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## The Effect of Internal Auditors' Involvement in Enterprise Risk Management on Internal Audit Objectivity: Evidence from Malaysia

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#### Authors' contributions

This work was carried out in collaboration between both authors. Authors MK and SBT designed the study, managed the literature searches, as well as performed and interpreted the statistical analysis.

Both authors read and approved the final manuscript.

#### Article Information

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#### **ABSTRACT**

In the last two decades, the role of internal auditors has been growing significantly within organizations, especially in some specific areas such as Enterprise Risk Management (ERM) and internal control. The purpose of conducting this study is twofold: First, to determine the level of internal auditors' involvement in the ERM process in order to examine their compliance with the recommendations of the Institute of Internal Auditors (IIA). And second, to investigate the effect of this involvement on the objectivity of internal auditors. A quantitative method has been used based on a cross-sectional survey. The data has been collected from 119 participants who are members of the Institute of Internal Auditor Malaysia (IIAM). The findings of the study indicate that the majority of internal auditors in Malaysia are low involved in the ERM process. Also, found that internal audit objectivity is affected by the level of internal auditors' involvement in ERM. This study would contribute to enrichment the literature of internal auditing by describing how internal auditors in Malaysia perceive their current role concerning ERM activities and reinforce the need for internal auditors to adhere to the recommendations of the IIA by avoiding the participation in the roles that could impair their objectivity.

Keywords: Internal auditor; internal audit objectivity; enterprise risk management; involvement.

#### 1. INTRODUCTION

In the recent years, the internal audit function has subjected to dramatic changes which have resulted in expanding its scope in order to make a better contribution to serve the organizations. This expansion, especially in the scope of assurance and consulting services, has been influenced by many factors such as regulatory environment and economic complexity [1]. This has allowed internal auditors to assume responsibilities and cover management audit and financial audit instead of taking accounting audit only, as well as adapt to the constantly emerging changes in economic and business environment [2,3,4]. However, the context of internal auditing has known a clear deficiency in the suggestions and explanations about the most appropriate positioning of internal auditing [5]. Thus, the role of internal auditors especially in providing assurance and consulting services raised serious issues and big challenges for internal auditors about the balance between performing their role and maintaining their essential characteristics.

Moreover, since the issuing of the last definition of internal auditing by the IIA and the releasing of the integrated framework of Enterprise Risk Management by the Committee of Sponsoring Organizations of the Treadway Commission [6], the role of internal auditing has been grown significantly towards improving the areas of internal control, risk management, governance by providing objective assurance and consulting services in a variety of ways [3,7,8]. These incidents shed light also on the role of internal auditors in ERM, which gained the attention of many researchers and professionals [9,10,11]. However, when internal auditors perform their role regarding ERM process, serious threats may arise which could impair their independence and objectivity. Recognising this possibility, several bodies and researchers expressed concerns over this risk delineating and explaining the role of internal auditors in this area. In particular, the IIA [12] issued a position statement to clarify the role of internal auditors regarding ERM activities which have been listed in three categories: 1) the core roles, where internal auditors coordinate with management (assurance activities); 2) the legitimate roles with safeguards; and 3) roles should not undertake.

Even though the IIA and many researchers underlined that the increased involvement of internal auditors in ERM especially in the prohibited roles could pose a threat to internal audit objectivity [7,12,13], there are also different points of view that claim that the changing role of internal audit imposes internal auditors to perform more responsibilities. For instance, David Landsittel the former chairman of COSO and the Auditing standards board of AICPA gave his view on what role an internal auditor should play in ERM process when he stated "I think there is an opportunity for internal auditors ... to play a key role that extends beyond the assurance process. That's because the skills and the relationships of internal auditors are consistent with what is needed in building an ERM process ..." [14, p.47]. Further, Thompson [10] claimed that the internal auditors are expected to be increasingly involved in ERM process without impairing their independence and objectivity.

Accordingly, it is observed that there are two different opinions concerning the role of internal auditors in ERM. This debate increases the need for examining the validity of each argument by investigating the implications of the internal auditors' involvement in ERM on internal audit objectivity. While a few studies addressed this issue in terms of examining the willingness of internal auditors of remain objective when they perform their role concerning ERM process as well as studying the interaction between these two concepts [7,15,16], the authors are not aware of any study conducted in Malaysia. Therefore, the main objective of this study is to investigate whether the level of internal auditors' involvement in ERM affects internal audit objectivity. This objective provides the key motivations for conducting this study, taking into consideration that scope of the problem is revolved around the different effects of high involvement and low involvement of internal auditors in ERM on internal audit objectivity. Before addressing this relationship, the current study also poses the following research questions in order to provide further descriptive statistics about the use of ERM within the Malaysian organizations and to determine the level of internal auditors' involvement in ERM process:

**RQ**<sub>1</sub>: To what extent is ERM used in respondents' organizations?

RQ<sub>2</sub>: To what extent should internal auditors in Malaysia involved in Enterprise Risk Management process?

The remainder of this article is structured as follow: The next section provides a review of previous research and the development of the hypothesis. Then, discuss the methodology of the study. In the final section, the results of the study are interpreted and discussed, followed by the conclusion.

## 2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

### 2.1 Underpinning Theory

There are several theories have been adopted over years in the literature of internal auditing to justify the status of internal audit department in the organizational structure, to explain the role of internal audit function within organizations internal control and especially in management; as well as to design a framework of internal audit effectiveness and its related factors. As a matter of fact, studies on the topic of internal auditing have traditionally been conducted under the cover of agency theory framework [17]. However, Mihret, James and Mula [18] have argued earlier that these neoclassical theories including agency theory were confined to limited research in internal auditing. They criticized the ability of these theories in enriching internal audit research and the development of internal audit operations in a diverse range of setting, as well as the assumption that organizational phenomena are driven by the individuals' pursuit of maximizing their self-interests only [19]. Therefore, the institutional theory was suggested due to its useful implications regarding the context of internal auditing.

Institutional theory explains how changes induced by institutional pressures shape organizational structures and practices [18]. According to the institutional theory perspective, the organizational structures and practices are shaped depending on normative factors including laws, regulation, and functions. In the context of internal auditing, the institutional theory provides means to understand the weaknesses of conforming and legitimating processes which can lead to the failure in the establishment of internal audit departments [20]. Internal auditing fits into this means as a result of the effects of the governments and professions [18]. These

influences may come from the internal and external factors that exert pressure on the organizations.

Institutional theory is considered also as a framework for analyzing social phenomena that view the social world as a group of institutions and a set of rules, practices, and structures as well as examining the compliance of people with those regulations [21]. Moreover, an institutional theory has many implications relating to internal audit especially in companies that are exposed to high level of risk. In this case, organizations as a part of their process of managing risks may internal audit departments establish compliance with some laws or standards. This proposes a positive relationship between the level of risk exposure within an organization and internal audit profession. Therefore, it is clear that the institutional theory is valid for research of internal auditing in the context of both developing and developed countries. Thus it is mainly used in this study to understand the level of internal auditors' compliance with the recommendations about performing their role regarding ERM process and their compliance with the ISPPIA regarding their commitment to internal audit objectivity.

## 2.2 Internal Audit Objectivity

The definition of internal auditing explicitly stated that internal audit is an independent function, and the internal auditors should remain objective in performing their work. Objectivity is a crucial element for any person who attempts to provide a professional judgment or opinion. In the concept of internal auditing, objectivity is one of the most crucial elements for internal audit function and its effectiveness [22]. Internal auditors should be objective in providing the services of assurance and consulting within their organizations. In this way, objectivity ensures that the decision or the judgment made by internal auditors is an unbiased opinion that is not subjected to any social pressures or familiarity. In the definition of objectivity in the Standard 1100 of the ISPPIA, the IIA describes the objectivity as a state of mind and recommended the internal auditors to have an impartial and objective attitude to avoid any conflict of interest that can undermine their confidence [23].

Previous studies addressed the issue of internal audit objectivity in a variety of ways in term of the evaluation of factors that can affect this characteristic, but there is a consensus among researchers that the environment of companies and the organizational status of internal audit function contain several threats that can compromise the objectivity of internal auditors. Mutchler [24] examined the objectivity by identifying the influence of a number of concepts including self-review, social pressure, familiarity, personal relationship and economic interest. Similarly, Endaya and Hanefah [25] addressed internal audit objectivity by evaluating some conditions that can threaten the ability of internal auditors to perform their responsibilities in an unbiased manner. Goodwin [26] earlier stated that the internal auditors, especially in private sectors, may not enjoy the day to day objectivity required to fulfill their duties adequately. This uncomfortable feeling towards the objectivity may come from the various social pressures that can restrain the internal auditors while carrying out their daily work. These pressures may come from several individuals and organizational factors such as the relationship of internal auditors with their senior managers. Haas [27] argued that the pressure on the internal auditors exerted by senior management to serve more may diminish the ability of internal auditor to remain objective.

Moreover, De Zwaan et al. [7] assessed internal audit objectivity by investigating the willingness of internal auditors to report the breakdown in risk procedure when they perform their role regarding ERM process. It has been noticed that there are several factors that can affect the internal audit objectivity due to the scope and the nature of internal audit function. These factors may come from the various social pressures that can restrain the internal auditors during performing their tasks and make them feel uncomfortable toward the commitment to the standards of internal audit objectivity.

## 2.3 The Involvement of Internal Auditors in ERM

As discussed earlier, the main role of internal auditing regarding ERM is to evaluate and improve the effectiveness of ERM by providing objective assurance and consulting service to the board and senior management about the progress risk management activity [12,28]. However, the internal auditors may extend their involvement in ERM to include further activities compared with the traditional tasks. Fraser and Henry [29] indicated that internal auditors and audit committee are becoming increasingly

involved in ERM and its related activities. This involvement requires a redesigning of internal audit plans and the role of internal auditors.

The IIA aims to delineate the role of internal auditors in ERM by resuming three categories of ERM roles. Table 1 specifies the list of activities under each category of role. According to IIA, the first row of the table represents the assurance activities which are considered as the core internal audit role in ERM. This is a part of providing objective assurance to the board and senior management on the effectiveness of ERM activities within an organization. The second row shows the legitimate roles with safeguards which represent the consulting services that the internal provide regarding auditors may Undertaking consulting roles by internal auditors require certain safeguards and conditions to ensure that the internal audit activity is operating properly without compromising the nature of internal auditors. However, the last row of the table shows the category of roles labeled as prohibited roles that the internal auditors should not undertake because they could violate their independence and objectivity [12]. In this classification, the IIA provides recommendations for internal auditors for best practice of internal audit role regarding ERM process as well as to maintain the independence and objectivity required by IIA professional standards.

The involvement of internal auditors in ERM gained a sufficient attention in the prior literature. For example, Fraser and Henry [29] in a study conducted in the UK concluded that the internal auditors can be extensively involved in ERM. Another study reported by Gramling and Myers [30] found that internal audit was primarily responsible for implementing ERM process in many organizations which is inconsistent with recommendations of the IIA.

Further, Arena and Azzone [31] addressed the internal auditors' involvement in ERM as independent factors that can affect the effectiveness of internal audit function. A latest study conducted by [32] indicated that the internal audit functions are significantly involved in performing assurance, but provide a very limited role of consulting services. For the current study, the involvement of internal auditors is investigated as a level which is required to be categorized into two values. Adopted from De [7], the low involvement of internal auditors in ERM includes only the activities that considered by the IIA as the core roles of internal auditors in ERM

Table 1. The role of internal auditors in ERM process

### Core internal audit roles in regard to ERM (

Giving assurance on risk management processes

Giving assurance that risks are correctly evaluated

Evaluating risk management processes

Evaluating the reporting of risks

Reviewing the management of key risks

Facilitating identification and evaluation of risks Coaching management in responding to risks

Coordinating ERM activities

Consolidating the reporting on risks

Maintaining and developing the ERM framework

Championing establishment of ERM

Developing risk management strategy for board

Approval

Roles internal audit should not undertake

Legitimate internal audit roles with

safeguards

Setting the risk appetite

Imposing risk management processes
Management assurance on risks
Taking decisions on risk responses

Implementing risk responses on management's

behalf

Accountability for risk management

Source: IIA (2009)

process, while the high involvement is considered as a situation when internal auditors are increasingly involved in all three categories.

### 2.4 Hypothesis Development

The compatibility between performing some management responsibilities and maintaining internal audit objectivity has become the main concern among researchers and official bodies of the internal audit function. For instance, the role played by internal auditors in risk management has been discussed over years. As mentioned earlier, after the issuing of the ERM integrated framework by COSO [6], there has been a global shift towards the risk-based internal audit approach. To delineate the role of internal auditors in this area, the IIA [12] classified three categories of internal auditors' activities regarding the assurance and consulting services in ERM and determined which activities are the core role of internal auditors and which are likely to impair their independence and objectivity. Accordingly, there was a growing body of evidence in the literature to argue that high involvement of internal auditors especially in some inappropriate ERM activities could influence their independence and objectivity [3,29,30]. In addition, Stewart and Subramaniam [13] findings showed that conducting a dual role of assurance and consulting services regarding ERM increases the probability of affecting the objectivity of internal auditors negatively.

Similarly, latest study conducted by [33] concluded that internal auditors may face some challenges to maintain their independence and objectivity when they perform a dual role, especially if they need to balance between the assurance and consulting roles. These arguments are generally agreed with the assumptions of the IIA that defined some ERM services as forbidden roles for internal auditors. [7] also found that low internal auditors' involvement in ERM permit them to report the breakdown objectively compared to a situation where they have a high involvement.

According to the above discussion, the present study thus argues that the involvement of internal auditors in the assurance activities regarding ERM which considered in the context of the study as low involvement would maintain internal audit objectivity. In contrast, high involvement of internal auditors in ERM including those activities deemed as should not be undertaken would impair internal audit objectivity. Therefore, it is argued that there is a significant difference between high involvement and low involvement of internal auditors in ERM process in terms of their effect on internal audit objectivity. Thus, the hypothesis of this study is formulated as follow:

**H**<sub>1</sub>: The effect of low internal auditors' involvement in ERM on internal audit objectivity will be significantly different compared to the effect of high involvement.

#### 3. METHODOLOGY

## 3.1 Sample of the Study

The population of the study comprised the internal auditors who are currently working in both private and public sectors organizations in Malaysia. However, the subjects of the study were limited to the members of the Institute of Internal Auditors Malaysia IIAM [34]. determine the minimum sample size required for this study, the power of analysis test was conducted using G-Power software. Accordingly, the minimum sample size was computed as 107. The survey was conducted through email with the assistance of the IIAM. The advantage of the assistance of the IIAM in the process of data collection is to firmly keep the anonymity of the respondents to ensure the privacy of the data, thus enhance the quality of the information provided. Simple random sampling technic has been used to collect data in order to give each element of the population equal and known chance of being selected in the main sample. Thus, a total of 119 valid responses were collected to test the hypothesis of the study.

## 3.2 Variables and Measurements

The present study addresses the relationship between the involvement of internal auditors in ERM process and internal audit objectivity. In other words, tow variables are used in developing the hypothesis of the study which argues that the level of internal auditors' involvement could differently affect their objectivity. Accordingly, the dependent variable of the current study is internal audit objectivity. As mentioned earlier, Objectivity is defined as a state of mind in which negative effects in performing tasks and assessments are avoided. As mentioned above, Mutchler [24] stated that objectivity is a set of desired characteristics of the individuals or groups who make the necessary decisions, assessments, judgments. He also categorized and identified such important indicators that may threaten and measure the objectivity in the same time which include: self-review, social pressure, economic interests, familiarity, personal relationship, cognitive bias; and cultural, racial and gender bias. Further, Endaya and Hanefah [25] developed these concepts as items for the measurement of internal audit objectivity. The current study adopts the same technic to measure this variable based on six items framed

in terms of five-point Likert scale as a score. The values of the measurement scale of objectivity are ranging from 1= Not influence at all; to 5= Total influence.

The independent variable of this study is the level of internal auditors' involvement in Enterprise Risk Management (ERM). This involvement is defined as a situation in which the internal auditors are extensively involved in all three categories of ERM activities as it identified by the IIA [7]. To measure this variable, the present study adopted the classification roles recommended by the IIA in its position statement which are identified as follow: 1) the core internal audit roles in ERM, 2) the legitimate role with safeguards; and 3) roles should not undertake [12]. The measurement of the level of involvement will be manipulated at either a high or low level following the method of De Zwaan et al., [7]. The aim of this method is to investigate whether there is a significant difference between high involvement and low involvement of internal auditors in ERM, in terms of their effect on internal audit objectivity. Therefore, five points Likert Scale are used to measure these items ranging from 1= No responsibility; to 5= Total responsibility.

# 4. DATA ANALYSIS, RESULTS AND DISCUSSION

## 4.1 Descriptive Statistics

The objective of data analysis is to test the goodness of the collected data and examine the hypotheses developed for the study [35]. First, using SPSS 23, the pre-test of the data includes identifying the reliability of the questionnaire by computing the Cronbach's alpha coefficient of the constructs. The results indicate that the values of Cronbach's Alpha for both internal auditors' involvement and objectivity were greater than the minimum acceptable level of 0.7 (0.893 and 0.884 respectively) which suggest an adequate reliability of measures recommended by [36]. In order to answer the first research question of the study, the respondents were required to provide information regarding the status of ERM process within their organizations. The responses to this question are presented in table 2. The results show more than 26 percent of the organizations are currently considering the relevance of ERM, and more than 67 percent of the organizations have adopted ERM. Further, only 6 percent of the organizations were audit firms. These results are taking into consideration that the researcher ignored the responses of the internal auditors who work in the organizations that do not consider or reject ERM process.

#### 4.2 T-test Result

In order to answer the second research question as well as to test the hypothesis of the study, the independent variable must be categorized first into two values or groups as follow: i) High involvement of internal auditors in ERM; ii) Low involvement of internal auditors in ERM. In the same vein, the mean of the dependent variable internal audit objectivity has been computed in order to understand the effect of the levels of internal auditors' involvement. To test the research hypothesis, a so-called independence T-Test has been conducted in order to compare the significant differences between the variances of the two groups in terms of their effect on internal audit objectivity. The result of categorizing the level of internal auditors' involvement in ERM is presented in table 3. According to table 3, there are 98 internal auditors were low involved in ERM process. while 21 were high involved. This result indicates that the great majority of internal auditors (more than 82%) in the sample comply with the standards and recommendations of the IIA regarding their role in ERM [12].

The results of partitioning each independent variable into two groups as illustrated in table 3 help the researcher to perform T-test in order to assess the significant differences between the two groups in terms of their effects on internal audit objectivity. To illustrate, an independent samples T-test was carried out to compare between high involvement and low involvement in terms of the effect of each group on internal audit objectivity. The results of the independent samples T-test is therefore shown in table 4. The result of this analysis indicates that the hypothesis of the study was found to be statistically supported with T-Statistics is computed as 3.586 and P value is statistically significant (P < 0.05). In other words, the results indicate that the level of internal auditors' involvement in ERM process really does have an effect on internal audit objectivity. Specifically, our results suggest that the effect of high internal auditors' involvement in ERM process on internal audit objectivity is significantly different than the effect of low involvement in FRM.

Theoretically, earlier literatures support the finding of the current study which indicated that the effect of high internal auditors involvement in ERM on internal audit objectivity differs than the effect of low involvement (see for example: [7] and [13]). Further discussions on the results are provided in the next section.

**Table 2. Status of ERM Process** 

	Classification	Freq.	Per. (%)
Enterprise Risk Management Status	The organization is currently considering the relevance of ERM for enterprise	31	26.1
managoment etatae	The organization has recently adopted ERM, but the implementation is not fully complete	39	32.8
	The organization has recently adopted ERM, and implementation is relatively mature	21	17.6
	The organization adopted ERM several years ago, and infrastructure is mature	20	16.8
	The organization is an audit firm	8	6.7
	Total	119	100%

Table 3. Groups statistics (level of involvement / N=119)

Level of involvement	Compute mean of internal audit objectivity				
	Group (N)	Percentage (%)	Mean	Std. Deviation	
Low involvement	98	82.35	3.48	0.676	
High involvement	21	17.65	2.89	0.740	

Table 4. Independence samples T-test results

Hypothesis path (Equal variance assumed)	T Statistics	P-Value (Sig. 2Tailed)	Results
Level of Involvement> IA. Objectivity	3.586	0.000	Supported

#### 5. SUMMARY AND CONCLUSION

## 5.1 Current Responsibility in ERM Process

In the questionnaire of this study, the respondents referred on a five-point scale their responsibilities regarding the various activities of internal auditors in ERM process. As discussed earlier, the IIA [12] categorized the responsibility of internal auditors in this area as core roles. legitimate roles with safeguard and roles should not undertake. The results of the survey indicate that the respondents of this study consider the core and legitimate roles as very important activities and lie under their main responsibility. However, the involvement of the respondents in the prohibited roles was lower. This shows that the internal auditors in Malaysia have more independent and objective perceptions regarding their responsibilities in ERM process and thus comply with the recommendations of the IIA [12]. This result is in accordance with the outcomes of institutional theory in this regards.

Comparatively, similar findings were reported by De Zwaan et al. [7] in Ausitralia and Cuevas, Mortsjo and Anilane [37] in Sweden when they concluded that internal auditors do not wish to involve in the unauthorized roles. On the contrary, a study by Gramling and Myers [30] states that internal auditors took some activities which considered as not recommended. Fraser and Henry [29] likewise found that the internal auditors in the UK can be significantly involved in ERM. Further, as observed by Selim et al. [15], it is extremely important to keep in mind the cultural differences between the countries when comparing the results of the current study with the results of other contexts' studies.

# 5.2 Summary and Implications of the Study

The findings of the present study indicate that high involvement of internal auditors in ERM process is significantly different than low involvement in terms of their effects on internal audit objectivity. In the situation where the internal auditors have high involvement in ERM process, internal audit objectivity was found to be negatively influenced in terms of compromising the characteristics used in the evaluation of the objectivity of internal auditors. This result collaborates with other findings documented by prior studies in this regards. For instance, it was

previously found that Performing consulting services regarding ERM activities pose serious threats to independence and objectivity in forms of social pressure, economic interest, self-review and familiarity [16,38]. The evaluation of objectivity in this study is totally consistent with these arguments as the same characteristics are used. In addition, other studies concluded that the engagement in the non-recommended roles could imperil internal audit independence and objectivity [29,39]. On the contrary. low involvement of internal auditors in ERM process would positively affect internal audit objectivity. Low involvement of internal auditors is considered in this study as the thoughtful which involvement complies with recommendations of the IIA [12] in this regards. Moreover, De Zwaan et al., [7] found that the internal auditors will objectively report the breakdown in risk procedures when they have low involvement in ERM compared to when they have high involvement. To conclude, it can be argued that this significant difference found between high and low involvement in ERM in terms of their effects on internal audit objectivity is reflecting the assumption that high involvement of internal auditors in ERM would impair their objectivity, and conversely, low involvement would maintain the objectivity of internal auditors when they perform their regarding ERM process. In this case, low involvement is represented in the participation of internal auditors in the roles recommended by the IIA which considered as thoughtful involvement.

Furthermore, the significant implications of this research are twofold; theoretical and practical. First, from the theoretical perspective, the literature of internal auditing is extended through this research by investigating the objectivity of internal auditors within a specific area, namely enterprise risk management. Inspiring by previous studies, this research advances theory by identifying the effect of the level of internal auditors' involvement in ERM process on internal audit objectivity. Second, from the practical perspective, the study shed light on the role of internal auditors in ERM process, identifies several cases from different contexts in this regard and discusses the implications on the objectivity of internal auditors. This research also descriptive evidence provides current status of ERM within the Malaysian organizations and describes how internal auditors in Malaysia perceive their role regarding ERM process.

#### 5.3 Conclusion

This paper provides evidence that the effects of the level of internal auditors' involvement in ERM on internal audit objectivity are double-edged. The findings show that high internal auditors' involvement in ERM process can negatively influence internal audit objectivity compared to the situation when the involvement is low. This result is consistent with the assertions of the IIA regarding the role of internal auditors in ERM and reinforces the needs to adhere recommendations. Further, the findings of the study provide additional support for the results of Ahmad and Taylor's [2] study in Malaysia where they found that the influences of the role ambiguity and role conflict on internal auditors' commitment to their independence were low. This indicates that the Malaysian internal auditors do not perceive any conflict from their dual role of assurance and consulting. This would also highlight the importance of internal audit objectivity as one of the key individual characteristics of internal auditors.

Moreover. this study associated regarding its scope, research limitations framework development, and data collection. First, the research design of this study uses cross-sectional survey where the findings of the study are based on a modest sample size of 119 units. This method of data collection also associates with many problems including response bias. The authors attempted to minimize this disadvantage by collecting the data through email which is considered less biased than the face-to-face method. Next, all respondents of the study were members of the Institute of Internal Auditors Malaysia (IIAM). Hence, there is a possible bias towards professional internal auditors compared to those who are members but they are tentatively employed as internal auditors.

As a result of these opportunities arising from the limitations of the study, future research can cover a larger sample of internal auditors in Malaysia and conduct a deep comparison study between the members and the non-members of the Institute of Internal Auditors Malaysia (IIAM) in terms of their compliance with internal audit standards and investigate the implications on internal audit objectivity. This could help in understanding the benefits of being members in the IIAM for the Malaysian internal auditors.

#### **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

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