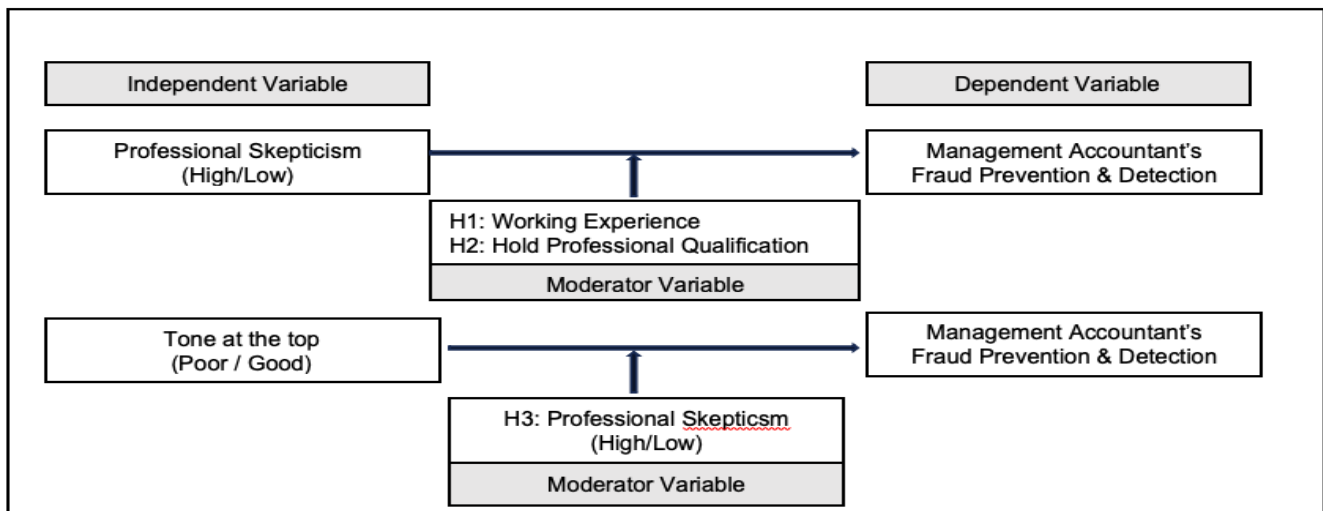


Fig. 1. Conceptual Framework

RESEARCH METHOD

This study utilized a quantitative research design to examines the moderating role of professional skepticism in the relationship between tone at the top and fraud prevention and detection among Management Accountants (MAs) in Malaysia. Additionally, it explores whether behavior that may help MAs detect fraud more successfully are linked to higher degrees of skepticism with working experience and holding professional licence as moderating effect .

The research hypotheses were tested using the statistical analysis method of Partial Least Squares Structural Equation Modeling (PLS SEM), as it is particularly suitable for moderation analysis. PLS-SEM uses indicator weights, unlike Covariance-Based SEM (CB-SEM), which depends on common factor models; thus, PLS-SEM is better suitable for this investigation since our constructs combine formative and reflective indicators. Furthermore, whereas PLS-SEM provides more flexibility in handling smaller or medium samples, CB-SEM calls for a large sample size to attain consistent estimations. Another key advantage of PLS-SEM is its strong predictive modeling capabilities, which align with the primary objective of this study—to enhance fraud prevention and detection strategies. Since Partial Least Squares Structural Equation Modeling (PLS SEM) is especially appropriate for moderation analysis, the research hypotheses were examined using that statistical analysis technique.

The data was obtained directly from management accountants who are registered members of the Malaysian Institute of Accountants (MIA). A web-based questionnaire was disseminated to the aforementioned accountants, yielding a total of 237 replies. The self-administered questionnaire was created based on a thorough examination of existing research consist of professional skepticism, tone of the top, and detection of financial statement fraud. Professional Skepticism, Tone at The Top, Fraud Prevention and Detection were measured using a 5-point Likert scale.

RESULTS AND DISCUSSION

Demographic profile of the respondents

This study involved 237 respondents. 152 individuals (64.1%) identified as female while 85 individuals (35.9%) identified as male. According to the results, 39 individuals (16.5%) were aged between 21 to 30 years

old, 155 individuals (65.4%) were aged between 31 to 40 years old, 36 individuals (15.2%) were above 41 years old, and only 7 individuals (3.0%) were below 20 years old. In addition, the finding indicates that 92.0% of the 237 respondents surveyed identified their ethnicity as Malay, while the remaining 8.0% identified themselves as Punjabi, with a total of 19 individuals falling under this category. The highest education completed by the participants varied, with 60 individuals (25.3%) having completed a Bachelor's degree, 138 individuals (58.2%) having completed a Master's degree, and 18 individuals (7.6%) having completed a PhD. Additionally, 20 individuals (8.4%) completed their professional qualifications, while only one person (0.4%) completed a Diploma. Out of the total respondents, 39 individuals (16.5%) held an ACCA (Association of Chartered Certified Accountants) license, while the majority, 198 individuals (83.5%), did not hold any of the listed professional licenses.

The result shows the distribution of respondents according to their working experience as an accountant. 95 of them (40.1%) had 2-5 years of experience, while 64 individuals (27.0%) had 6-10 years of experience. Additionally, 59 individuals (24.9%) had less than 1 year of experience, and 19 individuals (8.0%) had more than 11 years of experience. Furthermore, 8.9% are auditors, 7.6% are chief financial officers (CFOs), 0.4% are housewives, 17.7% are junior accountants, 8.0% are lecturers, 24.9% are managers, and 32.5% are senior accountants. Out of the 237 individuals surveyed, 162 of them, which is 68.4%, work in the private sector, while the remaining 75 individuals, which is 31.6%, work in the public sector. The result shows that 88.6% of the respondents, which is a total of 210 individuals, are not members of the Malaysian Institute of Accountants (MIA). On the other hand, 11.4% of the respondents, which is 27 individuals, confirmed that they are MIA members. Next, 175 (73.8%) reported that they were in a permanent employment status, while 62 (26.2%) indicated that they were on a contract basis. The majority of respondents (59.1%) work in organizations with more than 1,000 employees. 16.5% work in organizations with 500-1000 employees, 15.2% work in organizations with 100-500 employees, and 9.3% work in organizations with 51-100 employees.

Table 1 highlights that the respondents were predominantly female, Malay, and mid-career professionals holding Master's degrees, working mostly in the private sector and large organizations. This demographic composition reflects a highly educated and professionally active sample, which strengthens the relevance of the study findings for managerial accounting practices in Malaysia.

Table 1. Demographic profile

Variables	Category	Frequency (n=237)	Percentage (%)
Gender	Female	152	64.1
	Male	85	35.9
Age	Below 20 years old	7	3.0
	21 to 30 years old	39	16.5
	31 to 40 years old	155	65.4
	Above 41 years old	36	15.2
Race	Malay	218	92.0
	Punjabi	19	8.0
Highest education	Bachelor's degree	60	25.3
	Diploma	1	0.4
	Master's Degree	138	58.2
	PhD	18	7.6

	Professional Qualifications	20	8.4
Professional license	ACCA	39	16.5
	None of the above	198	83.5
Working experience	Less than 1 year	59	24.9
	2 – 5 years	95	40.1
	6 – 10 years	64	27.0
	More than 11 years	19	8.0
Current position	Auditor	21	8.9
	CFO	18	7.6
	Housewife	1	0.4
	Junior accountant	42	17.7
	Lecturer	19	8.0
	Manager	59	24.9
	Senior accountant	77	32.5
Sector	Private Sector	162	68.4
	Public Sector	75	31.6
Malaysian Institute of Accountants (MIA) member	No	210	88.6
	Yes	27	11.4
Employment status	Contract	62	26.2
	Permanent	175	73.8
	51-100	22	9.3
Number of employees	100-500	36	15.2
	500-1000	39	16.5
	More than 1,000	140	59.1

Descriptive statistics of the constructs and items

The table appears to represent the results of a survey or assessment of various constructs, along with the individual items used to measure each construct, as well as the mean and standard deviation of responses for each item. The constructs being measured include questioning mind, search for knowledge, suspension of judgement, interpersonal understanding, self-confidence, self-determination, tone at the top, procurement, payables, receivables, and general financial and payroll. Each construct is measured using several items, denoted by the item label. Mean scores indicate the average response to each item, while the standard deviation measures the variability of responses around the mean, with a larger standard deviation indicating more variability in responses. Overall, most of the items demonstrate a high score of mean based on the

guideline by Konting (2005) where 3.67 to 5 indicates high score, 2.33 to 3.66 suggests moderate score and below 2.33 indicates low score of mean.

Table 2 shows that most constructs had high mean scores (above 3.67), suggesting that respondents generally demonstrated strong professional skepticism traits and positive organizational practices. Notably, search for knowledge items scored the highest (means around 4.7–4.8), indicating that respondents actively seek new information in their professional roles. By contrast, self-determination showed relatively lower scores (means between 2.37–3.49), suggesting variable levels of confidence in exercising judgment under pressure.

Table 2. Descriptive statistics of the items

Constructs	Items	Mean	Std. Deviation
Questioning mind	QM1	4.42	0.951
	QM2	4.02	1.193
	QM3	4.74	0.448
Search for knowledge	SFK1	4.83	0.367
	SFK2	4.68	0.617
	SFK3	4.68	0.616
	SFK4	4.67	0.625
	SFK5	4.73	0.454
	SFK6	4.67	0.471
Suspension of judgement	SOJ1	4.44	0.755
	SOJ2	4.59	0.492
	SOJ3	4.29	0.600
	SOJ4	4.82	0.394
	SOJ5	4.43	0.644
Interpersonal understanding	IU1	4.12	1.096
	IU2	4.36	0.932
	IU3	4.29	0.908
	IU4	4.36	0.922
	IU5	4.28	0.995
Self-confidence	SC1	2.67	1.468
	SC2	4.25	0.922
	SC3	4.11	1.034
	SC4	4.17	1.141
	SC5	4.50	0.518
Self-determining	SD1	2.47	1.389
	SD2	2.95	1.542
	SD3	2.37	1.534
	SD4	2.77	1.516
	SD5	3.49	1.130
	SD6	3.46	1.047
Tone at the top	TT1	4.09	0.883

	TT2	4.39	0.514
	TT3	4.31	0.654
	TT4	4.47	0.526
	TT5	4.29	0.768
	TT6	4.30	0.627
	TT7	3.42	0.973
Procurement	PRO1	4.74	0.443
	PRO2	4.79	0.457
	PRO3	3.90	1.025
	PRO4	4.82	0.403
	PRO5	4.46	0.830
Payables	PAY1	4.81	0.430
	PAY2	4.75	0.426
	PAY3	4.73	0.613
	PAY4	4.50	0.751
	PAY5	4.27	0.899
	PAY6	4.26	0.983
	PAY7	3.91	1.165
	PAY8	3.64	1.086
	PAY9	3.67	1.062
	PAY10	4.74	0.431
	PAY11	4.83	0.374
Receivables	REC1	4.00	1.064
	REC2	4.41	0.847
	REC3	4.32	0.925
	REC4	4.48	0.857
	REC5	4.41	0.847
	REC6	4.48	0.852
General financial and payroll	GFP1	4.49	0.852
	GFP2	4.27	0.812
	GFP3	4.48	0.856
	GFP4	4.31	0.928
	GFP5	4.44	0.870
	GFP6	4.45	0.865
	GFP7	4.55	0.860
	GFP8	4.48	0.852
	GFP9	4.24	1.069

Partial least squares structural equation modeling (PLS-SEM)

Partial least squares (PLS) structural equation modelling was performed using the SmartPLS software version 4.0 (Ringle et al., 2022). This statistical tool permits to analyze the proposed measurement and structural

model, since survey research is normally not normally distributed and has the advantage of allowing for small sample sizes without relying on the assumption of data normality (Chin et al., 2003). Multivariate normality was tested by following Webpower website as recommended by Cain et al., (2017). The results showed that multivariate skewness was 5425.856 ($p < 0.01$), while multivariate kurtosis was 5523.454 ($p < 0.01$), suggesting that the data was not normal. As such we ran the bootstrapping procedure to generate the standard errors when testing the structural model. As recommended by Kock and Lynn (2012), we first examined the potential for Common Method Bias by assessing full collinearity. This approach involves regressing each variable against a common variable and if the variance inflation factor (VIF) is less than or equals 5, then, there is no bias resulting from the single data source. As shown in Table 3, the analysis produced a VIF less than 5, thus, common method bias is not a serious issue in our study.

Table 3. Full collinearity analysis

Constructs	VIF
Questioning mind	1.173
Search for knowledge	2.331
Suspension of judgement	3.202
Interpersonal understanding	1.250
Self-confidence	1.630
Self-determining	2.860
Tone at the top	1.890

Measurement model Assessment

In the assessment of reflective measurement model (stage 1), there are specific measures that include indicator reliability, internal consistency, convergent validity and discriminant validity. Reliability was assessed by first checking the indicator reliability based on outer loadings of at least 0.708 or higher however loadings higher than 0.5 is adequate if other items have the highest scores of loadings to complement AVE and CR. For AVE, it is suggested that AVE should be higher than 0.5 and CR should be higher than 0.70-0.90 (definitely 0.95) to be considered as satisfactory (Hair et al., 2019).

The measurement model results confirm satisfactory reliability and validity. After removing 15 items with low loadings, all constructs achieved AVE values above 0.5 and composite reliability above 0.7. This suggests that the measurement items adequately captured the intended constructs, providing a strong basis for testing the structural model.

Table 4. Measurement model

First Order Constructs	Second Order Constructs	Item label	Loadings	CR	AVE
Fraud prevention and detection				0.954	0.564
	Procurement			0.912	0.777
		PRO1	0.951		
		PRO2	0.788		
		PRO4	0.897		
	Payables			0.884	0.609
		PAY1	0.853		
		PAY2	0.743		
		PAY3	0.943		

		PAY10	0.601		
		PAY11	0.717		
	Receivables			0.974	0.862
		REC1	0.699		
		REC2	0.952		
		REC3	0.958		
		REC4	0.971		
		REC5	0.982		
		REC6	0.974		
	General financial and payroll			0.983	0.866
		GFP1	0.989		
		GFP2	0.888		
		GFP3	0.979		
		GFP4	0.926		
		GFP5	0.958		
		GFP6	0.969		
		GFP7	0.929		
		GFP8	0.987		
		GFP9	0.722		
	Professional skepticism	-	-	-	-
	Questioning mind			0.796	0.572
		QM1	0.900		
		QM2	0.599		
		QM3	0.740		
	Search for knowledge			0.966	0.905
		SFK2	0.989		
		SFK3	0.872		
		SFK4	0.988		
	Suspension of judgement			0.877	0.707
		SOJ1	0.856		
		SOJ2	0.701		
		SOJ5	0.946		
	Interpersonal Understanding			0.909	0.670
		IU1	0.943		
		IU2	0.845		
		IU3	0.666		
		IU4	0.867		
		IU5	0.741		
	Self-confidence			0.903	0.816

		SC1	0.792		
		SC2	0.936		
		SC3	0.979		
		SC4	0.907		
		SC5	0.893		
	Self-determining			0.829	0.556
		SD1	0.615		
		SD2	0.736		
		SD3	0.939		
		SD4	0.649		
	Tone at the top			0.907	0.591
		TT1	0.726		
		TT2	0.960		
		TT3	0.921		
		TT4	0.584		
		TT5	0.819		
		TT6	0.710		
		TT7	0.567		

In this study, fifteen items were removed due to low factor loading (< 0.5). Consequently, the AVE for all constructs have met the satisfactory level of AVE result of 0.5. Furthermore, all constructs have also achieved the composite reliability acceptable values of 0.7. The discriminant validity using the new suggested method by Henseler et al. (2015) through the Heterotrait-Monotrait ratio of correlations (HTMT) values are lower than 0.90. This confirmed discriminant validity. (Refer Table 5).

Table 5. Discriminant validity (HTMT)

	1	2	3	4	5	6	7	8	9
1. Fraud Prevention & Detection									
2. Interpersonal Understanding	0.260								
3. Professional Skepticism	0.253	0.687							
4. Questioning Mind	0.533	0.390	0.776						
5. Search for Knowledge	0.368	0.382	0.516	0.452					
6. Self-confidence	0.503	0.174	0.481	0.488	0.489				
7. Self-determining	0.465	0.359	0.566	0.359	0.364	0.426			
8. Suspension of Judgement	0.569	0.300	0.650	0.875	0.878	0.689	0.399		
9. Tone at the top	0.547	0.551	0.553	0.680	0.496	0.486	0.313	0.704	

Structural model Assessment

Path coefficients, standard errors, t-values, and p-values for the structural model using a 10,000-sample resample bootstrapping approach were presented in accordance with Hair et al. (2019) and Ramayah et al. (2018). Table 6 shows the summary of the criteria used for hypotheses testing. As shown in Table 6, the positive relationship between professional skepticism and the management accountant prevention and

detection of fraud is stronger for less experienced accountant ($\beta = 0.620$, $p < 0.01$), while, providing support to hypothesis H1. This indicates that working experience moderates the relationship between professional skepticism and the management accountant prevention and detection of fraud. In addition, the positive relationship between professional skepticism and the management accountant prevention and detection of fraud is stronger for those who have professional qualification ($\beta = 0.746$, $p < 0.01$), thus, providing support to hypothesis H2. This finding concludes that professional license moderates the relationship between professional skepticism and the management accountant prevention and detection of fraud.

Next, tone at the top, reveals significant positive effect on accountant's ability to prevent and detect fraud ($\beta = 0.473$, $p < 0.01$). The finding suggests that for every unit increase in tone at the top will increase 0.473 in accountant's ability to prevent and detect fraud.

Finally, H3 was not supported based on $p > 0.05$, suggesting that professional skepticism does not moderate the relationship between the tone at the top and the management accountant prevention and detection of fraud.

According to Hair et al. (2019) R^2 values of 0.968 reveal that 96.8% of total variation in accountant's fraud prevention and detection is explained by all variables in the model. The Q^2 value for business success is larger than 0, indicating that the model has sufficient predictive relevance. After examining the structural model, two hypotheses were supported in this study

In summary, Table 6 indicates that H1 and H2 were supported, while H3 was not. Specifically, the effect of professional skepticism on fraud prevention was stronger for less experienced accountants and those with professional *licenses*. This suggests that professional credentials and early-career vigilance enhance accountants' fraud detection capabilities. However, professional skepticism did not significantly moderate the effect of tone at the top on fraud prevention, implying that organizational culture and leadership influence operate independently from individual skepticism levels.

Table 6. Hypotheses testing

		Std beta	t-value	p-value	LL	UL	Decision
H1	Working experience (less than 1 year) x Professional Skepticism -> Fraud Prevention & Detection	-0.481	1.174	0.120	-1.382	-0.194	Not Supported
	Working experience (2-5 years) x Professional Skepticism -> Fraud Prevention & Detection	0.620	2.442	0.007***	0.106	0.836	Supported
	Working experience (6-10 years) x Professional Skepticism -> Fraud Prevention & Detection	0.007	0.053	0.479	-0.088	0.378	Not Supported
H2	Hold professional license x Professional Skepticism -> Fraud Prevention & Detection	0.746	4.018	0.000***	0.383	1.009	Supported
H3	Professional skepticism x Tone at the top -> Fraud Prevention & Detection	0.186	1.546	0.061	0.107	0.552	Not Supported

Note:

Significant at **5% level

CONCLUSION AND RECOMMENDATION

Our findings have significant implications for fraud prevention and detection among management accountants (MAs). The findings revealed that tone at the top significantly influences fraud prevention and detection.

However, professional skepticism did not demonstrate a significant moderating effect. This suggests that even though management accountants have high/low professional skepticism, it does not necessarily increase their ability to detect financial statement fraud if the tone at the top is poor.

The non-significant result may be explained by several theoretical and contextual factors. First, professional skepticism is often associated with auditors rather than MAs. While auditors are trained to adopt a questioning mindset, MAs may be more embedded within management structures, which could reduce the independent exercise of skepticism. Second, organizational and cultural contexts in Malaysia may discourage MAs from openly challenging management, thereby limiting the effect of skepticism even when present. This aligns with Attribution Theory, which suggests that situational pressures (such as tone at the top and organizational culture) may override dispositional traits (such as skepticism).

Besides, the study also reveals that professional skepticism significantly enhances fraud prevention and detection among MAs, particularly for less experienced accountants and those holding professional qualifications. This result fits with Attribution Theory, which holds that less experienced accountants sometimes base their fraud risk estimates more on outside cues such as professional training, ethical norms, and leadership direction. Conversely, experienced accountants may develop internalized decision-making heuristics, hence reducing their reliance on outside skepticism cues. By combining a theoretical framework and applying PLS-SEM, which was selected depending on the complexity of the model and the predictive character of the study, this study helps to contribute to the limited body of knowledge on MAs in Malaysia.

In addition, this study also contributes to the literature by extending prior research on fraud prevention and detection beyond external and internal auditors to include MAs, a group that has received less attention despite their important role. It also demonstrates that while tone at the top has a clear and direct influence, skepticism may not always operate as a moderating factor, particularly in cultural contexts where hierarchy and authority are emphasized.

From a practical standpoint, the findings emphasize the need for organizations to establish and reinforce a strong ethical tone at the top. Even highly skilled MAs may struggle to exercise independence if the organizational environment does not support ethical conduct. Therefore, regulators, professional bodies, and policymakers should focus not only on strengthening technical skills and professional skepticism training, but also on creating structural safeguards that empower MAs to act objectively.

Regulators and professional associations should develop training modules that emphasize the practical application of professional skepticism in managerial contexts. At the organizational level, whistleblowing mechanisms and protection should be strengthened to reduce employees' fear of challenging unethical practices. Furthermore, senior leaders must be held accountable through governance frameworks that explicitly link ethical behavior to performance evaluations, thereby fostering a culture of integrity and accountability.

Limitations

There are several limitations in this study. Firstly, the participants in the study were exclusively members of the Malaysian Institute of Accountants (MIA) who worked as management accountants in Selangor and Kuala Lumpur, Malaysia. As a result, the sample size was rather small. Future research should include MAs from other regions of Malaysia and different industries to broaden applicability. Second, this study relied on self-reported survey data, which may be affected by response bias. Future studies could use mixed methods, such as interviews or case studies, to triangulate the findings.

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