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## Internal auditor and internal whistleblowing intentions : a study of organisational, individual, situational and demographic factors

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**INTERNAL AUDITORS AND INTERNAL WHISTLEBLOWING  
INTENTIONS:  
A STUDY OF ORGANISATIONAL, INDIVIDUAL, SITUATIONAL AND  
DEMOGRAPHIC FACTORS**

**SYAHRUL AHMAR AHMAD**

A thesis submitted in partial fulfilment of the requirements for the degree of

**Doctor of Philosophy**

**School of Accounting, Finance and Economics  
Faculty of Business and Law  
Edith Cowan University  
Western Australia**

**April 2011**

**INTERNAL AUDITORS AND INTERNAL WHISTLEBLOWING  
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**School of Accounting, Finance and Economics  
Faculty of Business and Law  
Edith Cowan University  
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**Principal Supervisor : Professor Malcolm Smith**

**Co-Supervisor : Dr Zubaidah Ismail**

**April 2011**

## USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

## ABSTRACT

Whistleblowing is a type of ethical decision-making behaviour, and it has been one of the positive outcome behaviours investigated in the ethical decision-making literature. The issue has garnered widespread attention since the collapse of global multinational companies which lead to the passage of the renowned Sarbanes-Oxley Act of 2002. Since then a vast amount of research has been conducted in the whistleblowing stream, though it is still predominantly taking place largely in western countries. Such studies as have been undertaken in Asian countries neglect to consider how Malaysian respondents might play their roles in undertaking this type of ethical decision-making behaviour.

There have been arguments in the whistleblowing literature on whether the internal reporting of corporate wrongdoings should be considered as an internal whistleblowing act, and whether internal auditors should also be regarded as whistleblowers. Despite the fact that internal auditors hold a unique position in their organisations to prevent, deter and detect corporate wrongdoings, the role of this profession in investigating ethical decision-making behaviour has been much neglected. Hence, there is little research concerning internal auditors' internal whistleblowing intentions in the literature. The purpose of this study is to investigate internal auditors' internal whistleblowing intentions on corporate wrongdoings in Malaysia.

Theoretically, the study explored individual's prosocial behaviour theory and organisational ethical climate theory to provide the general framework for predicting internal auditors' internal whistleblowing intentions. The model developed for this study included four levels of factors that can influence an internal auditor's internal whistleblowing intentions: organisational, individual, situational and demographic factors. The organisational factors are ethical climate, size of organisation and job level. The individual factors are ethical judgment, locus of control, and organisational commitment. The situational factors include seriousness of wrongdoing and status of wrongdoer. The individual demographics include gender, age and tenure. This research is the first to examine the effect of these four factors in the internal auditing profession in Malaysia.

A total of one hundred and eighty internal auditors who were members of the Institute of Internal Auditors Malaysia (IIA Malaysia) participated in an experimental design employing four vignettes constituting four different types of wrongdoing and manipulated variables (seriousness of wrongdoing and status of wrongdoer). The primary analysis of this study, multiple regression models, were computed individually for these four types of vignettes to test the model of internal whistleblowing intentions

The findings confirm those from previous studies, suggesting that organisational members have different reactions to different types of wrongdoings. Overall, the findings suggest that, depending on the type of wrongdoings, the main predictors of internal auditors' internal whistleblowing intentions were the principle ethical climate (organisational factor), relativism dimensions of ethical judgment (individual factor), seriousness of wrongdoing (situational factor) and finally, gender (demographic factor). Although the findings are not conclusive, the current study is able to provide a much needed theoretical and practical contribution to the Malaysian internal whistleblowing literature.

## DECLARATION

I certify that this thesis does not, to the best of my knowledge and belief:

- i. Incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education;
- ii. Contain any material previously published or written by another person except where due reference is made in text; or
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**Some sections of this thesis have already been presented in a doctoral colloquium and as a conference paper and conference proceeding:**

**Doctoral Colloquium**

Ahmad, S. A., Smith, M., and Ismail, Z., (2009), “Organisational ethical climate as a predictor of whistleblowing”. *Presentation at the Doctoral Colloquium: Asia-Pacific Conference on Forensic Accounting and Financial Criminology 2009*, 15 June 2009, Universiti Teknologi MARA, Shah Alam, Malaysia.

**Conference paper and conference proceeding**

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# CHAPTER 1

## INTRODUCTION

### 1.1. Introduction

This thesis examined internal auditors' intentions to whistleblow and the factors that influence their internal whistleblowing intentions in Malaysian organisations. The first chapter is aimed at providing an overview of the thesis and its structural scheme. It begins with providing background of whistleblowing research. Next, it outlines the purpose of research, research questions and the basic research model. Then, the rationale and the significance of the study as well as definition of whistleblowing are provided. The chapter then concludes by outlining the thesis organisation.

### 1.2. Background of Study

The issue of "whistleblowing" has garnered widespread attention globally over the past several decades. Many of the whistleblowing issues have centred on employee reporting of corporate wrongdoing occurring in their own organisations. Over the years, the frequency of organisational wrongdoing across the world has increased (Bowen, Call, & Rajgopal, 2010), evident from the constant media coverage of such incidents. The infamous cases of corporate debacles such as Enron and WorldCom have triggered not only extensive academic whistleblowing studies but have caused legal ramifications that have led to the passage of Sarbanes-Oxley Act<sup>1</sup> of 2002 (Eaton & Akers, 2007; Lacayo & Ripley, 2003). These corporate cases have resulted in individual and institutional investors incurring huge financial losses and have eroded public confidence in financial markets. Whistleblowing will allow the organisation to rectify corporate wrongdoing internally and this may prevent them from encountering any further substantial damages. Therefore, whistleblowing acts on corporate wrongdoing are needed as they will yield tremendous benefits to organisation and society at large. Encouraging

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<sup>1</sup> The Sarbanes-Oxley Act provides guidelines to public companies in U.S. on dealing with various issues pertaining to whistleblowing legislation.

whistleblowing will send a message to stakeholders and the public at large that the organisation is exercising good corporate governance (Eaton & Akers, 2007).

Since the 1980s, there has been a growing interest in whistleblowing on corporate wrongdoing in academic research. This interest stems from various academic fields such as psychology (Near & Miceli, 1986; Zhang, Chiu, & Wei, 2009b), organisational behaviour (Kaplan & Schultz, 2007; Seifert, Sweeney, Joireman, & Thornton, 2010), culture (Hwang, Staley, Chen, & Lan, 2008; Patel, 2003), business ethics (Greenberger, Miceli, & Cohen, 1987; Kaptein, 2011), organisational theory (Miceli & Near, 1984) as well as in accounting and auditing (Brennan & Kelly, 2007; Miceli, Near, & Schwenk, 1991). The studies have examined what motivates the whistleblowing act and the factors that cause employees to whistleblow. Understanding of these factors and the whistleblowing process has been complicated due to the sensitive nature of reporting. Furthermore, there is no typical case of whistleblowing as each case of corporate wrongdoing is extremely complex and may take years to solve (Miceli, 2004). Gobert and Punch (2000) added that, no two individual whistleblowers are alike and their actions are driven by complex psychological and sociological factors. Jennings (2003) explains that an employee who discovers wrongdoing in his or her company will struggle not only with divided loyalty (loyalty to his or her organisation or conformance to his or her personal and moral beliefs) but he or she will be faced with so many options as illustrated in Table 1.1 below.

**Table 1-1: A Whistleblower's Options**

<b>Decision</b>	<b>Option</b>
Do nothing	Stay
Do nothing	Leave organisation
Feed rumour mill <sup>2</sup>	Stay
Feed rumour mill	Leave
Disclose internally	Stay
Disclose internally	Leave organisation
Disclose externally	Stay
Disclose externally	Leave
Leave	Disclose externally

**Source: Jennings (2003, p. 19)**

<sup>2</sup> The term refers to conduct by employees who do not use formal or informal avenues to report. Jennings (2003) likened them as 'pot stirrers', who discuss the problem among their colleagues either to persuade or merely ask for their support.

The table above suggests various types of decisions and options for an employee (whistleblower) to choose should he or she intend to act. However, should the employee decide to disclose the wrongdoing, it will certainly cause negative consequences for the organisation as well as to the employee's reputation and career. Vinten (1996) likened the whistleblowing act as akin to a "bee-sting phenomenon". He said that the whistleblower has only one sting to be used, and once it is used, it will lead to his or her career downfall. Studies have reported that whistleblowers have often suffered serious reprisals from their employer in response to their actions. In order to avoid severe damage, Vinten (1996) has suggested that organisations may minimise this risk by internalising the whistleblowing procedure as part of corporate communications. Keenan and Krueger (1992) emphasised that, by having a proper whistleblowing procedure, organisations stand to benefit from actions of whistleblowers that may curb further substantial adverse consequences such as loss of sales, costly lawsuits and negative publicity.

Another issue that has been highlighted in previous studies relates to the definition of whistleblowing. There is misperception that it only relates to reporting parties outside of the organisation (Keenan & Krueger, 1992). Whistleblowing can in fact occur internally or externally (Eaton & Akers, 2007; Figg, 2000; Keenan, 2000; Keenan & Krueger, 1992; Near & Miceli, 2008). If the wrongdoing is reported to parties within the organisation, the whistleblowing is internal. If the wrongdoing is reported to parties outside of the organisation, then the whistleblowing is considered as external. Ethically, internal whistleblowing, as opposed to external whistleblowing, is preferred. This is because external whistleblowing can cause serious damage to the organisations as compared to internal whistleblowing (Park & Blenkinsopp, 2009). Zhang, Chiu, and Wei (2009a, pp. 25-26) suggest that "disclosing insider information to outsider's breaches obligations to the organization, violates the written or unspoken contract, and elicits damaging publicity". Hence, internal whistleblowing gives an organisation the opportunity to deal quickly without the pressure of external publicity. Furthermore, by rectifying corporate problems internally, managements can ensure that confidential information remains confidential and encourage organisational accountability and learning.

Although there are two different channels of whistleblowing, researchers have stated that internal or external whistleblowers actually share similar characteristics (Dworkin & Baucus, 1998). Empirical data indicate there are few differences between internal and external whistleblowers regarding their attitudes and beliefs towards whistleblowing, types of wrongdoing observed, retaliation expectancies, and other relevant variables (Keenan & Krueger, 1992, p. 21). Furthermore, whether the person is an internal or external whistleblower, Near and Miceli (1985) state that whistleblowers possess four observable characteristics; (1) they are current or former employees of the organisation where the wrongdoing was observed, (2) they usually lack the authority to change or stop the wrongdoing that is under their employers' control, (3) they may or may not make the report, and (4) they may or may not hold position that requires reporting of corporate wrongdoing.

The incidence of corporate fraud and organisational wrongdoing are a global concern. PricewaterhouseCooper conducted its fifth biennial survey in 2009, *The Global Economic Crime Survey* among 3,037 senior representatives of organisations in 54 countries. The survey reported that 38% of these senior representatives experienced accounting fraud, a significant increase since the last report in the 2007 survey (PricewaterhouseCoopers, 2009). The survey also reported that 17% of the frauds reported were detected by internal audit, which emerged once more as the means through which most frauds were detected. However, only 7% of frauds were detected through formal whistleblowing procedures. The survey suggested that this could be attributed to the many factors such as ineffectiveness or absence of whistleblowing procedures and lack of support within organisations or from management. Malaysia is also not spared from having its own issues of corporate fraud and organisational wrongdoing. Recently, KPMG Forensic Malaysia issued the results of a fraud survey conducted on a sample of 1,125 Malaysian companies across the public and private sectors. The survey, known as *KPMG Malaysia Fraud Survey Report 2009* revealed that fraud is a major problem for businesses in Malaysia (KPMG, 2009). Almost half of the respondents acknowledged that their organisations have been victims of fraud over the past three years and 61% of them believed that the incidence of fraud is set to increase in the next two years. Consistent with the previous 2004 survey, internally perpetrated fraud accounted for 87% of the total fraud value of RM63.95 million, of which out of this value, 53% was attributed to non-management level employees, 35%

was attributed to management level employees, while the remainder, 12% was attributed to customers and service providers. Overall, the 2009 survey suggested that a broad based fraud risk management plan be adopted, in response to the continued increase in fraud.

Due to these circumstances, Zarinah Anwar, the former Malaysian Securities Commissions (SC) deputy chief executive, said that Malaysian companies need to demonstrate their legitimisation of whistleblowing in the workplace by establishing structures and systems that facilitate the reporting of wrongdoing. In January 2004, the SC had amended its Securities Industry Act 1983, to introduce whistleblowing provisions into local securities law. In her speech, the SC deputy chief executive said that, the Act was amended as SC believed that internal auditors could indeed make a difference in enhancing corporate governance practices within corporations (Anwar, 2003). Zarinah Anwar further stated that internal auditors are said to be one of the fundamental checks and balances for organisations' good corporate governance in which their roles include examining, evaluating and monitoring the adequacy and effectiveness of an organisation's internal control structure (Anwar, 2003). The SC's view on the need for a whistleblowing mechanism is also consistent with The Institute of Internal Auditors Malaysia (IIA Malaysia). Its president, Fatimah Abu Bakar felt that whistleblowing should become part of the culture and business ethics of a company. Public listed companies are compelled to adopt an internal structure for whistleblowing to demonstrate a high level of corporate governance. However, although Malaysia has sufficient laws and regulations to create a conducive environment for whistleblowing, many local companies still do not have an internal structure for such a purpose (Tan, 2006). This could be due to Malaysian companies' fear that the whistleblowing system could be subjected to abuse or there could be whistleblowers acting out of spite, malice or grudge. The chief executive officer of the Minority Shareholder Watchdog Group (MWSG), Yusof Abu Othman stated that it is difficult to inculcate the practice of whistleblowing in Malaysian society and Malaysians need to change their mindset to de-stigmatise whistleblowing (Wahab, 2003).

Previous whistleblowing studies have extensively used subjects such as external auditors (Brennan & Kelly, 2007), management accountants (Somers & Casal, 1994), executives and managers (Keenan, 2007; Seifert et al., 2010), police officers (Rothwell

& Baldwin, 2007a), federal government employees (Miceli & Near, 1984, 1985, 1988) and MBA or undergraduate/graduate students as surrogates (Chiu, 2003; Kaplan & Schultz, 2007). Read and Rama (2003) contend that the role of internal auditors with regards to whistleblowing needs to be further reviewed. Whistleblowers who have higher credibility and power than other organisational members are likely to influence management to terminate wrongdoing (Near & Miceli, 1995). Practically, internal auditors could possess these two elements, and thus are supposed to be more likely to whistleblow. Prior studies have shown that there are limited whistleblowing studies that have used internal auditors as subjects (e.g. Arnold & Ponemon, 1991; Miceli, Near, & Schwenk, 1991; Seifert et al., 2010; Xu & Ziegenfuss, 2008). This could be due to arguments that the role of internal auditors reporting corporate wrongdoings is not regarded as an act of whistleblowing. These studies reveal that whistleblowing should be examined extensively in the field of auditing and the act of reporting by internal auditors could be regarded as internal whistleblowing.

Employees are generally an important source for detecting corporate wrongdoing (Miceli, Near, & Dworkin, 2008; Miethe, 1999), however studies have indicated that employees often refrain from reporting such wrongdoing as they believe that their organisation does not welcome reports of wrongdoing (Miceli, Near, & Dworkin, 2009) and the act is considered as challenging to the organisational hierarchy (Mesmer-Magnus & Viswesvaran, 2005). Studies in whistleblowing behaviour have tried to answer the question of why employees would blow their whistle. Research on whistleblowing has largely focused on three general factors: (1) *organisational factors*, such as organisational ethical climate (Rothwell & Baldwin, 2006, 2007a), size of organisation (Miceli & Near, 1988; Miceli, Near, & Schwenk, 1991), and job level (Keenan, 2002b; Keenan & Krueger, 1992); (2) *individual factors*, such as, ethical judgment (Ayers & Kaplan, 2005), locus of control (Chiu, 2003), and organisational commitment (Somers & Casal, 1994); and (3) *situational factors*, such as the seriousness of wrongdoing (Kaplan & Schultz, 2007; Near & Miceli, 1990), and the status of wrongdoer (Miethe, 1999; Near & Miceli, 1990). Miceli et al. (2008) in a comprehensive review of whistleblowing literature have suggested that these are the three general factors that influence the behaviour of reporting corporate wrongdoing by employees within organisations. Additionally, individual *demographic factors* such as respondents' gender (Miceli & Near, 1988; Sims & Keenan, 1998), age (Brennan &

Kelly, 2007; Keenan, 2000) and their working tenure in the organisation (Dworkin & Baucus, 1998; Near & Miceli, 1995) have also been investigated. However, studies in the whistleblowing literature have found mixed and inconsistent results regarding the effect of these demographic variables on whistleblowing tendencies.

Although several empirical studies have been conducted, many questions remain concerning the relative importance of these four factors (organisational, individual, situational and demographic) in Malaysian organisational settings. In his review of the literature, Vinten (2003) concludes that there is very little research on whistleblowing outside the United States. Most of the literature on whistleblowing is predominantly North American in origin (Gobert & Punch, 2000; Miceli et al., 2008). Although there is growing interest in the subject matter in the Asian region, studies have been limited to Hong Kong (Chiu, 2002, 2003), China (Zhuang, Thomas, & Miller, 2005) and Taiwan (Hwang et al., 2008). Miceli et al. (2008, p. 3) acknowledge that, “more research is needed before we can know the full answer to some particular question about whistleblowing”. Furthermore, the present study is needed as it is said that the mindset towards whistleblowing in Asia is the major barrier in developing company policies on it (Teen & Vasanthi, 2006). As such, understanding factors influencing the decision to whistleblow among internal auditors in Malaysian listed companies is significant for both management and organisations.

### **1.3. Research Questions and Research Model**

The purpose of the present study is to examine factors that will affect Malaysian internal auditors’ internal whistleblowing intentions. The broad question this study addresses is:

***“What are the factors that influence the internal whistleblowing intentions of internal auditors who have knowledge of corporate wrongdoings and unethical acts within their own organisations?”***

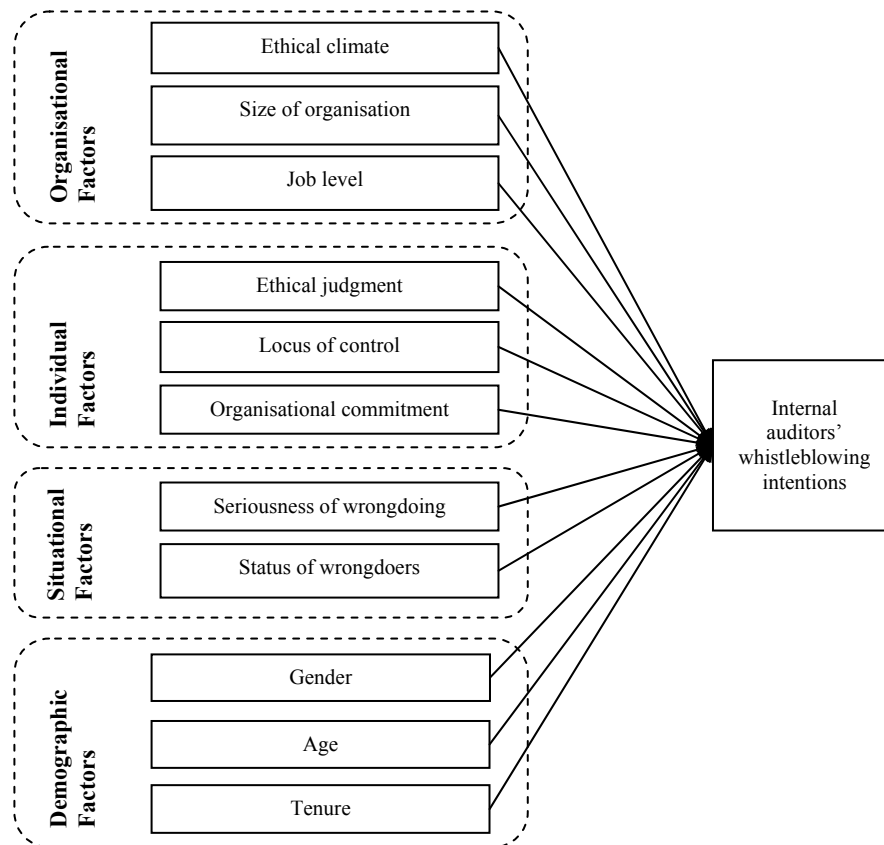
In addressing this primary question, the study focuses on organisational, individual, situational and demographic variables and their impact on the internal auditors’ internal

whistleblowing intentions. Specifically, the study intends to answer the following additional questions:

1. Do *organisational factors* such as ethical climate, size of organisation and job level influence internal whistleblowing intentions among Malaysian internal auditors?
2. Do *individual factors* such as ethical judgment, locus of control and organisational commitment influence internal whistleblowing intentions among Malaysian internal auditors?
3. Do *situational factors* such as seriousness of wrongdoing and status of wrongdoer influence internal whistleblowing intentions among Malaysian internal auditors?
4. Do *demographic factors* such as gender, age and tenure influence internal whistleblowing intentions among Malaysian internal auditors?
5. Which one of the organisational, individual, situational and demographic factors has the strongest influence on internal whistleblowing intentions among Malaysian internal auditors?

The following basic theoretical model is used in this study.





**Figure 1-1: Theoretical Framework of the Research**

#### **1.4. Rationale of the Study**

The purpose of the present study is to examine factors that will affect internal auditors' whistleblowing intentions. The focus of the study will be members of the Institute of Internal Auditors of Malaysia (IIA Malaysia) who are internal auditors of Malaysian listed companies. Through their work, these internal auditors have directly or indirectly seen or confronted many opportunities for corporate wrongdoing and unethical acts to occur. The responsibility of disclosure of any wrongdoing is embedded in their job description (Near & Miceli, 1985). Internal auditors may also face situations that involve conflict of interest while executing their dual-role duties. A study of whistleblowing in Malaysia by Patel (2003) has only examined external auditors as subjects. Prior studies have shown that there are limited whistleblowing studies that have used internal auditors as subjects (e.g. Arnold & Ponemon, 1991; Miceli, Near, & Schwenk, 1991; Seifert et al., 2010; Xu & Ziegenfuss, 2008). The present study will be able to fill the gap in the literature by examining internal auditors in Malaysia.

Ayers and Kaplan (2005) have emphasised that further research is required to examine how individuals within organisations form their reporting intentions. Past whistleblowing studies have focused on the interplay of organisational, individual and situational variables as the factors that may contribute to the propensity to whistleblow (Oh & Teo, 2010). Researchers contend that individual variables alone are not able to explain sufficiently individual ethical behaviour (Wittmer & Coursey, 1996). Organisational variables were found to have more effect on the individual decision to whistleblow (Mesmer-Magnus & Viswesvaran, 2005; Miceli & Near, 1984). Situational variables have also been found to be associated with the likelihood of whistleblowing (G. King, 1997). Despite the fact that demographic variables to date, have not provided consistent evidence on the direction of the relationships with whistleblowing behaviour (Zhang et al., 2009a), studies need to be conducted to ascertain such evidence in Malaysia. At present there is no empirical study in Malaysia that has examined the effects of these four factors on the internal auditors' internal whistleblowing intentions.

On a theoretical level, the current study investigates organisational and individual theory that can be used to explain internal auditors' ethical decision making with regards to their internal whistleblowing intentions. Organisational ethical climate theory that describes the ethical climate of an organisation is incorporated along with prosocial behaviour theory that explains the behaviour of a whistleblower as an individual. Ethical climate has proven to be a significant factor in shaping the behaviour of employees (Barnett & Vaicys, 2000; Fritzsche, 2000; Vardi, 2001). By grasping the relationship between ethical climates and employees' behaviours (such as whistleblowing), it should enable the organisational members to understand, evaluate and resolve ethical dilemmas (Wimbush, Shepard, & Markham, 1997b). Individual's prosocial behaviour theory on the other hand, can be used to explain the action undertaken by whistleblowers as individuals. A prosocial behaviour is briefly defined as any action by an organisational member that attempts to benefit the person(s) to whom it is directed (Brief & Motowidlo, 1986). Seifert et al. (2010) characterise employee's internal whistleblowing as a prosocial behaviour that includes both voluntary and role-related disclosures of wrongdoing. As internal auditors are members of a profession that is role-prescribed to mitigate wrongdoing, prosocial behaviour theory could help to further understand the motivations for these employees to actually whistleblow. In the

present research, these two theories are used to explain the behaviour for internal whistleblowing intentions in Malaysian organisational settings.

### **1.5. Significance of the Study**

Understanding factors that motivate internal auditors' internal whistleblowing intentions will yield both theoretical and practical implications. Theoretically, the present study will be able to provide additional empirical evidence concerning the existence and description of different dimensions of ethical climate with regard to internal auditors' reporting intentions in Malaysian organisations. Rothwell and Baldwin (2007a) reported that ethical climate theory has never been tested in whistleblowing behaviour studies and their study is considered the first to do so. Practically, the identification and predictability of ethical climate is important for management in Malaysian organisations. Once the type of ethical climate within the organisation is identified, management may be able to develop proper policies to promote ethical conduct among its employees, specifically for its internal auditors. Similarly, prosocial behaviour theory has not been considered in literature concerning the internal audit profession, specifically in the study of internal auditors' internal whistleblowing intentions. Dozier and Miceli (1985) propose that the decision to blow the whistle is a subjectively rational process in which the observer of corporate wrongdoing weighs the perceived cost and benefits of blowing the whistle. Should the perceived cost outweigh the benefits, no whistleblowing will result. As the profession of internal auditors is unique and consistent with the notion of prosocial behaviour theory, the relationships of these two theories with internal whistleblowing intentions is worth exploring.

Miceli et al. (2008) identified that, the body of empirical literature concerning whistleblowing outside the dominant North American region is still in its infancy stage. As the current study is conducted in Malaysia, the outcomes will be able to make a significant contribution to the limited literature by examining factors that will affect internal whistleblowing intentions among internal auditors in Malaysian listed companies. Previous studies have examined various issues related to whistleblowing, primarily in the area of psychology, organisational behaviour, culture, business ethics and organisational theory. Unfortunately, the issue has received little attention within

auditing research (Brennan & Kelly, 2007; Patel, 2003; Read & Rama, 2003). The results of the current study will help to further contribute to the much needed literature particularly in the internal auditing field. It is essential to examine the effects of these factors as there is limited information about the complexities underlying internal auditors' decisions to blow the whistle (Arnold & Ponemon, 1991).

The availability of whistleblowing as a form of organisational internal structure is fundamental as it is an important mechanism to prevent and deter corporate wrongdoing and questionable acts (Kaplan & Schultz, 2007). Organisations that foster whistleblowing will be able to deter corporate losses (Somers & Casal, 1994) and to improve their effectiveness and efficiency (Kaplan & Schultz, 2007). Near and Miceli (1995) found that due to the unavailability of a reporting channel that enables employees to report their concerns internally, the majority of employees who became aware of corporate wrongdoings never report or disclose their observations to anyone. Therefore, the findings of this study could guide Malaysian practitioners and the authorities concerned in the design of policies and practices which could encourage employees to expose organisational wrongdoing committed within the organisation. The result of this study will have implications for the types of action that should be taken by management should there be actual whistleblowing occurring in their organisations. Implicitly, to the extent practicable, organisations and policy makers in Malaysia would have an interest in whistleblowing and its effects on the implementation of a whistleblowing policy as part of the organisations' internal control mechanism.

## **1.6. Definition of Key Terms**

**Whistleblowing:** The key term that is used in this study is 'whistleblowing'. The widely used definition of whistleblowing (Brennan & Kelly, 2007) is given by Near and Miceli (1985, p. 4) as:

*"... the disclosure by organization members (former or current) of illegal, immoral, or illegitimate practices under the control of their employers, to persons or organizations that may be able to effect action."*

This definition however, has generated various debates and is discussed further in Chapter 2 of the thesis.

**Whistleblower:** According to Gobert & Punch (2000, p. 27), in the social and managerial literature, the term whistleblower refers to:

*“... an individual within an organisation who reveals negative information about the organisation, its practices or its personnel. The information may relate to abuse of power, fraud, mismanagement, waste, corruption, racial or sexual harassment, or health and safety dangers.*

## **1.7. Thesis Organisation**

The remainder of the thesis is structured as follows. Chapter 2 provides discussion on the theoretical and research background for the study. The research issues are outlined, concluding with the argument that there are key areas of research that are missing from the field, as well as establishing the current study’s research framework. Chapter 3 presents the development of the hypotheses tested in this study. Chapter 4 outlines the data collection procedures and the research design described for this study. This chapter also discusses methodological issues, the selection of samples as well as the statistical analyses used for data analysis. Chapter 5 discusses findings from analyses of data, including the results of the statistical analyses and results of hypotheses testing. Finally, discussions of findings, conclusions, limitations of the current study and future research directions are presented in Chapter 6.

## **CHAPTER 2**

# **THEORETICAL BASIS AND RESEARCH BACKGROUND ISSUES**

### **2.1. Introduction**

This chapter reviews general literature on whistleblowing. First, it highlights the theories that explain the behaviour of individual and organisational climates that permeate the whistleblowing act. Secondly, discussion on key arguments with regards to whistleblowing behaviour and the channels to report are presented. The following section explains the internal auditing profession and its role in whistleblowing research. Then, some reviews of previous empirical whistleblowing studies are also provided, incorporating early research in whistleblowing as well as studies from other parts of the world. This is essential in order to understand the complexity of this issue. The final section justifies the need for a whistleblowing study to be undertaken in a Malaysian environment.

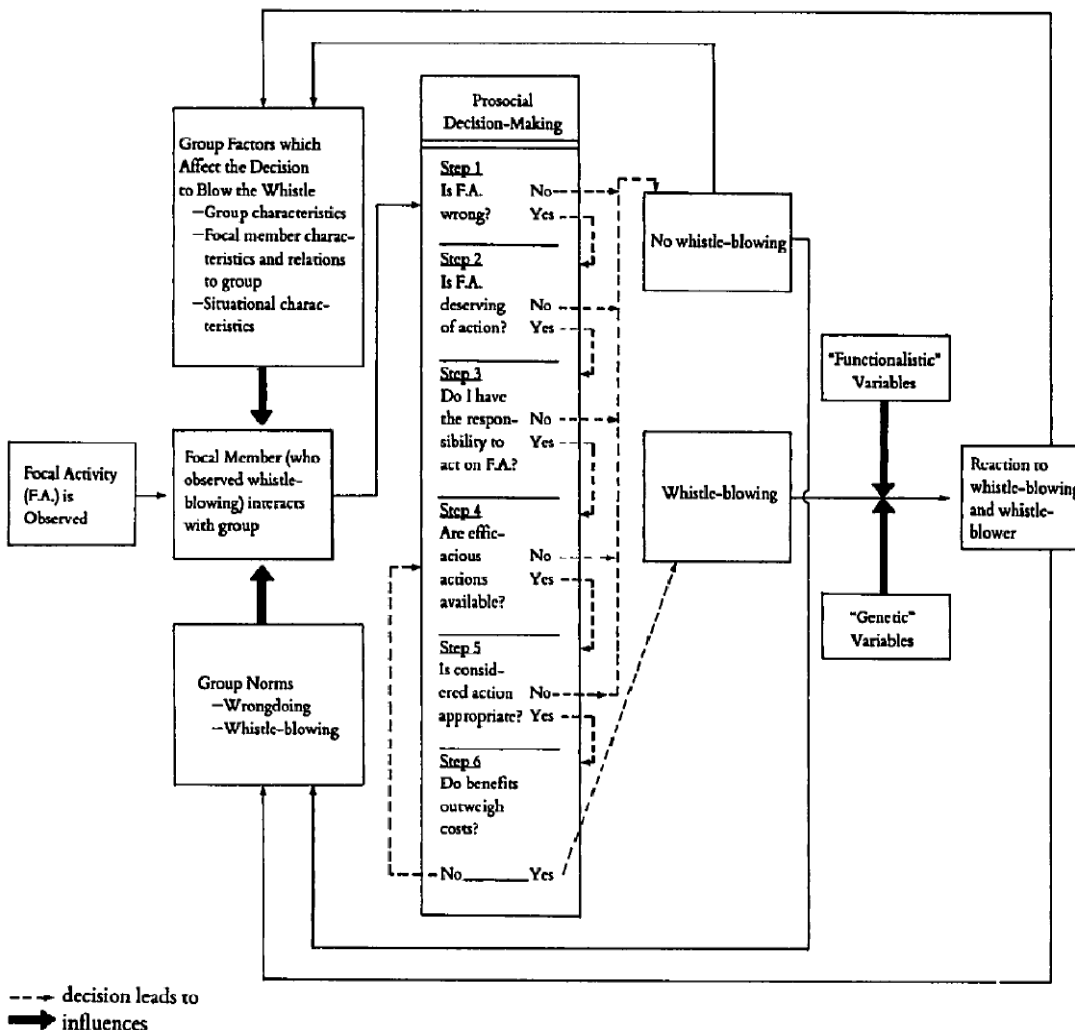
### **2.2. Theoretical Base for the Study**

Researchers have advocated that there is no comprehensive theory of whistleblowing (Miceli & Near, 1988; Miceli, Near, & Dozier, 1991; Near & Miceli, 1985; Zhang et al., 2009b). However, Near and Miceli (1985) explained that researchers can draw from the research on behavioural studies that are to some extent similar to the act of whistleblowing. The theories underpinning the current study are derived from prosocial behaviour theory and ethical climate theory. Prosocial behaviour theory explains the behaviour of whistleblowers as individuals while, the climate in the organisation that supports whistleblowing can be best described by ethical climate theory.

### **2.2.1. Prosocial behaviour theory**

The prosocial approach of whistleblowing has motivated much empirical and conceptual research on whistleblowing (see Brennan & Kelly, 2007; Brief & Motowidlo, 1986; Dozier & Miceli, 1985; Miceli & Near, 1988; Miceli, Near, & Dozier, 1991; Near & Miceli, 1995). Specifically, Brief and Motowidlo (1986, p. 711) defined prosocial behaviour as: “behaviour which is (a) performed by a member of an organization, (b) directed toward an individual, group, or organization with whom he or she interacts while carrying out his or her organizational role, and (c) performed with the intention of promoting the welfare of the individual, group, or organization toward which it is directed.” With regards to whistleblowing, it is considered as a positive social behaviour (Miceli et al., 2008) whereby, the whistleblower takes action to stop the wrongdoing within the organisation with the intention of benefiting persons within and outside the organisation. Dozier and Miceli (1985) explained that whistleblowing is a form of prosocial behaviour as the act involves both selfish (egoistic) and unselfish (altruistic) motives on the part of whistleblowers. In other words, whistleblowers’ acts are not purely altruistic but to a certain extent the actors may also have motives to achieve personal gain or glory.

Specifically, the prosocial approach of whistleblowing is based on Latane and Darley’s (1968) work on the bystander intervention model. The model proposes that a bystander will respond by helping in an emergency situation. According to Latane and Darley (1968), the decision process for whistleblowing behaviour goes through five steps and each step is critical in making the whistleblowing decision. The five steps are: (1) the bystander must be aware of the event; (2) the bystander must decide that the event is an emergency; (3) the bystander must decide that he or she is responsible for helping; (4) the bystander must choose the appropriate method of helping; and (5) the bystander implements the intervention. These are the five processes in ethical decision-making for the would-be whistleblower and in doing so highlight the ethical dilemmas inherent in the decision to whistleblow (Brennan & Kelly, 2007).



**Figure 2-1: The Prosocial Decision-making Process Associated with Whistleblowing**

Source: Greenberger et al., (1987), Figure 1, pg. 530

The above decision process for whistleblowing behaviour is clearly explained by Greenberger et al., (1987) in Figure 2.1. The figure depicts the whistleblowing decision process that may be taken by a focal member in determining whistleblowing actions and its outcomes. Greenberger et al., (1987) claimed that the figure represents a complete model of whistleblowing and it incorporates the theoretically-based predictions concerning the whistleblowing decision processes. Citing the work of Dozier and Miceli (1985), Greenberger et al., (1987) explained the whistleblowing processes that organisation members may use. In Step 1, the focal member considers whether the focal activity is wrong. In Steps 2 and 3, the member decides whether the situation is deserving action and then, whether the member feels responsible to act. In Step 4, the



member considers whether these actions are appropriate (Step 5), and finally, whether the expected benefits of action outweigh the expected cost (Step 6). The decision process stops when the outcome reaches a step which is not affirmative. A “no” answer to Step 6 will cause the process to return to Step 4. A “yes” answer in Step 6 will result in whistleblowing action (Dozier & Miceli, 1985). It can be seen that the decision model advocated by Greenberger et al., (1987) is more or less similar to the Latane and Darley’s (1968) bystander intervention model in explaining employees’ prosocial behaviour towards whistleblowing.

### 2.2.2. Ethical work climate theory

Based on moral philosophy and the theory of cognitive moral development, Victor and Cullen (1988) developed a model of ethical climate to describe the determinants of ethical climates in organisations. The model theorises that ethical work climates in organisations varies along two dimensions – an ethical approach dimension and an ethical referent dimension.

**Table 2-1: Victor and Cullen’s (1988) Theoretical Ethical Climate Types**

Ethical criteria	Locus of analysis		
	Individual	Local	Cosmopolitan
Egoism	Self-interest	Company profit	Efficiency
Benevolence (Utilitarian)	Friendship	Team interest	Social responsibility
Principle (Deontology)	Personal morality	Rules, standard operating procedures	Laws, professional codes

The first ethical dimension suggested by Victor and Cullen (1988) looks at the ethical approach dimension used by organisations in the decision making processes, (a) *egoism*, or maximising self-interest; (b) *benevolence*, or maximising joint interests; and (c) *principle*. In brief, ethical climate theory states that in an organisation that is characterised primarily by the use of the egoistic criterion, employees would consider particularly their own self-interest in decision-making when facing an ethical dilemma. In a benevolence type of organisation, employees would mostly consider the welfare of others in solving their ethical decisions, while where the organisation predominantly uses a principle criterion, employees would consider the application of rules, principles and laws in making their ethical decisions.

Meanwhile, the ethical referent dimension of the Victor and Cullen (1988) model refers to the locus of analysis, which is represented by (a) *individual*, (b) *local* and (c) *cosmopolitan* referents. If the locus of analysis is individual, the basis for the individual's ethical decision-making comes from within the individual's personal moral belief; local locus of analysis refers to expectation that comes from within the organisation such as the organisation's code of practice; and finally, cosmopolitan locus of analysis refers to ethical decision-making that is external to the individual and organisation such as a code of ethics established in professional associations. Cross tabulation of these two dimensions produces nine possible theoretical ethical climate types as shown in Table 2.1. These nine theoretical climates would influence the decision-making process in an organisation (Cullen, Parboteeah, & Victor, 2003).

To elaborate the effect of these two cross tabulated dimensions, within the *egoism* criterion, an individual locus of analysis signifies that organisational members make ethical decisions mostly for their self-interest. At the local level of analysis, considerations are for organisations' interest (e.g. company profit). Finally the cosmopolitan locus of analysis considers larger society interests (e.g. efficiency) (Victor & Cullen, 1988). Meanwhile, in the context of the *benevolence* criterion, an individual locus of analysis is defined as consideration for other people, regardless of organisational membership (e.g. friendship). At the local locus of analysis, the ethical climate considers the organisational collective (e.g. team play). The cosmopolitan locus of analysis considers others outside the organisation (e.g. social responsibility) (Victor & Cullen, 1988). Lastly, in the context of *principle* criterion, an individual locus of analysis signifies that the morals are self-chosen, guided by their own personal ethics. At the local locus of analysis, the source of morals lies within the organisation through its own rules and regulations. Finally, at the cosmopolitan locus of analysis, the source of morals is external to the organisations (e.g. law, professional codes of ethics) (Victor & Cullen, 1988).

Using the 3 x 3 matrix of the nine theoretical ethical climates shown in Table 2.1, Victor & Cullen (1988) developed an ethical climate instrument where the questions were written to capture all the nine ethical climate types and placed the respondents in the role of observers, requiring them to report perceived organisational expectations (Cullen, Victor, & Bronson, 1993). Respondents were asked to indicate on Likert-type

scales (ranging from completely false to completely true) how accurately each of the items in the instrument described their general work climate. The ethical climates' variables are further discussed in Chapter 3 of this study.

### **2.3. Debates on Whistleblowing**

The literature then proceeds with providing some understanding on the pertinent issues in the whistleblowing literature, beginning with what whistleblowing is all about. There is no agreed definition of whistleblowing (Brennan & Kelly, 2007, p. 62). One consistent element that researchers agree on is that whistleblowing is an act to report and expose wrongdoings. The 'whistleblowing' term has been rigorously defined and debated in various literatures. The debates surround which channels (internal vs. external whistleblowing) to report as well as whether auditors (internal or external), should be regarded as whistleblowers.

#### **2.3.1. Debates on channels of whistleblowing**

There are two channels of reporting wrongdoings – internal and external whistleblowing (Eaton & Akers, 2007; Near & Miceli, 2008). Near and Miceli (1985, p. 3) reported that there is “substantial disagreement” in the literature on whether internal reporting of corporate wrongdoing should be considered as whistleblowing. Some researchers argue that whistleblowing is an action where reporting of the wrongdoing is only to outside parties (e.g. Courtemanche, 1988; Elliston, Keenan, Lockhart, & Van Schaick, 1985; Jubb, 1999). Jubb (1999, p. 78) thus defines whistleblowing as:

*“... a deliberate non-obligatory act of disclosure, which gets onto public record and is made by a person who has or had privileged access to data or information of an organisation, about non-trivial illegality or other wrongdoing whether actual, suspected or anticipated which implicates and is under the control of that organisation, to an external entity having potential to rectify the wrongdoing.”*

Jubb (1999) came out with the above definition from reviews of previous whistleblowing literature, which include Near and Miceli's (1985) most widely used<sup>3</sup> definition (defined in section 1.6 earlier). Jubb (1999, p. 91) asserted that, "whistleblowing is an ethical dilemma because it necessitates a breach of trust". This is because the whistleblower has violated his loyalty not only to his own organisation but to the professional association he represents as well as to the general public. To Jubb (1999), an internal disclosure on the other hand, is considered as discreet and the intention is only to get the attention of internal management and not to the general public and hence fails to create the notion of an ethical dilemma. Jubb (1999) further explained that though internal disclosure may breach the reporting individual's loyalty to his/her own organisation, the act does not affect the organisation's privacy and property rights, hence it should not be regarded as whistleblowing.

However, to Near and Miceli (2008), the definition provided by Near and Miceli (1985) covers both internal and external whistleblowing. Brennan and Kelly (2007) stated that Near and Miceli's (1985) definition does not exclude internal reporting, which suggests that organisation members may blow the whistle either internally or externally. This is interpreted from the phrase that describes "persons or organisations that may be able to effect action" in Near and Miceli's (1985) definition. Furthermore, Near and Miceli (1996) indicate that a genuine whistleblower reports wrongdoings to someone capable of stopping the wrongdoing. That "someone" could be internal or external parties to the said organisation.

Consistent with Near and Miceli's (1985) definition of whistleblowing, Dworkin and Baucus (1998) and Read and Rama (2003) stated that whistleblowers have a choice on whether to whistleblow either internally or externally, while Miethe (1999) and Vinten (1992b) reported that whistleblowers are distinguished according to the nature of their disclosures; i.e. internal and external whistleblowers. Internal whistleblowers disclose the wrongdoing to another person within the organisation who can take immediate action while, external whistleblowers expose the wrongdoing to outside parties. Several researchers have contended that the act of whistleblowing incorporates both internal and external reporting (see Brennan & Kelly, 2007; Dasgupta & Kesharwani, 2010; Eaton &

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<sup>3</sup> Near and Miceli (2008) reported that studies using this definition include samples of nurses, employees in for-profit organizations, federal employees and internal auditors in various forms of organizations.

Akers, 2007; Miceli & Near, 1992; Miceli et al., 2008; Miethe, 1999; Rothwell & Baldwin, 2006; Tsahuridu & Vandekerckhove, 2008; Vinten, 1992b) and state that a distinction between internal and external whistleblowers is important in understanding the whistleblowing process (Eaton & Akers, 2007; Miceli & Near, 1992; Miethe, 1999; Somers & Casal, 1994). Miceli et al. (2008) explained that the separation between those channels is legally important as some state and federal statutes in United States protect whistleblowers depending on whether they use internal or external channels. Therefore Miceli et al. (2008, p. 9) state that, “using the term “whistle-blower” when referring to internal complaints and to external complaints is consistent with legal usage”. Another important reason why internal and external reporting should be regarded as whistleblowing is highlighted by Miethe (1999, p. 16) who contends that, “internal whistleblowing is often regarded as a precursor to external whistleblowing”. This is consistent with Miceli et al. (2008) who assert that whistleblowers resort to disclose externally after first using an internal channel, that failed to rectify the wrongdoing.

On the contrary, MacNab, Brislin, Worthley, Galperin, and et al. (2007) argued that internal whistleblowing and internal reporting are two different phenomenon, and so are external whistleblowing and external reporting (see Table 2.2 below for detailed explanation). MacNab et al. (2007) stressed that the major difference between the act of ‘whistleblowing’ and ‘reporting’ is that, the former is unauthorised by normal organisational processes, while the latter is authorised internally. However, the current study adopts the view of Near and Miceli (1985) and G. King (1999) who argue that internal and external reporting of corporate wrongdoing are basically the same process. Both types of reporting represent a direct challenge to management’s authority structure and thus, both types should be considered as whistleblowing (G. King, 1999; Near & Miceli, 1985). However, as mentioned previously, it is acknowledged that the effect of reporting externally is more costly and disastrous than reporting internally. As such, Vinten (1996) suggested that internalising whistleblowing as a type of internal communication can minimise this risk. Furthermore, internal whistleblowing will allow organisations to rectify their internal matters before they are made public (Barnett, 1992a).

**Table 2-2: Basic Varieties of Ethics Management Reporting**

<b>Ethics management reporting</b>	<b>Primary distinguishing feature(s)</b>	<b>Example</b>
External whistleblowing	<ol style="list-style-type: none"> <li>1. Unauthorised by target organisation.</li> <li>2. Reported externally in relation to target organisation.</li> <li>3. Organisationally passive (ethics management <i>passive/reactive</i>)</li> </ol>	An employee communicates the improper organisational accounting practices directly to SEC or other government regulatory body.
Internal whistleblowing	<ol style="list-style-type: none"> <li>1. Unauthorised by target organisation.</li> <li>2. Reported within target organisation.</li> <li>3. Organisationally passive (ethics management <i>passive/reactive</i>)</li> </ol>	An employee unexpectedly announces the improper organisational accounting practices during a board of directors meeting.
External reporting	<ol style="list-style-type: none"> <li>1. Authorised by target organisation.</li> <li>2. Reported externally in relation to target organisation.</li> <li>3. Organisationally proactive (ethics management <i>proactive/responsive</i>)</li> </ol>	An employee reports the improper organisational accounting practices to an organisationally endorsed, third party such as an external auditor or ethics consultant.
Internal reporting	<ol style="list-style-type: none"> <li>1. Authorised by target organisation.</li> <li>2. Reported within the target organisation.</li> <li>3. Organisationally proactive (ethics management <i>proactive/responsive</i>)</li> </ol>	An employee reports the improper organisational accounting practices via an established ethics hotline or to an established, internal ombudsman.

**Source: MacNab et al. (2007, p. 9)**

### **2.3.2. Debates on auditors as whistleblowers**

Another point of argument is whether an auditor can be regarded as a whistleblower. Jubb (1999, 2000) argued that reporting or disclosures made by internal and external auditors are role-prescribed and should not be regarded as whistleblowing acts. Jubb (2000) explained that the disclosures on corporate wrongdoings made by these auditors are within the ambit of their profession and should be considered as reporting or informing rather than whistleblowing. Courtemanche (1988) advocated that whistleblowing be regarded as a gratuitous act which is unrelated to an individual's official obligations. Thus, in order to distinguish between whistleblowing and informing, the disclosure has to be non-obligatory for it to be considered as whistleblowing (Jubb, 1999).

However, the definitions of “whistleblowing” as provided by Near and Miceli (1985) and Jubb (1999) suggest that, the actor (the whistleblower) is an organisation member who has access to vital corporate information. Similarly, Tsahuridu and Vandekerckhove (2008) highlighted that, one of the characteristics that constitutes an act of whistleblowing is that the whistleblower has privileged access. Tsahuridu and Vandekerckhove (2008) further explained that the whistleblowers know exactly what is going on at work and their jobs enable them to access specific information about their organisation. Therefore, this study contends that reporting by internal auditors within the organisation should be regarded as internal whistleblowing acts. Internal auditors’ scope of work enables them to access and hold such important corporate information and require them to report any form of corporate wrongdoing. It is said that internal auditors are responsible to disclose any organisational wrongdoing as it is embedded in their job description (Dasgupta & Kesharwani, 2010; Near & Miceli, 1985; Seifert et al., 2010). Moreover, this was what Cynthia Cooper (an internal auditor herself) did in the WorldCom case and her act was considered as whistleblowing by internal auditors. Xu and Ziegenfuss (2008, p. 324) acknowledged Cooper’s action by stating that “the recent example in the WorldCom incident shows that the public may perceive the internal auditor as a whistleblower”.

Miceli, Near, and Schwenk (1991, p. 114), supported the notion by stating that “internal auditors should be considered whistle-blowers when they report wrongdoing”. Dozier and Miceli (1985) explained that individuals whose job role requires whistleblowing can in fact be whistleblowers as unstated norms of altruistic (unselfish) behaviour may be more influential than organisational policy that requires the reporting of corporate wrongdoings. Such altruistic behaviour can be seen in the internal auditing profession (Arnold & Ponemon, 1991), and researchers have agreed that internal auditors, whose roles require them to report corporate wrongdoings, should be regarded as whistleblowers (Miceli, Near, & Schwenk, 1991; Near & Miceli, 1986; Xu & Ziegenfuss, 2008). Various whistleblowing studies have since associated the definition provided by Near and Miceli (1985) with both internal auditors (see Arnold & Ponemon, 1991; Miceli, Near, & Schwenk, 1991; Seifert et al., 2010; Xu & Ziegenfuss, 2008) and external audit professions (Brennan & Kelly, 2007; Patel, 2003). Specifically, internal auditors who disclose organisational wrongdoings are thus described as internal whistleblowers; consistent with the suggestion given by Miceli et al. (2008) and Miethe

(1999) stating that internal whistleblowers report to persons within the organisation who can take necessary actions.

The Institute of Internal Auditors (IIA) also acknowledges that whistleblowing is associated with internal auditors. IIA (1988, p. 16) defines whistleblowing as “the unauthorized dissemination by internal auditors of audit results, findings, opinions, or information acquired in the course of performing their duties to anyone outside the organization or to the general public”. However members of IIA are obliged to adhere to the requirement of the IIA’s *Standards* and *Code of Ethics*, which requires them to report the matters internally utilising sufficient mechanisms without the need to bring the matters outside their organisations. Specifically, the IIA Code of Ethics (IIA, 2009) requires that members “shall observe the law and make disclosures expected by the law and the profession”; and “shall disclose all material facts known to them that, if not disclosed, may distort the reporting of activities under review”. This IIA Code of Ethics requirement seems to be consistent with the acknowledgment that internal auditors indeed should be considered as internal whistleblowers.

## **2.4. Internal Audit Profession and Whistleblowing**

The internal auditing profession has evolved remarkably and has gained an important role within organisations. From merely having a traditional role focussing on compliance procedures, the profession has then evolved by having a larger value adding role (Ramamoorti, 2003). The role of internal auditors is encapsulated in the definition of the profession provided by the IIA. Internal auditing is thus defined as:

“... an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.” (IIA, 2007)

This broad definition covers a wide scope of internal auditing services that includes consulting activities, value added services, evaluation and improvement of the effectiveness of the risk management and governance process (Abdolmohammadi, Burnaby, & Hass, 2006). The definition also highlights the growing responsibilities of



internal auditors in assisting risk management and promoting effective corporate governance procedures within their organisations (Krogstad, Ridley, & Rittenberg, 1999). The responsibilities to ensure sound corporate governance practices actually include the need for internal auditors to internally whistleblow within their organisations should the need arise. IIA in its position paper cautioned that whistleblowing should not be brought by internal auditors externally as internal auditors are actually equipped with sufficient mechanisms to solve any matters that arise in the course of their duties (IIA, 1988).

Unfortunately, there have been limited whistleblowing studies that have used internal auditors as their subject of interest. It is an irony that a profession that is said to have a unique position in organisations to prevent, deter and detect corporate wrongdoings and malpractices (Hillison, Pacini, & Sinason, 1999; Pearson, Gregson, & Wendell, 1998) was not being fully studied on their propensity for whistleblowing behaviour. Their unique position actually allows them to know more about their own organisation than anyone else. Miceli et al. (2008) highlighted a finding from their previous study that, compared to other professions, the highest reported observation of wrongdoing was reported by internal auditors (see Miceli, Near, & Schwenk, 1991). Internal auditing profession is indeed an important role in organisations as most frauds were detected by internal audit, as evidenced from the findings of the latest survey, *The Global Economic Crime Survey* conducted by PricewaterhouseCooper (PricewaterhouseCoopers, 2009).

Such a gap could be due to some researchers arguing that the reporting of internal auditors is merely role-prescribed (as discussed earlier), hence the act of reporting is not considered as whistleblowing (see Jubb, 1999, 2000). However, some studies advocated that due to the uniqueness of the profession, internal auditors may also be potential whistleblowers (Arnold & Ponemon, 1991; Miceli, Near, & Schwenk, 1991; Pearson et al., 1998; Xu & Ziegenfuss, 2008). Pearson et al. (1998) advocate that the reporting of illegal activities within organisations by internal auditors to higher management, boards of directors or government agencies be referred to as an act of whistleblowing. Meanwhile, a survey by Miceli, Near, and Schwenk (1991) demonstrated that internal auditors were more likely to report wrongdoing if it was judged to be part of their role responsibility.

The more pressing matter for internal auditors actually, is to decide whether or not to whistleblow should they discover organisational wrongdoings. Internal auditors may face situations that involve conflict of interests while executing their dual-role duties (Arnold & Ponemon, 1991; E. Z. Taylor & Curtis, 2010). Basically, internal auditors are employed by the organisation and are subject to the needs and requirements of their employment, but on the other hand, as members of a professional body, they are also required to adhere to the profession's ethical requirements, as well as the needs of other stakeholders. Ahmad and Taylor (2009) shared the same view with regards to this type of conflict of interest. They assert that the role of internal auditors in providing auditing tasks for their organisations may cause ongoing conflicts. Ahmad and Taylor (2009) explained that internal auditors need to balance their role towards being independent of management while executing their duties, and at the same time, balancing their roles within their own professional association (i.e. the Institute of Internal Auditors) that demands them to uphold the directives that may be incompatible with the demands and accountabilities of internal auditors to their employing organisations. It is therefore essential for the current study to examine factors affecting internal auditors' internal whistleblowing intentions as Arnold and Ponemon (1991) stated that there is limited information about the complexities underlying the internal auditors' whistleblowing decisions.

## **2.5. Review of Past Empirical Whistleblowing Studies**

The literature review continues by examining some previous empirical whistleblowing studies. This is essential in order to appreciate and understand thoroughly what had been done in the relevant field.

### **2.5.1. Earlier whistleblowing studies – the MSPB studies**

The United States Merit Systems Protection Board (MSPB<sup>4</sup>) survey was the earliest known empirical study conducted in the whistleblowing literature (Near & Miceli,

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<sup>4</sup> The MSPB was established by the Civil Service reform Act of 1978 (Miceli & Near, 1984). The MSPB data were archival in nature and in the public domain. The data were gathered from the U.S. Office of Personnel Management and from the Offices of Inspector General at each participating department or agencies (Miceli & Near, 1985).

2008). The purpose of the survey, which was first conducted in 1980, was to ascertain whether prohibited personnel practices were occurring in the United States' civil service. Miceli and Near (1984, 1985, 1988) utilised the MSPB data sets and the outcomes of their studies provide valuable information in explaining organisational members' whistleblowing behaviour.

The first study conducted by Miceli and Near (1984) utilised data collected in 1980. Among their findings in this study, one suggested that the profiles of internal whistleblowers were found to be professionals, powerful organisational members, highly educated, and held supervisory positions and/or in positions where internal whistleblowing was role-prescribed. This group believed that blowing the whistle internally is less threatening than blowing it externally. Then, in their follow-up study, Miceli and Near (1985) found that observers of wrongdoing will be more likely than inactive observers to blow the whistle, depending on the level of seriousness of the wrongdoing. Consistent with their earlier study in 1984, Miceli and Near (1985) suggested that internal whistleblowers' actions are role-prescribed and they are usually part of the management team. The third and final study on MSPB by Miceli and Near (1988) utilised another set of data collected in 1983. Their findings explained that whistleblowing is consistent with a type of prosocial behaviour that occurs in organisations, as "whistle-blowers call attention to questionable practices in order to help the present and potential victims or to benefit the organization because they believe the activity is not consistent with the organization's stated values" (Miceli & Near, 1988, p. 268).

Near and Miceli (2008) advocated that the outcome of MSPB surveys have influenced researchers on the development of theory and encourage more research on the topic of whistleblowing. Specifically, Miceli and Near's (1984, 1985, 1988) studies have indirectly acknowledged the existence of three important factors affecting individual whistleblowing decisions, namely: organisational, individual and situational factors. Furthermore, Miceli and Near's (1988) study has shown that whistleblowing behaviour can be explained by prosocial behaviour theory. As such, Near and Miceli (2008) contended that the MSPB data have been useful in providing preliminary knowledge about whistleblowing.

However, the most apparent weakness of MSPB data sets utilised by Miceli and Near (1984, 1985, 1988) is that they concentrated on United States federal government and agencies employees and did not take into consideration private sector companies. As such, Miceli and Near (1984, 1985, 1988) cautioned that the findings of secondary analyses using the data from these surveys may not be relevant to private sector employees and its employers. Miceli and Near (1985) then suggested that future studies should utilise diverse samples to determine whether their findings were consistent across samples. Another apparent weakness was that, the MSPB surveys required the respondents to personally report (self report) whether or not they had observed any form of wrongdoing in their organisations. Whistleblowing is a sensitive issue to some organisational members, that may cause them not to respond to the questionnaire (Miceli & Near, 1988) and there is a possibility that some respondents who had actually observed the wrongdoing, would choose not to report it (Miceli & Near, 1984), thus making the data flawed. This indicates that future research needs to consider the most appropriate method in tackling sensitive issues such as whistleblowing behaviour.

### **2.5.2. Whistleblowing in Asian countries**

The incidence of the infamous American corporate debacles in 2001, has also led to a substantial number of whistleblowing studies being conducted in countries such as China (Chiu, 2002, 2003), Taiwan (Hwang et al., 2008), South Korea (Park & Blenkinsopp, 2009; Park, Rehg, & Lee, 2005) and Japan (Davis & Konishi, 2007; Ohnishi, Hayama, Asai, & Kosugi, 2008). Interestingly, these studies have emphasised the importance of national and cultural differences in examining whistleblowing issues. According to the Wikipedia encyclopaedia (Confucius, n.d.), countries like China, Taiwan, South Korea and Japan share a common belief in Chinese virtues and Confucianism<sup>5</sup> values.

There is actually a different perception with regards to whistleblowing behaviour among Asians as compared to their western counterparts. While Vinten (1992a) stated that western countries acknowledged their whistleblowers as an organisation's model

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<sup>5</sup> Confucius (551 BC – 479 BC), was a Chinese thinker and philosopher, whose teachings and philosophy of Confucianism have deeply influenced the Chinese, Taiwanese, Korean, and Japanese way of life.

employees, Asian researchers on the other hand, explained that by Chinese virtues, whistleblowing is regarded as an unacceptable and unethical behaviour and as an act against the teachings of Confucianism (Chiu, 2002, 2003; Hwang et al., 2008; Ohnishi et al., 2008; Park et al., 2005). Confucianism values encourage social conformity and harmony by maintaining good relationships with people, be it with family members or within organisations (Ohnishi et al., 2008). As such, the act of whistleblowing would be considered as breaking close relationships between employees and employers (Chiu, 2002) as it will also affect harmony within the organisation (Ohnishi et al., 2008).

The Chinese virtues in preserving relationships and maintaining harmony within their groups are consistent with Hofstede's (1980a, 1991) collectivism dimension. Collectivism is one of the cultural traits of Asian society (Park et al., 2005). Hofstede (1980a, 1991) explained that, collectivism emphasises group-based values such as loyalty, harmony, cooperation, unity, conformity and the unquestioning acceptance of norms. In this respect, Park et al. (2005) added that the attitudes of collectivist societies are considerably different from those in individualist societies (especially among westerners), in which conflict between employees is regarded as acceptable. Confrontation and conflict in organisations within a collectivist society is considered as undesirable (Hofstede, 1991) and the act of confrontation is considered as seriously unacceptable within the norms of organisations (Park et al., 2005). That is the reason why Asian researchers highlighted that the act of whistleblowing is not acceptable within their communities.

However, there are contradictory findings in some empirical Asian whistleblowing studies. Chiu (2002) found that his subjects, part-time Chinese MBA students, viewed whistleblowing as ethical. Chiu (2002), however pointed out that his Chinese subjects are actually exposed to the effect of capitalism, which includes possessing materialistic, egoistic and self-centred behaviour, and suggested that their actions for blowing the whistle are consistent with a need to protect their own interests and rights. Chiu (2002) further explained that such behaviour is also due to the influence of Communist values, which require faithful party members or responsible citizens in China to report the wrongful acts of others, which Chiu (2002) likened as an act of prosocial behaviour. A study in Taiwan by Hwang et al. (2008) was also found to be consistent with Chiu's (2002) study in China. Using professionals from CPA firms, corporations and

professional associations and universities as their study subjects, Hwang et al. (2008) found that whistleblowing is judged as ethical and is positively related to whistleblowing intentions in Taiwan. Hwang et al. (2008) suggested that, this could be due to their respondents having a higher level of morality since the recent cases of global accounting and auditing failures.

In a nutshell, an act of reporting on someone's wrongdoing in Asian organisations would trigger a debate as such behaviour is not permissible in Asian cultural values and norms. Potential whistleblowers that are embedded deeply within Asian cultural virtues, the teachings of Confucius and collectivism dimension may discourage whistleblowing behaviour within organisations. Generally, Asians view the whistleblower negatively as a betrayer of organisation. Thus, researchers have acknowledged that having a sound reporting mechanism is essential if Asian organisations are to combat corporate fraud.

### **2.5.3. Whistleblowing and cross-cultural studies**

Apart from acknowledging national and cultural differences, prior whistleblowing studies have also examined cross-cultural effects. Keenan (2007) noted that previous whistleblowing studies concentrated only on culturally-bound perspectives and did not focus on cultural and international differences. Researchers have suggested that acknowledging the cultural and societal differences, i.e. between countries being examined, would provide a better understanding of differences in individual whistleblowing tendencies (Keenan, 2002a, 2007; MacNab et al., 2007; Schultz, Johnson, Morris, & Dyrnes, 1993; Sims & Keenan, 1999). Comparative studies between different nations have been conducted to determine the differences in cross-cultural ethics towards the act of whistleblowing.

Previous comparative whistleblowing studies undertaken have relied on Hofstede's (1980a, 1991) Theory of International Cultures (see Keenan, 2002a, 2007; Patel, 2003; Schultz et al., 1993; Sims & Keenan, 1999). Hofstede's theory suggests that every country has different work-related values which can be distinguished into four primary dimensions: *Masculinity* (versus *Femininity*), *Power Distance*, *Uncertainty Avoidance*,

and *Individualism* (versus Collectivism)<sup>6</sup>. Hofstede advocates that these dimensions could differentiate the cultures of our world and Sims and Keenan (1999) stated that those dimensions may help in the understanding of differences in whistleblowing tendencies.

Schultz et al. (1993) initiated comparative cross-cultural whistleblowing studies by incorporating Hofstede's dimensions of cultural differences into their study which examined whether subjects from France, Norway and United States, differ on their attitude to reporting. Then, Sims and Keenan (1999) explored cultural differences between samples of managers from America and Jamaica with respect to their whistleblowing tendencies. Other cross-cultural whistleblowing studies have investigated the propensity to whistleblow between Indian and American samples of managers (Keenan, 2002a), Chinese and American managers (Keenan, 2007), Australian, Indian and Chinese-Malaysian accountants (Patel, 2003), as well as between American, Canadian and Mexican executives (MacNab et al., 2007). All studies, except for Keenan (2002a)<sup>7</sup>, have found that there are significant differences between subjects of different nations with regards to their likelihood to blow the whistle. These studies acknowledged that Hofstede's dimensions of work-related values do indeed provide an explanation for cultural and societal differences on individual whistleblowing propensity.

Though Hofstede's work is one of the most cited sources in the *Social Science Index* and the most influential in the study of cross-cultural management (Fang, 2003; Sondergaard, 1994), his theory is not without criticism. Critics argue that his work-related values dimensions derived from 117,000<sup>8</sup> questionnaires administered in 66 countries were exclusively taken only from a single company – IBM (Baskerville, 2003; McSweeney, 2002b; Sondergaard, 1994). Baskerville (2003) argues that the data that formed the basis of Hofstede's (1980a) analyses were not representative of people in

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<sup>6</sup> Hofstede later added the fifth dimension in his later research, *Long-term Orientation* (versus Short-term) (Hofstede & Bond, 1988).

<sup>7</sup> Sims and Keenan (1999) explained that though Hofstede's (1980a, 1991) Theory of International Cultures could not explain all differences between two cultures, the theory may help to explain and predict differences in whistleblowing behaviour.

<sup>8</sup> The figures were combined from two rounds of surveys. Although the survey covered 66 countries, only 40 countries were used in Hofstede (1980a) study (McSweeney, 2002b).

those 66 countries being studied. Furthermore, McSweeney (2002b) stated that the data derived by Hofstede to construct national cultural comparisons were limited to responses from marketing-plus-sales employees and yet, Hofstede (1980b, p. 44) claimed the data “have the power to uncover the secrets of entire national cultures...”. Hofstede claimed that the term national culture refers to the culture of a country or state and not necessarily of a nation (Baskerville, 2003; McSweeney, 2002b) and each country/states or nations have different cultures.

Researchers argued that the attribution of the institution (IBM) or nation as a national culture is a weak move which has methodological flaws (Baskerville-Morley, 2005; Baskerville, 2003; McSweeney, 2002a, 2002b). Baskerville (2003) stressed that culture does not equate with nations citing the *Encyclopaedia of World Culture*, by saying that various different cultures could even be identified within a single country, and “Hofstede did not adequately address these basic problems” (Baskerville, 2003, p. 6). The *Encyclopaedia* identified that, in the Middle East, there are 35 different cultures in 14 nations and 98 different cultures identified in 48 countries in Africa. Western Europe has 81 cultures in 32 countries, while in North America, there are 147 Native American cultures and 9 North American folk cultures (Baskerville, 2003). Jacob (2005) further emphasised that there is no such thing as homogeneous cultural entities within a country. She even explained that “even a small country like Switzerland, with a population of only 7.5 million, is not culturally homogenous” (Jacob, 2005, p. 515).

As most whistleblowing studies are derived from the United States (Vinten, 2003), it is expected that Americans will be compared with their counterparts from other countries in determining the differences towards whistleblowing tendency. This is essentially what has been done by previous researchers (see Keenan, 2002a, 2007; MacNab et al., 2007; Schultz et al., 1993; Sims & Keenan, 1999). However, these studies do not take into consideration the fact that the United States is also culturally diverse. G. King (2000) reported a diverse racial composition in the American workforce which includes African Americans, Hispanic Americans, Asian Americans and Anglo Americans, with each race having different cultural attitudes and styles of communication in reporting unethical behaviour by employees. Therefore, extreme care and alternative methodologies need to be undertaken and Jacob (2005) has suggested that researchers need to employ more robust methodology in cross-cultural studies. Apart from the



methodological concerns, due to the nature of previous comparative whistleblowing studies, the findings are case-specific and cannot be simply generalised to other countries.

#### **2.5.4. Internal auditors in prior empirical whistleblowing studies**

Arnold and Ponemon (1991) were the first that had used internal auditors in their whistleblowing study. Specifically, their study examined internal auditors' perceptions of whistleblowing and its effects on three variables: (1) the level of moral reasoning of the individuals, (2) the possible retaliation imposed by the management against the whistleblower, and (3) the position of whistleblower in an organisation (external auditors, internal auditors and marketing analysts). Using experimental methods incorporating a case scenario, the internal auditors were required to predict the likelihood of another person disclosing wrongdoing. Arnold and Ponemon (1991) found that internal auditors with lower levels of moral reasoning were unlikely to blow the whistle on wrongdoing, due to fear of management retaliation, that the position of the prospective whistleblower has a significant influence on whistleblowers' behaviour, and external auditors are most likely to whistleblow compared to internal auditors and marketing analysts.

Xu and Ziegenfuss (2008) then extended the study on internal auditors whistleblowing intentions by exploring the impact of reward systems and its effect on individual's moral reasoning. Xu and Ziegenfuss (2008) suggest that reward systems (cash rewards or continued employment contracts) may have a positive impact on whistleblowing behaviour. They proposed that internal auditors with lower levels of moral reasoning are more sensitive to reward and are more willing to whistleblow when reward incentives are provided. Adapting a case scenario from Arnold and Ponemon's (1991) study, the internal auditors were required to indicate the likelihood of reporting the wrongdoing to higher authorities. Xu & Ziegenfuss (2008) found that reward systems have a significant influence on internal auditors' likelihood of whistleblowing behaviour, with internal auditors possessing lower levels of moral reasoning more likely to be affected by reward incentives than those with higher levels of moral reasoning.

Both studies by Arnold and Ponemon (1991) and Xu & Ziegenfuss (2008) have used moral reasoning variables contributed by Kohlberg's (1969) moral development theory and the Defining Issues Test (DIT)<sup>9</sup> instrument developed by Rest (1979). However, there are some concerns as the application of such an approach in a cross-cultural study (e.g. as in Malaysia) is likely to be problematic (Ma, 1984). Ma cautioned that some of the dilemma scenarios used in the DIT instrument to measure the individual's moral development level "... are concerned with some of the political situations commonly occurred in America" (Ma, 1984, p. 53), and as such, these scenarios are culturally-specific and cannot be understood by subjects from other cultures.

Other studies that have examined internal auditors' reporting of wrongdoing were conducted by Miceli, Near, and Schwenk (1991) and recently by Seifert et al. (2010). Miceli, Near, and Schwenk (1991) examined whether internal auditors' whistleblowing behaviours could be predicted based on literatures on prosocial behaviour and bystander intervention theory. Their study examined a number of individual and situational variables to determine the likelihood of internal auditors towards whistleblowing. Miceli, Near, and Schwenk (1991) found that internal auditors were less likely to report when they felt that they are not morally compelled or prescribed by their role to do so, when they have a lower job performance level and if their organisations are highly bureaucratic. On the other hand, internal auditors are more likely to whistleblow if they feel that the public and their co-workers are harmed by the act of wrongdoing, the wrongdoer is a lower level employee, when there are few observers, and when their organisations are highly regulated. The study by Seifert et al. (2010) on the other hand, utilised a group of internal auditors and management accountants. Their study represents an experimental approach (via use of vignettes) to identify actions of policies that encourage internal reporting of wrongdoing. Their results suggest that management can increase the likelihood of these auditors and accountants to internally report financial statement fraud by incorporating organisational justice in the design and execution of whistleblowing policies.

The methodological approach used by Miceli, Near, and Schwenk (1991) requires their subjects to self report based on their own actual work experience. This was also in exact

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<sup>9</sup> The DIT provides a surrogate measure of an individual's ethical reasoning and judgement. It contains a self administered questionnaire that contains a series of six hypothetical moral conflicts.

contrast to studies by Arnold and Ponemon (1991), Xu and Ziegenfuss (2008) and Seifert et al. (2010) which undertook experimental methods utilising case scenarios. Miceli and Near (1988, p. 279) cautioned that “retrospective, self-reported data can be problematic because of memory distortion and post-decisional justification, and other processes, and cause-effect relations are difficult to trace”. Furthermore, Miceli and Near (1984) added that when self-reported data are used there will always be possibilities for bias, especially for employees who actually observed a wrongdoing, but decided not to act or report it. The variables and method for this study in conducting the research are further explained in Chapters 3 and 4 of this thesis.

#### **2.5.5. Methodological concerns**

Patel (2003) states that whistleblowing is a difficult topic to research, as researchers can only examine their respondents’ behavioural intentions rather than their actual behaviour. The whistleblowing intention variable refers to respondents’ probability to report unethical behaviours represented in hypothetical case scenario(s) or vignettes. This method is commonly used in previous research investigating respondents’ whistleblowing intentions (see Arnold & Ponemon, 1991; Ayers & Kaplan, 2005; Brennan & Kelly, 2007; Chiu, 2002; Kaplan & Schultz, 2007; Keenan, 2002a, 2002b; Patel, 2003; Rothwell & Baldwin, 2007a; Xu & Ziegenfuss, 2008).

Though the approach has been widely used, some studies have acknowledged its limitations. Brennan and Kelly (2007) and Xu and Ziegenfuss (2008) reported that hypothetical scenarios are not able to capture exact information about the real world, thus the validity and generalisability of the findings need to be questioned. Miceli et al. (2008) doubt that respondents who responded in the hypothetical situations would actually act if they were faced with the real situation. Furthermore, if these respondents did respond, they would then possibly be susceptible to social desirability bias (Miceli et al., 2008).

However, Mesmer-Magnus & Viswesvaran (2005) state that previous researchers have advocated the use of whistleblowing intention as a research variable. They cite that it is due to: “(1) ... difficulty of carrying out investigations into unethical conduct in actual organizations, (2) suggesting that actual whistleblowers censor the information they

provide to investigators due to the perception that data gathered in actual organizations preclude their confidentiality or anonymity, (3) illuminating the difficulty of locating actual whistleblowers for questioning, or (4) citing the inherently flawed nature of such data (e.g., self-reports of past events)” (Mesmer-Magnus & Viswesvaran, 2005, pp. 278-279 ). Ayers and Kaplan (2005) contend that an experimental approach (by using hypothetical scenarios or vignettes) is particularly useful for the study of whistleblowing intentions as it allows for greater control over competing explanations, thus enhancing internal validity. Kaplan and Shultz (2007) supported that, suggesting that an experimental approach allows for a high level of control and provides a stronger basis to evaluate cause–effect relationships.

Previous research has acknowledged that, other types of research design such as interview, field-experimental and longitudinal survey design may not be workable in whistleblowing research. Although some researchers recognise that it is essential to measure actual whistleblowing behaviour in order to understand whistleblowing tendencies (Gundlach, Martinko, & Douglas, 2008; Sims & Keenan, 1999), it is however not practical in social science research. Miceli and Near (1988, p. 277) stated that, “... because of obvious ethical concerns, one cannot randomly select employees to witness manipulated wrongdoing in order to determine which individual or situational characteristics are associated with whistle-blowing”. Furthermore, due to the sensitivity of the nature of wrongdoings, participants may not be willing to be identified and may not respond to the questionnaire, hence making the data become invalid (Miceli & Near, 1988).

Therefore, the use of hypothetical scenarios or vignettes allows the researcher to approach highly sensitive issues by posing hypothetical situations to which the participants may respond. The approach of using vignettes is considered as appropriate and effective for acquiring data in whistleblowing studies (Gundlach et al., 2008) and it provides a more realistic context for the respondents (Reidenbach & Robin, 1990). It is therefore apparent that the majority of whistleblowing studies have used vignettes or scenario-based approaches to examine their respondents’ ethical behaviours.

## **2.6. Whistleblowing Issues in Malaysia**

Malaysia is a multi-racial and multi-cultural country situated in Southeast Asia with a current population of about 28 million. The population consists of many ethnic groups with Malays, Chinese and Indians among the largest ethnic groups in Malaysia. The Malays, Malaysia's largest ethnic group, make up 50.4% of the population. It is then followed by Chinese with 23.7%, Indian with 7.1% and the remainder consisting of a myriad of other ethnics groups (<http://en.wikipedia.org/wiki/Malaysia>). Each of these ethnic groups are free to practice and maintain their separate ethnic identities, cultures, languages as well as their own norms, values and beliefs. This has turned Malaysia into a mosaic of cultures with a diverse and colourful heritage, thus making Malaysia unique and not directly comparable with other nations.

### **2.6.1. Cross-cultural issues in Malaysia**

The differences in cultures, norms, values and beliefs possessed by these three major ethnic groups could also lead to differing views of what is acceptable and what is unacceptable in business ethics (Rashid & Ibrahim, 2008). Prior studies that have examined these three major ethnic groups in Malaysia have shown that there were significant differences among the Malays, Chinese and Indians with respect to their judgments on business ethical practices (see Rashid & Ho, 2003; Rashid & Ibrahim, 2008; Zabid, 1989). These studies however, were limited to examining unquestionable business ethics practices and did not incorporate complex and sensitive issues such as whistleblowing. Although Rashid and Ho (2003) acknowledged that there were influences of ethnic groups on perceived business ethics, such differences however, were limited. They then suggested that, the influence of culture is dependent on the situational context, thus if the ethical situation is complex, the more likely the influence of culture would be.

This would suggest that, as whistleblowing is also a very complex issue to be studied, culture would impact on the individual Malaysians' whistleblowing tendencies. Though Malaysia is located in the same Asian region as China, Taiwan, South Korea and Japan, as well as having its own Chinese population, the corresponding research findings in

whistleblowing studies cannot be generalised to Malaysia for very apparent reasons. As Malaysia is culturally diverse, this study is not interested in determining whether cultural differences existed among the three major ethnics with regards to their whistleblowing intentions.

Such a study, if ever incorporated, could lead to various methodological concerns should it not be properly undertaken. The concerns have been highlighted rigorously in the previous section which discussed cultural and cross-cultural studies in previous empirical research. McDonald (2000) highlighted that methodological concerns in cross-cultural research include variable identification, operational definitions, instrument design, sample selection, sample treatment and analysis. The current study's concern is basically on its instrument design and the issue is described in Chapter 4 (Research Method) of the thesis (refer section 4.4.4.2). Hence, cultural differences between the Malays, Chinese and Indians with regards to their ethical decisions in examining their whistleblowing intentions will not be examined.

### **2.6.2. Corporate fraud issues in Malaysia**

As with any other nation, Malaysia has not been spared its own cases of corporate unethical practices, financial frauds and scandals. Such cases were said to be one of the primary causes of the 1997 Asian financial crisis (Haron, 2010). Furthermore, in the latest Corruption Perception Index 2009 issued by Transparency International, Malaysia is ranked 56<sup>th</sup> out of 180 nations surveyed with a score of 4.50 out 10, a fall of 0.60 (from 5.10) from the previous year (where 0 means highly corrupt and 10 is the best possible score). The decline from the 47<sup>th</sup> spot in 2008 is the steepest among the Asian countries, with Malaysia ranked below countries such as South Africa and Latvia as shown in the 2009 index. Haron (2010) implied that the decline was due to poor internal and external auditing procedures that failed to detect red flags of increasing fraud incidence.

Locally, in May 2009, KPMG Forensic Malaysia distributed a fraud survey questionnaire to a total of 1,125 companies comprising all listed companies on Bursa Malaysia as well as 100 private companies (which were ranked as Malaysia's top 1,000 companies). The survey, known as *KPMG Malaysia Fraud Survey Report 2009*, which

was conducted on the top management of the companies, provided an insight into contemporary fraud issues being faced by organisations in Malaysia (KPMG, 2009). The survey revealed that, nearly half (49%) of the Malaysian companies have been hit by fraud and this is expected to worsen in the next two years as a result of the financial crisis. Other key findings of the report were that, 47% of the respondents disclosed that the total losses suffered during the survey period (January 2006 – December 2008) totalled RM63.95 million, while the remaining respondents were unsure of the amount. The KPMG report showed that the threat of fraud comes mostly from within organisations, with internally-perpetrated fraud by management and non-management employees accounting for 88% of the total reported fraud value of over RM60 million.

The latest findings from the Transparency International and the KPMG Forensic Malaysia survey proved that corporate fraud and wrongdoing are an ongoing reality and a major concern. Tighter rules and legislation are very much needed in order to enhance corporate governance practices in the Malaysian corporate scenes. This has led to amendments to Malaysian securities laws with the introduction of provisions governing whistleblowing.

### **2.6.3. Whistleblowing legislation in Malaysia**

Whistleblowing provision in Malaysia is basically contained in Section 174 (8) of the Companies Act, 1965, where auditors are placed under obligation to report to the Registrar of Company breaches of company law. The law however, does not provide any kind of protection for would-be whistleblowers (Khan, 2009) and the obligation is only directed to external auditors of the organisation. In the light of numerous financial scandals which have occurred in recent years, as well as the introduction of Sarbanes-Oxley Act of 2002 in the United States, amendments to the Securities Industry Act 1983 (SIA) came in 2004 with the introduction of novel whistleblowing provisions into Malaysian securities law. The whistleblowing provisions are set out in sections 99E and 99F respectively. There are two key components of the whistleblowing provisions which include:

- A mandatory duty for auditors to report to relevant authorities breaches of securities law and listing requirements. This requirement supplements existing requirements in the Companies Act 1965; and
- Protection against retaliation for specific categories of persons, namely chief executive officers, company secretaries, internal auditors and chief financial officers who report to the authorities on cases of fraud and corporate wrongdoing. The protection against retaliation includes protection against discharge, discrimination, demotion and suspension by the company on the whistleblower.

The SIA provisions are the first Malaysian legislative initiatives on whistleblowing (Pascoe & Bidin, 2008) and generally apply to breaches of securities laws and stock exchange rules. Later, in September 2007, the Companies Act 1965 was amended to incorporate a new section 368B which provides protection to officers of a company for any report made to the Registrar of Companies of any contravention of the Companies Act or a serious offence involving fraud or dishonesty against the company committed by other officers in the company. In addition to the newly amended Companies Act 1965, a new Capital Market and Services Act 2007 (CMSA) has been introduced. CMSA had repealed the Securities Industry Act 1983 and Future Industry Act 1993 (Pascoe & Bidin, 2008). The whistleblowing provisions which was previously under SIA are now embodied in CMSA (Khan, 2009; Pascoe & Bidin, 2008).

Generally, these newly amended provisions provide for the protection of breaches of securities laws to the relevant authorities and promote better corporate governance in Malaysian public listed companies (Khan, 2009). However, consistent with the views held by the Securities Commission and IIA Malaysia, Pascoe and Bidin (2008) have also suggested that it is appropriate for local companies to develop their own internal whistleblowing procedures. It would then be interesting to determine whether the recent legislative changes on whistleblowing provisions have some influence in internal auditors' whistleblowing intentions.



#### **2.6.4. Empirical whistleblowing study in Malaysia**

It is evident that further research on whistleblowing is needed in Malaysia. To date, study has been limited to the work of Patel (2003). His study examined cultural influences on professional judgments among Australian, Indian and Chinese-Malaysian accountants in relation to whistleblowing as an internal control mechanism. The samples of his study were confined to selected Chinese professional accountants hence limiting the generalisability of other potential respondents from other races. It is hoped that the outcome of this study will address the gap in the study of whistleblowing intention as well as contributing to the much needed knowledge of whistleblowing literature in Malaysia.

#### **2.7. Summary**

Based on reviews of general literature related to whistleblowing, it is apparent that whistleblowing has become an increasingly important issue for behavioural research. Practically, management may be able to further understand their employees' ethical behaviour for whistleblowing within organisations. Without any doubt, more study is warranted to understand this ethics management tool. While research on whistleblowing is abundant, empirical research is very much needed in Malaysia in relation to internal auditors' influence on acts of whistleblowing.

It is obvious now that, internal whistleblowing is different from external whistleblowing behaviour, as the former involves reporting to an entity within the target organisation while the latter involves reporting to an entity external to the organisation. This research effort focuses on the internal type of whistleblowing, which currently represents an important organisational requirement in whistleblowing studies. Many important questions are unanswered in relation to this behaviour, particularly in Malaysia. There is a need for better understanding of how certain factors may influence internal auditors' internal whistleblowing decisions. The next chapter focuses on factors affecting individuals' decision to whistleblow, which is the primary concern of this study.

# CHAPTER 3

## FACTORS AFFECTING INTERNAL WHISTLEBLOWING INTENTIONS AND HYPOTHESES DEVELOPMENT

### 3.1. Introduction

The decision to whistleblow on corporate wrongdoing is a difficult decision to be made (Brennan & Kelly, 2007) and involves an extremely complicated process (Miceli, 2004). The decision to blow the whistle embraces different types of organisational, individual, situational and demographic factors (Brennan & Kelly, 2007; Greenberger et al., 1987; Keenan, 2000; Miceli & Near, 1988; Near & Miceli, 1985; Oh & Teo, 2010). Because of the potential internal whistleblowing has for protecting organisations against external whistleblowing, and because of recent legislation requirements, it is important to understand how these four factors might influence internal auditors' intentions to internally whistleblow on corporate wrongdoing occurring within their organisations (see Figure 1.1 that portrays the theoretical model for this study).

### 3.2. Organisational Factors

The research questions identified earlier examine the relationship between organisational factors and internal auditors' willingness to whistleblow. Previous empirical studies have shown that organisational factors such as ethical climate (Rothwell & Baldwin, 2006, 2007a), size of organisation (Hooks, Kaplan, Schultz, & Ponemon, 1994; Keenan, 2000; Miceli, Near, & Schwenk, 1991) and job level (Keenan, 2000, 2002a, 2002b, 2007; Miceli & Near, 1984) do influence subjects' decision to whistleblow.

### **3.2.1. Ethical climate**

It has been argued that organisations have distinct ethical climates (Victor & Cullen, 1988) that reflect common perceptions and beliefs concerning organisational ethical conducts. According to Victor and Cullen (1988, p. 103), ethical climate is simply “the ethical dimensions of organizational culture” that members perceive to be the organisation’s ethical identity. Specifically, Wimbush and Shepard (1994, p. 638) with reference to ethical climate, “... to the stable, psychologically meaningful, shared perceptions employees hold concerning ethical procedures and policies existing in their organizations”. Therefore, when organisations have identifiable ethical climates, employees are better able to recognize types of ethical dilemmas, to differentiate issues that are pertinent to the dilemmas and to identify a process that should be used to solve those dilemmas.

Explanations regarding ethical climate theory have been provided in Chapter 2 previously (refer section 2.2.2). The following sections discuss the outcomes of the Ethical Climate Questionnaire, the survey instrument used by Victor and Cullen (1988) and other researchers, its empirical dimensions and the relationship between ethical climates and organisational members’ ethical behaviour, including whistleblowing intentions.

#### **3.2.1.1. Dimensions of ethical climates**

In their preliminary ethical climate study, Victor and Cullen (1988) studied a sample of 872 employees from four firms; a small printing company, a savings and loan company, a manufacturing plant and a telephone company, to determine whether ethical work climates are multidimensional. Utilising the 26-item Ethical Climate Questionnaire (ECQ), five factors were loaded through factor analysis using a principal components solution with Varimax rotation. These five factors were then labelled as; (a) caring, (b) rules, (c) law and code, (d) independence, and (e) instrumental. The explanation for each factor is given below.

Employees in a ‘caring climate’ are sincerely interested in the wellbeing of each other and their workgroup constituencies. In a ‘rules climate’, employees would be expected

to adhere strictly to the rules and mandates of the organisations. Employees in a 'law and code climate' are expected to adhere strictly to the codes and regulations of their profession or government. In an 'independence climate', employees are expected to be strongly guided by their personal moral beliefs. Finally, in an 'instrumental climate', organisation members look out specifically for their own self-interest (Victor & Cullen, 1988). The major findings of this study substantiated that, a number of hypothesised ethical climates do exist and that organisations developed distinct forms of ethical climates.

Later, Cullen et al. (1993) extended Victor and Cullen's (1988) study by using a revised version of the ECQ with 10 more items added to the 26 items used previously. Using samples from four accounting firms, their study identified seven types of ethical climate, where two of the ethical climate types; company profit and social responsibility were previously not loaded in Victor and Cullen's (1988) study. Based on their outcomes, Cullen et al. (1993) suggest that the ECQ construct is valid and the scales are reliable. However, they acknowledged that the samples used in their studies are small, representing only four organisations in each study. Research examining a larger sample of organisations is needed to further validate organisational ethical climates (Cullen et al., 1993).

Fritzsche (2000) extended the examination of the number of ethical climates existing in a high technology firm by testing both the longer (36-items) and the shorter (original 26-items) version of the ECQ instrument. Using the 36-items, the factor analysis yielded eight factors. The study found factors describing the principle climate of independence, rules, and law and code, consistent with Cullen et al. (1993), as well as egoistic climate of efficiency. However, other factors were found to be mixed with other combinations of climate, making it difficult to interpret (Fritzsche, 2000). Fritzsche (2000) then used the original 26-items used by Victor and Cullen (1988) in order to gain parsimony in his analysis. The study found six factors and Fritzsche (2000, p. 130) state that "the 26-item scale yielded more factors which were interpretable without losing the essence of the factors from the larger scale".

Earlier, studies by Wimbush et al. (1997a; 1997b) also failed to replicate the same climates as identified by the Victor and Cullen (1988) study. Consistent with the

methodology used by Victor and Cullen (1988), Wimbush et al. (1997a, 1997b) applied factor analysis using a principal components solution with varimax rotation to 36 items of ECQ. Numerous rotations were made to obtain the best representation of the data (Wimbush et al., 1997a, p. 70). Their study identified only three out of five ethical dimensions similar as found by Victor and Cullen (1988) – law and rules, independence and instrumental. Another factor – ‘caring’, though was found in Victor and Cullen (1988) study, the loaded items were also found mixed with Victor and Cullen’s instrumental ethical climate. As such, this factor was then labelled as ‘service’ as it was a new ethical climate not identified in Victor and Cullen’s (1988) study and due to the fact that the content of the items referred mostly to customer service (Wimbush et al., 1997a).

The outcomes from these previous studies clearly show that Victor and Cullen’s (1988) empirically identified ethical climates are not expected to exist in all organisations. Studies that utilised the original 26-items have been able to identify either five (Victor & Cullen, 1988) or six factors (Fritzsche, 2000). On the other hand, those that used the extended version found five (Wimbush et al., 1997a, 1997b), seven (Cullen et al., 1993) and eight factors (Fritzsche, 2000). Peterson (2002b) states that it is uncertain how many ethical climate dimensions exist in a particular organisation as well as items of ECQ that are representative of each dimension. Peterson (2002b) illustrates the result of five studies employing an explanatory factor analysis procedure on the 36-items of ECQ which is shown in Table 3.1. Comparison of these studies showed that none of them is able to show all the nine hypothetical ethical climates to exist within organisations.

#### 3.2.1.2. Ethical climates and ethical behaviour

Research has established that organisational climate may influence the behaviour of employees (Barnett & Vaicys, 2000; Deshpande, 1996; Fritzsche, 2000; Martin & Cullen, 2006; Vardi, 2001; Victor & Cullen, 1988; Wimbush & Shepard, 1994; Wimbush et al., 1997a, 1997b). This is due to, ethical climate perceptions potentially influencing behaviour “in facilitating both positive and negative organizational outcomes” (Martin & Cullen, 2006, p. 191). Wimbush and Shepard (1994) validated Victor and Cullen’s (1988) ECQ as a proven instrument to evaluate and compare the ethical climate dimensions within organisations. The questionnaire examines

employees' perceptions concerning how they deal and confront ethical issues within their organisations. Studies have examined ethical climates' relationship to organisational commitment (Cullen et al., 2003), deviant workplace behaviour (Peterson, 2002a), and ethical behaviour (Wimbush et al., 1997b).

**Table 3-1: Ethical Climate Questionnaire items and the factors they represent based on five investigations.**

	Study 1	Study 2	Study 3	Study 4	Study 5
1. People concerned for themselves (EI)	SI	SI	F	*	SI
2. Consider efficiency first (EC)	E	E	F	E	*
3. Follow personal beliefs (PI)	PM	PM	PM	*	PM
4. Further company's interest (EL)	*	*	SI	*	*
5. Look out for each other's good (BI)	SI	*	F	F	*
6. No room for personal morals (EI)	PM	*	SI	*	SI
7. Follow company's rule (PL)	R	LR	LR	R	*
8. Hurts company's interest (EL)	*	*	SI	*	*
9. Decide for themselves what is right (PI)	PM	PM	PM	PM	*
10. People protect their own interest (EI)	SI	SI	F	SI	SI
11. Each person's sense of right and wrong (PI)	PM	*	PM	PM	*
12. Concern for all the people (BL)	F	F	F	F	*
13. Does decision violates any law (PC)	*	LR	LR	*	LR
14. Comply with the law (PC)	L	LR	LR	L	LR
15. Stick to company rules (PL)	R	LR	LR	R	*
16. Concern for what is best for others (BI)	F	F	F	*	F
17. Concern with the company's interest (EL)	*	*	SI	*	*
18. Successful people go by the book (PL)	R	LR	LR	*	*
19. Efficient way is always the right way (EC)	E	E	F	E	*
20. Strictly follow legal standards (PC)	L	LR	LR	L	LR
21. What is best for everyone (BL)	F	F	F	F	F
22. Guided by their own beliefs (PI)	PM	PM	PM	PM	PM
23. Obey company rules (PL)	R	LR	LR	*	*
24. Law is a major consideration (PC)	L	LR	LR	*	LR
25. Expected to work efficiently (EC)	E	E	SR	E	*
26. Do what is right for the customer (BC)	SR	SR	SR	SR	SR
27. View team spirit as important (BL)	*	*	F	*	*
28. Strong responsibility to the community (BC)	SR	SR	F	SR	SR
29. View decisions in terms of profit (EL)	*	*	SI	*	*
30. Concerned about customers' interest (BC)	SR	SR	SR	SR	SR
31. What is best for employees (BL)	F	*	F	F	*
32. Primary concern is for the organisation (BI)	F	F	F	F	F
33. What is best for themselves (EI)	*	SI	F	SI	SI
34. Customer is primary concern (BC)	SR	SR	SR	SR	SR
35. Care for each individual (BI)	F	F	F	F	F
36. Efficient solutions sought (EC)	E	*	F	E	*

\* Did not load highly on any one factor.

Values in parenthesis represent theoretical dimensions, E – Egoism, B – Benevolence, P – Principle, I – Individual, L – Local, and C – Cosmopolitan.

**Study 1:** (Cullen et al., 1993) SI – Self Interest, E – Efficiency, F – Friendship, SR – Social Responsibility, PM – Personal Morality, R – Rules, L – Laws. **Study 2:** (Vaicys et al., 1996) F – Team Spirit, LR – Rules and Codes, SR – Social Responsibility, SI – Self Interest, E – Efficiency, PM – Personal Morality. **Study 3:** (Wimbush et al., 1997) F – Caring, LR – Law and Rules, SR – Service, PM – Independence, SI – Instrumental. **Study 4:** (Trevino et al., 1988) F – Employee Focus, SR – Community Focus, SI – Self Interest, E – Efficiency, R – Rules, PM – Personal Ethics, LR – Law and Professional Codes. **Study 5:** (Agarwal and Malloy, 1999) F – Individual Caring, SI – Machiavellianism, PM – Independence, SR – Social Caring, LR – Law and Code.

**Source: Peterson (2002b), Table 2, p. 317**

Cullen et al. (2003) examined the effects of dimensions of ethical climates on employees' organisational commitment. Their study examined the effects of ECQ on two separate samples, i.e. non-union employees from seven departments of a telephone company (study 1) and members of four accounting organisations (study 2). As hypothesised, Cullen et al. (2003) found that both studies 1 and 2 showed that egoistic climate is negatively related to organisational commitment, and that the perceptions of benevolent climate are positively related to organisational commitment. Finally, perceptions of principle climate are positively related to organisational commitment for study 2 but not for study 1. Cullen et al. (2003) suggested that this could be due to professional workers having internalised the value of principle reasoning while executing their tasks.

Peterson (2002a) examined the possibility of predicting various types of deviant workplace behaviour utilising the ECQ instrument. Workplace deviance has been defined as voluntary disclosure that contravenes norms of organisations and the effect will threaten the well-being of organisations and its members (Peterson, 2002a citing Robinson & Bennet, 1995). The study clearly indicated that deviant workplace behaviour could be predicted from the ethical climate of the organisation. The clearest relationship was between Political Deviance<sup>10</sup> and a caring climate. This implies that when an organisation is concerned with the welfare of its members, the employees will be less likely to experience problems associated with Political Deviance (Peterson, 2002a). The second classification was the category of Property Deviance<sup>11</sup>. This form of deviant behaviour was related to the rule and law dimension (Peterson, 2002a). The study indicates that organisations that do not emphasise stringent adherence to the company's rule and laws are more susceptible to Property Deviance. The significant predictors of Production Deviance<sup>12</sup> were the instrumental, independence and caring climates. The instrumental climate was positively correlated indicating that in organisations where employees are concerned with protecting their own self-interest,

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<sup>10</sup> A minor form of deviance directed at members of the organisation such as favouritism, gossiping and blaming co-workers (Peterson, 2002a).

<sup>11</sup> A serious form of deviant behaviour such as stealing from the company, damaging company's property or padding expense accounts (Peterson, 2002a).

<sup>12</sup> A minor form of deviant behavior such as taking longer break, unproductive labour and worked on personal matters instead of business matters (Peterson, 2002a).

they were more likely to experience such deviance. Conversely, independence and caring climates were negatively correlated with Production Deviance. The final category, Personal Aggression<sup>13</sup> provided the least consistent result, suggesting that it might be better explained by the characteristics of the individual committing the act rather than organisational ethical climate (Peterson, 2002a).

Wimbush et al. (1997b) examined the relationship between ethical climate and ethical behaviour for the employees in a retail organisation. The employees' ethical behaviour was measured using four vignettes constructed from a series of ethical situations that commonly occur in an organisation; (1) stealing, (2) lying, (3) disobeying company rules, and (4) being an accomplice. Participants in their study were asked to assume the role of decision maker indicating how they would behave in each scenario. Wimbush et al. (1997b) found that independence, caring, law and code, and service climates were all negatively related to ethical behaviour of either being an accomplice, disobedience, lying, and stealing behaviours as hypothesised. On the other hand, instrumental climate was positively related only to behaviour of being an accomplice. The study suggests that there is a relationship between ethical climate and ethical behaviour. Wimbush et al. (1997b) state that once the exact climate is known, management may be able to take appropriate action to counter any unethical behaviour stemming from the climate.

#### 3.2.1.3. Ethical climates and whistleblowing intentions

The ethical climate of an organisation would influence organisational members to manage conflicts and make ethical decisions. With regards to whistleblowing, organisational climate theory can be used to show how reporting intentions are influenced by the organisations' climate (Rothwell & Baldwin, 2006, 2007a). Rothwell and Baldwin (2006, 2007a) have attempted the first and only studies to investigate the relationships between whistleblowing and five forms of ethical climate - instrumental, caring, rule, independence, and law and code.

In their first study, Rothwell and Baldwin (2006) have utilised Victor & Cullen's (1988) original 26-item ECQ instrument and used police officers and civilians as their samples.

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<sup>13</sup> A serious form of deviance such as cursing, sexual harassment or intimidating through threats (Peterson, 2002a).



Rothwell and Baldwin (2006) found that only instrumental, caring and rule climates demonstrate significant relationships with whistleblowing intention and action. Whistleblowing intentions among the respondents were gauged using vignettes that placed the respondents in hypothetical situations involving various acts of misconduct. As such, Rothwell and Baldwin (2006) concluded that ethical climates may have limited capacity to affect whistleblowing due to the complexities and sensitivity associated with whistleblowing. They acknowledged that their study did not control social desirable response, and due to infrequent exposure to workplace misconduct by their respondents, this could be the reason why ethical climate was not a valid predictor for whistleblowing. Furthermore, the fact that their samples were drawn from employees in public organisations might have made the ethical climate theory less generalisable to such an organisation, suggesting that future studies need to be conducted in private organisations (Rothwell & Baldwin, 2006).

In another study, Rothwell and Baldwin (2007a) used the 36-item ECQ to investigate the relationship between ethical climates and police whistleblowing on forms of misconduct. The factor analysis then loaded five factors which are identified as law and rules, friendship or team-interest, social responsibility, company profit or efficiency, and independence. The results of multiple regressions showed that among the ethical climates, only friendship or team climate could predict the willingness to blow the whistle.

Studies have suggested that organisational ethical climate can be a significant factor in shaping the behaviour of its organisational members. Researchers contend that individual variables alone are not able to explain sufficiently individual ethical behaviour (Victor & Cullen, 1988; Wimbush et al., 1997a). Organisational conditions may affect an individual's decision to whistleblow (Miceli & Near, 1984) and organisational variables such as ethical climate may provide a criterion for understanding, evaluating and resolving individual ethical dilemmas (Barnett & Vaicys, 2000). However, previous empirical studies have shown that no organisation is expected to exhibit all nine theoretical climates (see Cullen et al., 2003; Cullen et al., 1993; Fritzsche, 2000; Peterson, 2002a; Rothwell & Baldwin, 2006, 2007a; Wimbush et al., 1997b). This is due to the loci of analysis, which are most often combined in unique ways for different organisations (Cullen et al., 1993). As such, consistent with Cullen et

al. (2003), this study offers a proposition based on the three basic criteria of moral judgment: egoistic, benevolent and principle.

As stated in the previous chapter (section 2.2.2), a climate characterised as *egoism* can be expected to promote the organisational member to consider what is in his/her own self interest. Egoism is primarily based upon the notion of maximisation of self interest or rewards to oneself. The organisational member first examines the situation in question to determine his/her own best interest, regardless of whether others are affected by the decision made (Cullen et al., 2003). An egoistic climate signals to internal auditors that the organisation is supporting and endorsing self interested behaviours, even at the expense of others and in such a climate they may view the act to whistleblow as potentially harmful and will choose not to engage in it. The following sub-hypothesis is offered:

***Hypothesis 1(a):***

***In an organisation with an ethical climate characterised by egoism, internal auditors will be less likely to whistleblow.***

A *benevolence* climate is characterised by the expectation that organisational members are concerned with the well-being of others both within and outside the organisation (Victor & Cullen, 1988). Because of this promotion of well-being, an internal auditor, if confronted with a non-routine ethical dilemma, will choose to dissent. The decision to dissent would come primarily from the concern about others, the organisation, and the problem that the wrongful act is violating its own climate. Therefore, the second sub-hypothesis is proposed:

***Hypothesis 1(b):***

***In an organisation with an ethical climate characterised by benevolence, internal auditors will be more likely to whistleblow.***

A *principled* climate is based on the belief that there are universal principles of right and wrong and ethical decisions are based upon the application or interpretation of rules, laws and standards (Victor & Cullen, 1988). If the organisation or its members are engaging in unethical behaviour, another member would then likely feel compelled to

dissent. In this situation the principles adhered to are more salient than the activities of the organisation. Cullen et al. (2003) state that when an organisation develops a principled climate, professionals (such as internal auditors) will more likely behave in congruence with internalised professional norms and values. Therefore, the third sub-hypothesis is stated as follows:

*Hypothesis 1(c):*

*In an organisation with an ethical climate characterised by principle, internal auditors will be more likely to whistleblow.*

### **3.2.2. Size of organisation**

The size of organisation could have an effect on other organisational characteristics (Barnett, 1992a). However, there have been mixed and conflicting views in previous theoretical and empirical studies concerning the effect of size of organisation in explaining employees' whistleblowing behaviours. Theoretically, the bystander theory, a construct of prosocial behaviour theory, suggests that the incidence of whistleblowing would be lower in larger organisations than in the smaller ones. According to the theory, the larger the group of bystanders, the less likely any one bystander is to engage in prosocial behaviour to help out a victim. Latane and Darley (1968) used the term "diffusion of responsibility" to explain that the likelihood of a person intervening in an emergency situation will decrease should there be other people witnessing the event. If a person is alone when they notice such an emergency situation, they are solely responsible to cope with it, but if they believe that there are other people present, they may feel less responsible to take action and are less likely to offer assistance. The bystander theory would then suggest that, whistleblowing (intervention to an emergency situation) would be more likely to occur in small organisations than in larger organisations due to this diffusion of responsibility.

Some studies have agreed with this statement and have prescribed a negative relationship between the size of organisation and the likelihood of whistleblowing. Their arguments were centred on the structure of the organisation itself. Larger companies tend to have a complex hierarchical structure, hence, G. King (1999) suggests that whistleblowing may be influenced by the organisation's structure. He

contended that larger organisations possess a hierarchical, authoritarian and bureaucratic environment that may suppress communication to higher managements. His view is in agreement with Miethe (1999, p. 66) when citing previous research by indicating that, “... small, less formalized, less bureaucratic, and more participatory work environments may have a higher rate of internal whistleblowing ...”.

Miceli and Near (1985) provide two reasons why larger organisations could hinder the whistleblowing process. First, large organisations are less dependent on any single employee than in small organisations. Employees in larger organisations believe that retaliation would occur should they report the wrongdoing and therefore resulting in the whistleblowers losing their jobs. Secondly, small organisations have shorter and fewer communication channels, thus encouraging the act of whistleblowing. Due to such circumstances, whistleblowing would be more likely to happen in smaller organisations. Miceli and Near (1992) cited a reason why internal whistleblowers would be more likely in smaller organisations. They argued that, employees in smaller organisations are more concerned with the wellbeing of the company, and therefore choose to minimise potential harm by reporting the wrongdoing through internal means. Keenan (2000) who performed an empirical study among executives and managers shared the same feeling, stating that individuals in smaller organisations usually feel more personally involved and affected by wrongdoings, than those in larger organisations.

Other studies have contended that whistleblowing would be more likely in larger rather than smaller organisations (Barnett, 1992a; Brennan & Kelly, 2007; Dozier & Miceli, 1985; Elliston et al., 1985; Near, Dworkin, & Miceli, 1993; Read & Rama, 2003). Barnett (1992a) explained that as larger organisations need to cope with pressures from various stakeholder groups, it is very difficult for the said organisation to act in a manner that could satisfy all those stakeholders. As such, contrary to G. King (1999), Barnett (1992a) suggested that as larger organisations are associated with complex and bureaucratic structures that may stifle effective communication, organisational size may then harness a higher level of external whistleblowing.

This supports the contention made by Miceli and Near (1992) who argued that members from bureaucratic organisations as opposed to those in an open organisations are more likely to whistleblow externally because, “external parties are more likely than internal

parties to bring about change (Miceli & Near, 1992, p. 157) . Furthermore, due to the nature of large organisations which are associated with these complex and bureaucratic structures, it could be difficult for its members to maintain close relationships among themselves as compared to in smaller organisations (Rothwell & Baldwin, 2006, 2007a). Therefore, it is said that whistleblowing in larger organisations is easier as members in these larger organisations have few empathetic relationships, and the whistleblowing activity does not threaten their work and personal relationships (Rothwell & Baldwin, 2006, 2007a). Larger organisations are also said to have established procedures to manage employees' ethical concerns. Brennan and Kelly (2007, p. 67) in their study of whistleblowing among trainee auditors stated that "... more whistleblowing is expected in higher quality larger audit firms", as larger firms are more likely to have formal structures to support employees' whistleblowing concerns.

However, previous empirical findings have been found to be contrary to the beliefs of bystander intervention theory. Though their study predicted that, internal whistleblowing is more likely in smaller organisations, Miceli and Near (1985) found the opposite. Using the 1980 MSPB survey, the study found that whistleblowers were more likely than non-whistleblowers to be members of large organisations. In their later study utilising survey data from 1983, Miceli and Near (1988) found that more frequent whistleblowing occurred among organisational members in larger workgroups. As an explanation for this finding, Miceli and Near (1985) suggested that employees in smaller organisations are more concerned with their ability to report anonymously than are employees in larger organisations. In addition, these employees may be influenced by the pressure to remain silent or possibly, are personally known by the wrongdoer. The same finding was also reported in Keenan's (2000) study.

It can be seen that, a review of the literature found mixed support for the effect of the size of organisation in explaining employees' ethical decision process. It is also interesting to note that some researchers support both sides of the issue at various times. Furthermore, previous studies found conflicting results about the association between size of organisation and whistleblowing. Empirical research suggests that size of organisation is positively associated with whistleblowing (Barnett, 1992a; Hooks et al., 1994; Miceli & Near, 1985; Near & Miceli, 1996). However, a number of studies have

failed to observe this positive relationship (Mesmer-Magnus & Viswesvaran, 2005; Read & Rama, 2003; Rothwell & Baldwin, 2006, 2007a).

This is the first empirical study conducted in Malaysian public listed companies concerning internal auditors' ethical behaviour. The study suggests that as size of organisation is typically associated with complex and bureaucratic natures that suppress effective communication, size of organisation may be associated with lower levels of internal whistleblowing. As such, consistent with the argument on bystander theory, the following hypothesis is suggested:

***Hypothesis 2:***

***The internal auditors' intentions to whistleblow will be negatively associated with size of organisations.***

**3.2.3. Job levels**

Whistleblowing represents an influence process (Near & Miceli, 1995) as individuals may exercise their power in order to change the behaviour of other organisational members. Therefore, power theories seem to be useful in explaining this phenomenon (Miceli et al., 2008; Near & Miceli, 1995). The extent that an individual is able to highlight and mitigate the act of wrongdoing will partly depend on the power he or she possesses in the organisation (Graham, 1986; Near & Miceli, 1995). This may explain the findings from other studies as highlighted by Miceli and Near (1992) on why a majority of individuals who observe organisational wrongdoing chose not to report it, probably due to possessing lack of power.

Based on the minority influence literature (one of the perspectives in power theories as highlighted by Near and Miceli (1995)), Greenberger et al. (1987) suggest that whistleblowers who have credibility, will have greater influence and are more likely to persuade others to terminate organisational wrongdoings. According to Near & Miceli (1990), credibility comes from the power that enables such individuals to react. Power, as defined by Etzioni (1961, p. 227) refers to as "an actor's ability to induce or influence another actor to carry out his directives or any other norms he supports" that may be used to influence other organisational members. Studies have demonstrated that

powerful members may influence the decision of other members whether to support whistleblowing (Greenberger et al., 1987). Another perspective of power theory was derived from French and Raven's (1959) classic discussion of individual power bases (Near & Miceli, 1995). Consistent with the minority influence literature, whistleblowers who possess referent power or charisma, such as those at higher levels of organisations or those in role-prescribed whistleblowing positions such as internal auditors, may be seen as more credible organisational members than others (Near & Miceli, 1995). It is suggested that, individuals who hold important positions in an organisation may be more likely to whistleblow (Miceli, Near, & Dozier, 1991).

As such, holding a supervisory status or higher managerial level in organisation may influence whistleblowing activity as Miceli and Near (1984) indicated that position reflects the degree of power and minimises risk to challenge organisational authority. Persons holding higher managerial levels are usually seen as persons who set the ethical climate and culture for their subordinates and have more power and authority than other employees in organisations (Keenan, 2000, 2002b; Keenan & Krueger, 1992). Apart from that, those who hold a supervisory position are often held responsible for regulating employees' behaviour and enforcing standards (Rothwell & Baldwin, 2006, 2007a, 2007b). The role prescriptions of supervisors have mandated them to report misconduct, and blowing the whistle is said to be consistent with that role (Rothwell & Baldwin, 2007a). Therefore, it is expected that those who hold a supervisory status at higher managerial level are seen to be more responsible for reporting cases of wrongdoing and unethical acts than are employees at lower levels.

Studies by Rothwell and Baldwin (2006, 2007a, 2007b) have investigated the willingness and actions of police officers in the State of Georgia in the United States regarding their propensity to blow the whistle. They found that supervisory status is the most consistent predictor of whistleblowing intentions and behaviour in reporting for minor violations, major violations and misdemeanours. Several studies of whistleblowing and supervisory status (Jos, Tompkins, & Hays, 1989; Miceli & Near, 1984) also reveal positive associations between these variables. Other than that, prior research by Keenan (2002a, 2002b, 2007) suggests that different managerial levels i.e. upper-level, middle-level and first-level managers have different perceptions towards whistleblowing. Keenan's studies found that there existed significant differences across

the three managerial levels with upper-level managers being more positive about whistleblowing and more likely to whistleblow than their middle-level and first-level manager counterparts. Upper-level managers, by virtue of a position that is near to the top of organisations, have more authority and power than other types of managerial levels (Keenan, 2002b).

The Keenan, and Rothwell and Baldwin studies, however, do not take into consideration the status of wrongdoers when examining the effect of supervisory status or managerial levels towards the organisational wrongdoings. This study seeks to understand whether the likelihood of internally blowing the whistle on various kinds of wrongdoing (as depicted by the various types of vignettes) as well as by various types of status of wrongdoer, differ according to internal auditors' different job level. The study extends this line of research by examining the differences between junior level internal auditors, seniors, managers and those higher than the manager level with respect to their internal whistleblowing behaviours. It is thus expected that the likelihood to whistleblow will be positively associated with internal auditors holding higher job levels as compared to those who do not. Therefore, the following hypothesis is offered:

***Hypothesis 3:***

***Internal auditors holding higher managerial positions are more likely to whistleblow than those in lower managerial positions.***

### **3.3. Individual factors**

Research has shown that characteristics of individuals are also relevant for influencing decisions about blowing the whistle (MacNab & Worthley, 2008; Mclain & Keenan, 1999; Miceli & Near, 1984; Near & Miceli, 1990; Sims & Keenan, 1998). As whistleblowing is one option for individuals observing potential wrongdoing within an organisation, it is important to understand individual characteristics that may influence one's propensity to whistleblow internally. Past studies have hypothesised a number of intrapersonal traits. The present study will examine individuals' ethical judgment, locus of control and organisational commitment.



### 3.3.1. Ethical judgment

Ethical judgment has been stated in many ethical decision-making models as a variable that may influence individuals' behavioural intentions (Hunt & Vitell, 2006; Patel, 2003; Trevino, 1986). Previous research however, has measured individual ethical judgment merely by using a single scale anchored by phrases such as "ethical/unethical" (Patel, 2003). The problem with using a single scale measurement in asking a complex question such as in ethics studies may question the validity of the results (J. R. Cohen, Pant, & Sharp, 1993).

Reidenbach and Robin (1988, 1990) noted this limitation and suggested that individuals use more than one rationale and may utilise a relativist, deontological, utilitarian or other criteria in making ethical judgments. Thus, by using merely a single measure, Reidenbach and Robin argued that researchers are not able to reveal this kind of information and advocate the use of a multidimensional approach. They assert that, "individuals use more than one rationale in making ethical judgments, and that the importance of those rationales is a function of the problem situation faced by the individual" (Reidenbach & Robin, 1990, p. 639). Reidenbach and Robin (1988, 1990) then developed a Multidimensional Ethics Scale (MES) that comprises the following three dimensions; *Moral Equity*, *Relativism* and, *Contractualism*, each arranged according to their theoretical importance.

Prior studies have suggested that the moral equity, relativism and contractualism dimensions provide an understanding of why a particular behaviour is judged as either ethical or unethical. In particular, these studies have shown that individuals have used these three philosophical dimensions for evaluating ethical contents. The selection of these three dimensions as noted by Reidenbach and Robin (1990, p. 640):

"... encompass most of the "great" ideas for social survival, not just from the area of moral philosophy, but also from religion. Ideas of fairness, justice, contract, duty, consequence, greatest good and many others that come from the five philosophies can be found in the Bible, the Koran, the writings of Buddha, and in other religions".

Various empirical studies have justified the use of MES as the instrument provides greater explanatory power than the single-attribute measure (McMahon & Harvey, 2007; Patel, 2003; Reidenbach & Robin, 1990) and is capable of eliciting complex judgments such as behavioural intentions (Flory, Phillips, Reidenbach, & Robin, 1992; Reidenbach & Robin, 1990; Tuttle, Harrell, & Harrison, 1997; Tuttle, Harrell, & Jackson, 1997) including whistleblowing behaviour (Chiu, 2002, 2003; Patel, 2003).

#### 3.3.1.1. Ethical judgment and ethical behaviour

The MES was originally developed by Reidenbach and Robin (1988, 1990) to understand an individual's ethical decision-making in marketing activities. Since then, the MES is one of the most commonly used variables in ethics research (Ayers & Kaplan, 2005; Ellis & Griffith, 2001; Flory et al., 1992; Nguyen, Basuray, Smith, Kopka, & McCulloh, 2008a, 2008b).

In a study examining individuals' reporting intentions subsequent to the discovery of wrongdoing by information systems consultants, Ayers and Kaplan (2005) examined their subjects' reporting intentions under both anonymity and non-anonymity conditions. The Reidenbach and Robin (1988, 1990) MES model was utilised in order to determine the ability of this model to explain individuals' reporting intentions. The moral equity dimension was found to be significantly associated with a normal reporting channel, but not with the anonymous channel. Neither the relativism nor the contractualism dimensions appeared to influence reporting intentions under either reporting channel. Ayers and Kaplan (2005) concluded that the MES has less ability to explain individual behaviour, contrary to the findings from previous studies.

Similarly, Nguyen et al. (2008b) asked undergraduate students to provide ethical judgment in their study by incorporating three ethical dilemmas. The study found that their participants were consistent in applying the moral equity and relativism dimensions when judging the ethicality of the said dilemmas, however, these participants were not consistent in judging the contractualism dimension. Nguyen et al. (2008b) suggest that this was due to these participants putting least weight on the contractualism dimension when judging the ethicality of an action.

Such outcomes in both Ayers and Kaplan (2005) and Nguyen et al. (2008b) studies could be attributed to the type of ethical dilemmas that they utilised in their studies. Ellis and Griffith (2001), who had the same inconsistent MES results in their study, have clarified that the MES could be useful in cases where there are strong, clear and obvious legal issues perceived by subjects. Such inconsistent results were, however, apparent in accounting or auditing studies.

Since its inception, the MES has been useful in business ethics research, but its application in accounting ethical issues has been very limited (Lin & Ho, 2008). Flory et al. (1992) were perhaps the pioneers in the use of MES in accounting research. They used MES to study how and why accountants made certain ethical judgments. Their study provided evidence that the moral equity, relativism and contractualism dimensions were being implicitly drawn by accountants in evaluating ethical issues in accounting. More importantly, they found that the scales for each dimension on each of the four scenarios used in their research have high reliability coefficients and high content validity for the three-multidimensional measure. In addition, in each of the four scenarios used in the research, the MES “accounted for more “explained” variance than the univariate measure by 7 to 12 percentage points” (Flory et al., 1992, p. 296). Consequently, Flory et al. (1992) recommended the use of the MES for future research on ethical judgement in accounting studies.

Thereafter, to further adapt the MES to accounting ethics research, researchers have extended the MES with accounting-specific scenarios to examine accountants’ or accounting students’ ethical decision making about performing questionable actions (see J. R. Cohen et al., 1993; J. R. Cohen, Pant, & Sharp, 1996, 1998, 2001; Patel, 2003; Shawver, 2008; Shawver & Clements, 2008; Shawver & Sennetti, 2009). There is still, however, a dearth of research in which MES has been applied to compare internal auditors’ ethical perceptions.

### 3.3.1.2. Ethical judgment and whistleblowing intentions

Reidenbach and Robin’s (1990) MES scale was also used by Chiu (2002, 2003) in studies investigating the individual and joint influences of ethical judgment of a behaviour on whistleblowing intentions of Chinese managers and professionals. Chiu

suggests that the individual's evaluation of the ethicality of whistleblowing may influence his or her decision whether or not to engage in such behaviour. Utilising the summed total of Reidenbach and Robin's ethical judgment scale, results of those studies indicate a strong positive relationship between judgments of the ethicality of whistleblowing and whistleblowing intentions. Patel (2003) extended the multidimensional measure of MES in examining the cultural influences of professional judgments of Australian, Indian and Chinese-Malaysian accountants in relation to whistleblowing. Using two whistleblowing scenarios adapted from the previous study, Patel found that the MES would provide insight into complex elements involved in ethical and professional judgments in cross-cultural settings.

As a summary, previous studies have shown all the dimensions of ethical judgment to be significantly associated with behavioural intentions in the various types of scenarios examined (J. R. Cohen et al., 1996; Flory et al., 1992; Reidenbach & Robin, 1990; Tuttle, Harrell, & Harrison, 1997). The relationship between dimensions of ethical judgment and whistleblowing or reporting intentions have also been examined empirically in studies conducted by Ayers and Kaplan (2005), Patel (2003) and Chiu (2002, 2003). These studies found that the moral equity, relativism and contractualism dimensions show a positive association with other types of behavioural or whistleblowing intentions.

The most complex of the three dimensions, *Moral Equity*, is derived from the ethical philosophy of justice theory (Patel, 2003). Moral equity is defined as the individual perception of fairness and justice as well as what is right and wrong, in its broadest sense (Reidenbach & Robin, 1990). This dimension measures individuals' perceptions about whether such behaviour is fair, just, morally right and acceptable. This dimension is grounded in Aristotle's principle of formal justice that holds that equals ought to be treated equally whereas unequals ought to be treated unequally (Ayers & Kaplan, 2005, p. 125).

The pioneer study by Reidenbach and Robin (1990) indicates that the moral equity dimension was significantly associated with individual behavioural intentions in each of the three business scenarios examined. Subsequently, in an accounting related study, Flory et al. (1992) found that the moral equity dimension was significantly associated

with the individuals' behavioural intentions in each of four management accounting scenarios they examined. J. R. Cohen et al. (1996) found that the moral equity dimension was significantly associated with behavioural intentions in seven of the eight business vignettes they tested. Similarly, Tuttle, Harrell, and Harrison (1997) found that the dimension was significantly associated with intentions to implement an information system with known problems. Finally, Ayers and Kaplan (2005) found the moral equity dimension to be significantly associated with a normal reporting channel but not with the anonymous reporting channel. Based on this collection of findings, the study proposes a sub-hypothesis as follows:

***Hypothesis 4(a):***

***The higher the moral equity dimension in ethical judgment, the more likely internal auditors will whistleblow.***

Relativism is defined as perception of what is right versus wrong based on guidelines or parameters embedded in the social or cultural culture system rather than individual consideration (Reidenbach & Robin, 1990). The relativism dimension consists of two attributes: "Culturally acceptable/Unacceptable" and "Traditionally acceptable/Unacceptable" that are also ranked in theoretical importance. The essence of relativism is that cultural values are important in defining individual ethical beliefs (Patel, 2003).

Reidenbach and Robin (1990) indicate that the relativism dimension was significantly associated with individuals' behavioural intention in two of the three business scenarios they examined. Results from Flory et al. (1992) and Tuttle, Harrell, and Jackson (1997) also indicate strong support for this association. J. R. Cohen et al. (1996) found support in five of the eight vignettes examined, while in Ayers and Kaplan's (2005) study, the relativism dimension did not appear to influence reporting intention under either reporting channel. Such an explanation could be attributed to the vignettes employed in Ayers and Kaplan's (2005) study, as explained by Ellis and Griffith (2001), which do not pose individual harm. As such, the following hypothesis proposes that:

***Hypothesis 4(b):***

***The higher the relativism dimension in ethical judgment, the more likely internal auditors will whistleblow.***

The last dimension, contractualism, is defined as individual perception of what is right versus wrong based on notions of an implied contract that exists between business and society (Reidenbach & Robin, 1990). This dimension comprises two attributes ranked in terms of theoretical importance: “Violates/Does not violate an unwritten contract” and “Violates/Does not violate an unspoken promise”. These attributes are derived from the philosophy of deontology and focus on the importance of ethics in social contracts (Ayers & Kaplan, 2005; Patel, 2003).

The results from Reidenbach and Robin (1990), Flory et al. (1992) and J. R. Cohen et al. (1996) all found strong support for the association between the contractualism dimension and individuals’ behavioural intentions. Tuttle, Harrell, and Jackson (1997) and Ayers and Kaplan (2005) however report that such an association does not exist in their studies. Ellis and Griffith (2001) explain that, the contractualism dimension will provide useful information in cases where there appear to be strong, clear and obvious legal issues. This could be the reason for the findings in both, Tuttle, Harrell, and Jackson’s (1997) and Ayers and Kaplan’s (2005) studies. As such:

***Hypothesis 4(c):***

***The higher the contractualism dimension in ethical judgment, the more likely internal auditors will whistleblow.***

### **3.3.2. Locus of control**

Another individual characteristic that may explain the probability of individual whistleblowing behaviour is Rotter’s (1966) locus of control. Locus of control, also known as “internal versus external control of reinforcement”, is one of the most studied variables in psychology and the social sciences (Rotter, 1990) and is considered as an important personality variable for the explanation of human behaviour in organisational settings (Donnelly, Quirin, & O’Byrne, 2003; Spector, 1982). Rotter (1966) explains that, locus of control is a bipolar one-dimensional construct where the internal and external locus of control are opposites.

Internal versus external control refers to the degree to which individuals expect that a reinforcement or an outcome of their behaviour is contingent on their own behaviour or

personal characteristics versus the degree to which individuals expect that the reinforcement or outcome is a function of chance, luck or fate, is under the control of powerful others, or is simply unpredictable (Rotter, 1966). In a simpler explanation, a person with “internal” locus of control is more likely to rely on his/her own determination of what is right and wrong and is more likely to accept responsibility for the consequences of his or her behaviours. Meanwhile, a person with “external” locus of control believes that life is beyond one’s control as it is due to fate, luck or destiny, and is less likely to take personal responsibility for the consequences (Trevino, 1986). Briefly, external locus of control is typically associated with a less ethical perspective on life, while internal locus of control has been linked to more ethical decisions (Trevino & Youngblood, 1990).

#### 3.3.2.1. Locus of control and ethical behaviour

Spector (1982) discusses locus of control within the context of organisation. He predicted that, internals exert more control over their surroundings when this leads to desired ends and are more likely to hold higher expectations and possess higher levels of self-esteem. Externals, in contrast, are expected to be more compliant with social demand and directive supervision. The theory of locus of control has proven to be a successful measure to test differences in predicting individuals’ behaviour in many different populations (Rotter, 1990) and has been used with success in examining individuals’ behaviour in numerous studies (see Cherry, 2006; Donnelly et al., 2003; Siu, Spector, Cooper, & Donald, 2001; Trevino & Youngblood, 1990).

In a cross-cultural study, Cherry (2006) incorporated the locus of control construct to understand the dynamics of ethical decision-making among Taiwanese and U.S. businessmen. He posited that as Taiwan is a collectivistic society which possesses the Individual/Collectivism dimension of Hofstede’s (1980a, 1991) well-known Theory of International Culture, it exerts more externally oriented control (Cherry, 2006). By using a vignette requesting respondents to pay a bribe to gain entry into a foreign market, the Taiwanese were found to have a higher external locus of control than their U.S. counterparts. The study found significant differences of ethical decision-making between these two sample groups. The Taiwanese were found to have a favourable attitude towards the requested bribe compared to the U.S. respondents, consistent with

Trevino and Youngblood's (1990) suggestion that externals traits are associated with less ethical behaviour.

The examination of the role of locus of control in auditing study, according to Donnelly et al. (2003), has remained very limited. Donnelly et al. (2003) examined the characteristics of auditors towards another form of ethical concern, dysfunctional audit behaviour<sup>14</sup>, which is a great concern to the auditing profession. Donnelly et al. (2003) suggested that there was a positive correlation between an individual's external locus of control and his/her willingness to engage in a dysfunctional audit behaviour. Utilising a total of 205 auditors from a cross-section of ten public accounting firms, their study found a significant positive association. They then suggested that locus of control is an important attribute in determining the needs of individual auditors in mitigating the audit quality reduction behaviours (Donnelly et al., 2003).

In a study examining the mechanisms by which age could be related to work well-being, Siu et al. (2001) found that older managers reported fewer sources of stress, better coping and a more internal locus of control, than their younger colleagues. They acknowledged that the locus of control variable is a significant explanatory variable for examining organisational members' behaviour, consistent with prior theory and research in ethics studies.

#### 3.3.2.2. Locus of control and whistleblowing intentions

Locus of control might have an influence on the decision of employees to whistleblow. In whistleblowing studies, Curtis and Taylor (2009, p. 192) stressed that "the personal characteristic of locus of control is a significant antecedent of likelihood to whistleblow". As whistleblowing is considered as an ethical act, it is expected that a would-be whistleblower is likely to have internal locus of control traits. Moreover, past researchers have associated that internals are more likely than externals to engage in prosocial behaviour (Miceli, Near, & Dozier, 1991; Spector, 1982). Therefore, researchers (Dozier & Miceli, 1985; Miceli, Near, & Dozier, 1991; Miceli et al., 2008;

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<sup>14</sup> Dysfunctional audit behavior is a form of audit quality reduction behavior such as prematurely signing off an audit report or underreporting of audit findings.



Near & Miceli, 1985) predict that internal locus of control will be more likely to whistleblow.

Miceli, Near, and Dozier (1991) attempted to measure the relationship of locus of control to whistleblowing in a controlled field experiment. They predicted that internal locus of control would be negatively related to whistleblowing because of its association with prosocial behaviour. However, no significant relationship was found. The relation between locus of control and intention to blow the whistle contradicts their proposition, in which locus of control had no main effect on students' propensity to report wrongdoing by a 'research assistant' to their university's 'research committee' representative. Miceli, Near, and Dozier (1991) suggest that the distinction between internals and externals in their study appeared to be irrelevant under the condition of threat of retaliation.

Chiu (2003), in his study of whistleblowing intentions among Chinese managers, used locus of control within the context of theory of planned behaviour as the measure of perceived behavioural control. He found that Chinese managers with an internal locus of control were more likely to blow the whistle compared to those with an external locus of control. Chiu (2003) explained that the Chinese managers in his study would more likely whistleblow when they believed that the situation was deemed as unethical and if they were in control of the situation. This is an exact contrast with the finding in Cherry's (2006) study regarding ethicality, as discussed earlier. However, the major difference in the attitudes regarding the ethicality of an issue between the Chinese and Taiwanese sample in both studies could be due to the type of vignettes used in their studies. Chiu (2003) used a vignette about a manager about to whistleblow regarding a major corruption that he observed in his company, while Cherry's (2006) vignette was about paying a bribe to gain entry into a foreign market. Moreover, Chiu's (2003) study is consistent with a more recent study conducted by Curtis and Taylor (2009). Curtis and Taylor (2009) found that locus of control was a significant antecedent to whistleblowing intentions among U.S. public accountants. Auditors with internal traits were more likely to whistleblow than auditors with external traits.

Relevant studies have advocated that as whistleblowing is a prosocial behaviour (Dozier & Miceli, 1985; Miceli, Near, & Dozier, 1991), the individual who has internal locus of

control is more likely to engage in whistleblowing behaviour (Chiu, 2003; Curtis & Taylor, 2009; Miceli et al., 2008). Those with external locus of control are said to be less likely to take personal responsibility for the consequences. Therefore, based on the relevant literature concerning locus of control, the study expects that internal auditors will demonstrate similar behaviour and offer the following hypothesis:

***Hypothesis 5:***

***Internal auditors with internal locus of control will be more likely to whistleblow.***

### **3.3.3. Organisational commitment**

Research has also extensively examined the relationship between the organisational commitment variables and individuals' ethical behaviour. Organisational commitment is defined as the relative strength of an individual's identification and involvement in a particular organisation (Mowday, Steers, & Porter, 1979). Accordingly, organisational commitment can be characterised by three factors: "(1) a strong belief in and acceptance of the organization's goals and values, (2) a willingness to exert considerable effort on behalf of the organization, and (3) a definite desire to maintain organizational membership" (Porter, Steers, Mowday, & Boulian, 1974, p. 604). Porter et al. (1974) developed a 15-item questionnaire to measure levels of organisational commitment among individuals, which is an important measure used in behavioural studies.

Theoretical and conceptual works on organisational commitment have pointed out that individuals showcasing higher organisational commitment basically resemble prosocial behaviour directed to organisations (Brief & Motowidlo, 1986; Mowday, Porter, & Steers, 1982). Mowday et al. (1982, p. 27) justified that organisationally committed individuals "are willing to give something of themselves in order to contribute to the organization's well-being". As such, studies involving a variety of professions, including management accountants (Somers & Casal, 1994), MBA executives (Pool & Pool, 2007), senior managers (Y.-J. Chen, 2007) as well as internal auditors (Kwon & Banks, 2004), have shown that various types of ethical behaviours are related to organisational commitment.

### 3.3.3.1. Organisational commitment and ethical behaviour

Studies have indicated that organisational commitment is a viable predictor for many behaviours, including turnover intentions (Donnelly et al., 2003), job satisfaction (Y.-J. Chen, 2007), motivation levels (Pool & Pool, 2007) and whether the variables impacting organisational commitment differ from those influencing professional commitment (Kwon & Banks, 2004) .

Organisational commitment has also been used as an antecedent in studies predicting employees' turnover intentions. Donnelly et al., (2003) found that auditors who report lower organisational commitment are more likely to express intention to leave their organisations. With regards to the effect on job satisfaction, Chen's (2007) study exploring the impact of service orientation, employed by Taiwan's international tourist hotels, found that job satisfaction is positively correlated with organisational commitment. Meanwhile, work by Pool and Pool (2007) showed that there was a significant and positive relationship between MBA's executives' organisational commitment and their motivation level, thus enabling them to pursue organisational goals for the business.

Kwon and Banks (2004) examined factors that lead internal auditors to become committed to their organisation and profession. Kwon and Banks (2004) interests were spurred by relatively little research having been directed to the internal auditing profession in this area. Results showed that factors influencing internal auditors' organisational commitment were different from those influencing their professional commitment. Their study found that there are a different set of variables that affect internal auditors' organisational commitment and that these also differ from the findings for other professions. It appears that respondents, with internal auditor certification, have less organisational commitment to their organisation than their commitment to their profession. Kwon and Banks (2004) suggested that it could be due to such internal auditors having more job mobility than those who do not have internal auditor certification.

### 3.3.3.2. Organisational commitment and whistleblowing intentions

Street (1995) has attempted to directly link the concept of organisational commitment to the likelihood of whistleblowing. He contended that theoretical models of whistleblowing studies have acknowledged the potential influence of such a variable (see Dozier & Miceli, 1985; Graham, 1986; Miceli & Near, 1988; Near & Miceli, 1985). There was little empirical research on organisational commitment in whistleblowing studies (Street, 1995). Street (1995) argued that if individuals have a high organisational commitment, they are more likely to display prosocial behaviour of whistleblowing than those having a lower organisational commitment. However, Street (1995) only proposed a theoretical relationship and argues for the development of an empirical study to test such proposition.

Somers and Casal (1994) had empirically examined the direct relationship between organisational commitment and the willingness of management accountants to whistleblow. Using Mowday et al.'s (1979) Organisational Commitment Questionnaire to measure organisational commitment, they found that their subjects' organisational commitment affects the probability that an observed wrongdoing is reported to internal targets (persons to whom organisational wrongdoing is reported), but such commitment was unrelated to reporting to external targets. More specifically, the relationship between commitment and the propensity to whistleblow takes the form of an inverted U, suggesting that moderate levels of organisational commitment are most likely to result in whistleblowing. Somers and Casal (1994) suggested that organisational commitment increases the likelihood of whistleblowing as the whistleblowers that are characterised as reformers<sup>15</sup> wish to put their organisations back on course. Mesmer-Magnus and Viswesvaran (2005) also tested that theory. They expected organisational commitment to be positively related to both reporting intention and actual reporting. Their study failed to find significant results. Mesmer-Magnus and Viswesvaran (2005) reported that differences between internal and external reporting may account for their results.

Theoretical and empirical studies of whistleblowing have acknowledged that organisational commitment can directly influence willingness to whistleblow (Dozier &

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<sup>15</sup> Reformers are committed employees who wish to stop organisational wrongdoings from damaging the organisation (Somers & Casal, 1994).

Miceli, 1985; Miceli & Near, 1988; Near & Miceli, 1985; Street, 1995). This is because individuals who have a high organisational commitment level will be more likely to display prosocial behaviour than those who have low organisational commitment (Brief & Motowidlo, 1986). Near and Miceli (1985) suggest that internal reporters will demonstrate high levels of firm loyalty in their initial decision to report. Furthermore, Kwon and Banks (2004) have acknowledged that, little research has examined the application of the organisational commitment and its impact on the behaviour of internal auditors. More research in this area will increase the importance of the internal audit function within the organisation, hence fulfilling the shortfall. Thus, the next hypothesis is:

***Hypothesis 6:***

***Internal auditors with higher organisational commitment will be more likely to whistleblow.***

### **3.4. Situational Factors**

Research shows that situational factors also contribute to the likelihood of whistleblowing. The two specific factors that will be examined in this study are seriousness of wrongdoing and status of the wrongdoer.

#### **3.4.1. Seriousness of wrongdoing**

One important example of situational criteria is the nature and severity of the wrongdoing (Miethe, 1999). The seriousness of the wrongdoing is akin to one of the six components in Jones's (1991) moral intensity model. The seriousness of the wrongdoing item was identified by Jones (1991) in his model as a magnitude of consequences. Jones (1991) suggested that the magnitude of consequences is related to the extent of the consequences of a moral issue, and proposed that the moral intensity of an issue is high if the consequences are greater, rather than fewer. Though not specifically testing the Jones model, other studies have found that, the more serious the issue, the greater the likelihood of whistleblowing behaviour (Ayers & Kaplan, 2005; Kaplan & Schultz, 2007; Miceli & Near, 1985; Near & Miceli, 1996; Schultz et al., 1993). Specifically, type of wrongdoing and its perceived severity have been found to

be significantly related to whistleblowing (Miceli & Near, 1985; Miceli, Near, & Schwenk, 1991; Near & Miceli, 1996; Near, Rehg, Van Scotter, & Miceli, 2004). Each type of wrongdoing is in some way unique (Miceli et al., 2008, p. 47) and Miceli, Near, and Schwenk (1991, p. 118) suggest that, “organizational members may have different reactions to different types of wrongdoing”. In their survey of a large military base, Near et al.’s, (2004) study found that employees who observed perceived wrongdoing involving mismanagement, sexual harassment, or unspecified legal violations were significantly more likely to report it than were employees who observed stealing, waste, safety problems, or discrimination.

Whether or not organisational members react to report any form of wrongdoings may depend on who is gaining from such acts. Miceli, Near, and Schwenk (1991) added that if a wrongdoing is undertaken merely to benefit the individual, such as theft, this may evoke organisational members to respond. This is due to the act of theft being considered as only enriching the culprits themselves, as well as potentially damaging the organisation’s bottom-line. However, if the wrongdoing is committed for the benefit of the organisation, it may lessen the likelihood for organisational members to report. A good example is the release of a fraudulent corporate financial report, as it may be seen as an initiative to polish corporate image or to increase profit in order to facilitate employees’ bonus payments. Therefore, the facts of the case may influence the individual’s propensity to blow the whistle. The case refers to the type of wrongdoing that allegedly occur within an organisation and may range from petty theft to misleading financial statements (Near & Miceli, 1990). Near and Miceli (1990) found that whistleblowing effectiveness was associated with types of wrongdoing that benefited a small group of employees, such as stealing and embezzlement committed by employees. Such acts are much easier to address through termination of employment compared to trying to correct organisational activities that may enhance profits.

As such, previous studies using case scenarios have shown that whistleblowing behaviour is related to the facts of the case (Ayers & Kaplan, 2005; Kaplan & Schultz, 2007; Schultz et al., 1993). Kaplan and Shultz (2007) provided evidence that individual’s reporting intentions are influenced by the nature of the case. Their study focused primarily on the characteristics of the wrongdoing and investigated the reporting behaviour across three different cases involving financial fraud, theft and poor

quality work. Kaplan and Shultz (2007) found that economic and non-economic factors shown in the three cases resulted in significant differences in their subjects reporting intentions. In an earlier study, Schultz et al. (1993) used an experimental approach to examine the reporting intentions of managers and professional staff members in three different countries (France, Norway and United States). For each of six hypothetical scenarios, participants were required to assess the seriousness of the act and then indicate their reporting intentions. Schultz's et al. (1993) results showed that seriousness was significantly related to the reporting intentions of the pooled sample containing all participants from these three countries.

Similar results were also found in Ayers and Kaplan's (2005) study. Using a similar experimental approach (via hypothetical case scenarios) they found that perceptions about the seriousness of wrongdoings are related to reporting of such wrongdoing in both anonymous and non-anonymous reporting channels. Other ethics studies utilising case scenarios or vignettes have consistently shown that seriousness of the case is significantly related with individuals' reporting or whistleblowing intentions (see Curtis, 2006; E. Z. Taylor & Curtis, 2010). Therefore, this study proposes the following hypothesis:

***Hypothesis 7:***

***The more serious the wrongdoing, the higher the influence on internal auditors' intentions to whistleblow.***

**3.4.2. Status of wrongdoer**

The status of organisational members who commit corporate wrongdoings or illegal acts may also influence the propensity of observers to whistleblow (Miceli, Rehg, Near, & Ryan, 1999; Miethe, 1999). Miethe (1999) states that the propensity for observers to report the wrongdoing may depend on the observers' perception that the reporting will result in corrective action and the particular position held by the wrongdoer in the organisational hierarchy. Wrongdoing committed by organisational members of a higher status, such as top management, may not easily be addressed through termination of employment (Near & Miceli, 1990). If the wrongdoer sits at a higher hierarchical level within an organisation, he or she may have enough power to suppress whistleblowing.

As such, Miceli et al. (1999) match the importance of the power of the wrongdoer to the observer's intentions to whistleblow. Miceli et al. (1999) alluded to the importance of power by drawing on Black's (1976) sociological theory of justice:

"The theory considers the act of a subordinate blowing the whistle on a supervisor as deviant behavior and a more serious offense in a socially stratified society. According to Black (1976, p. 28), "upward deviance" (that is directed from a person of lower status toward one higher in status) is the most serious kind of deviant behavior; it is most likely to evoke the greatest sanction." (Miceli et al., 1999, p. 147).

More specifically, Cortina and Magley (2003) cautioned that exposing the misbehaviour of a higher status individual in organisational hierarchy actually questions that hierarchy. Near et al. (1993) added that the dominant coalition in organisational hierarchy, including the wrongdoer, may retaliate against the whistleblower to correct this challenge against organisational higher authority. Furthermore, other organisational members who are close and supportive of the whistleblower would respond with distance and rejection, particularly when a powerful wrongdoer is involved, as they may fear reprisals for aligning with the less powerful (and thus more deviant) whistleblower. This group may also retaliate as a means of signaling to the whistleblower that he or she has deviated from behavior prescribed by social-structural norms (Miceli & Near, 1992).

Another point that also needs to be considered is that, organisational wrongdoing conducted by higher level wrongdoers may mean that it was merely done for strategic purposes (Rehg, Miceli, Near, & Van Scotter, 2008). Such wrongdoing is necessary to enable the organisation to remain competitive. This is consistent with Brief and Motowidlo's (1986) argument that organisational members' belief about whether the organisation is the beneficiary or victim of wrongdoing may affect their reactions to whistleblowers. Miceli and Near (1994) added that if the wrongdoing enhances the organisation's performance, the organisation may rely heavily on the wrongdoing, and as such may retaliate against the whistleblowers to discourage further whistleblowing. This actually reflects the resource dependency theory as described by Pfeffer and Salancik (1978). The theory posits that when one party possesses resources upon which another is dependent, that party will be more powerful. As such, Miceli and Near (1994,



p. 777) describe that, “the resource dependency perspective thus suggests that an organization may depend on wrongful activity when organizational leaders do not perceive that alternative activities are available.”

It can be seen that individuals may be less likely to whistleblow on powerful wrongdoers for several reasons: (1) fear of retaliation from these powerful wrongdoers, (2) the organisation is dependent upon the wrongdoer for its survival, and (3) the negative consequences associated with exposing the powerful wrongdoer may be more significant. Preliminary findings show that the likelihood of an observer blowing the whistle on organisational wrongdoing decreases when the status of wrongdoer is higher than lower (Miceli, Near, & Schwenk, 1991). As higher level wrongdoers have power in their organisations, whistleblowers are likely to suffer retaliation when they pursue such people (Cortina & Magley, 2003). Therefore, with regards to this situational factor, the study hypothesises that:

***Hypothesis 8:***

***The higher the status of wrongdoers in the organisational hierarchy, the less the influence on internal auditors’ intentions to whistleblow***

### **3.5. Demographic Variables**

Previous literature suggests that demographic characteristics such as gender (Near & Miceli, 1985), age (Brennan & Kelly, 2007) and working tenure (Miceli & Near, 1988) may be related to respondents’ whistleblowing intentions. Although there have been consistently mixed results to date regarding the direction of the relationships between these demographic variables and whistleblowing, any possible effect of these factors in the current study should be investigated.

#### **3.5.1. Gender**

With regards to gender, studies have shown that men and women differ significantly in making ethical judgments. Specifically, evidence has indicated that men and women differ in terms of ethics, beliefs, values, and behaviour (Schminke, Ambrose, & Miles, 2003), with women theorised to be more ethical in their judgment and behaviour than

men (Vermeir & Van Kenhove, 2008). Judging from these statements, women are expected to be more willing to whistleblow. However, to the contrary, in whistleblowing studies, women are found to be less likely than men to engage in whistleblowing acts (Dworkin & Baucus, 1998; Miceli & Near, 1988; Miceli, Near, & Dozier, 1991; Sims & Keenan, 1998). Men are more likely to whistleblow as they tend to occupy higher managerial positions in organisations and have more credibility than women (Near & Miceli, 1995). Furthermore, women whistleblowers are said to experience more retaliation than men (Rehg et al., 2008), thus making them more reluctant to risk their careers. It is expected that similar findings would occur with regard to internal auditors' reporting intentions in this study.

### **3.5.2. Age**

With regards to age, older organisational members would tend to have a greater understanding of the authority and control systems within their organisations and have minimal restraints to whistleblow as compared to new members (Keenan, 2000; Sims & Keenan, 1998). Brennan and Kelly (2007) found that older subjects are more concerned about the effect of reporting on their own career. Previous studies generally support these statements (Brennan & Kelly, 2007; Keenan, 2000; Miceli & Near, 1988). However, some studies also found that age is not a significant predictor of the intention to whistleblow (Sims & Keenan, 1998). This study proposes that older employees have a greater tendency to report wrongdoings to the management.

### **3.5.3. Tenure**

Organisational tenure can also be expected to be related to the likelihood of whistleblowing. Senior employees are more likely to whistleblow because they are closer to retirement, possess high levels of power and organisational commitment (Mesmer-Magnus & Viswesvaran, 2005; Near & Miceli, 1995). New employees on the other hand, may not know how corporate culture operates and are less concerned with stopping the wrongdoing (Dworkin & Baucus, 1998). Furthermore, a newcomer may be less familiar with appropriate channels for whistleblowing (Miceli & Near, 1992).

This study expects that these demographic variables in general may be associated with the internal auditors' tendency to whistleblow, leading to the following set of hypotheses:

***Hypothesis 9:***

***Internal auditor is more likely to whistleblow if the person: (a) is male; (b) is older; and (c) has a longer tenure in the organisation.***

### **3.6. Summary**

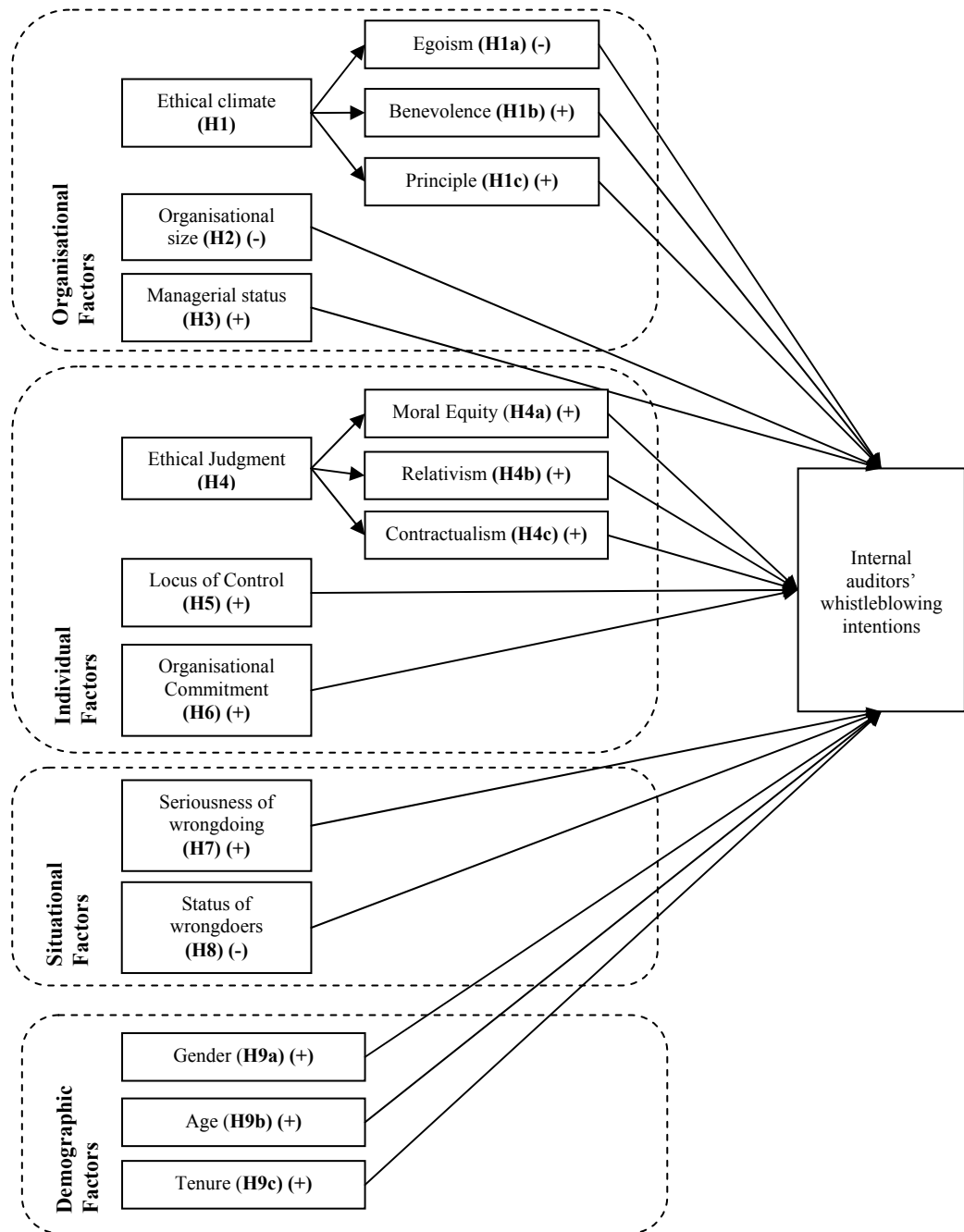
Based on the review of prior theoretical and empirical whistleblowing literature, five general research questions were developed for investigation of internal auditors' decisions to whistleblow within their organisations:

1. Do *organisational factors* such as ethical climate, size of organisation and job level influence internal whistleblowing intentions among Malaysian internal auditors?
2. Do *individual factors* such as ethical judgment, locus of control and organisational commitment influence internal whistleblowing intentions among Malaysian internal auditors?
3. Do *situational factors* such as seriousness of the case and status of wrongdoer influence internal whistleblowing intentions among Malaysian internal auditors?
4. Do *demographic factors* such as gender, age and tenure influence internal whistleblowing intentions among Malaysian internal auditors?
5. Which one of the organisational, individual, situational and demographic factors has the strongest influence on internal whistleblowing intentions among Malaysian internal auditors?

As such, four groups of hypotheses are offered to investigate the research questions presented above (See Table 3.2 for summary). The first three hypotheses listed test the influences of organisational factors on internal auditors' intentions to internally

whistleblow. The fourth, fifth and sixth hypotheses are offered to test the influence of individual factors on internal auditors' intentions to internally whistleblow. The seventh and eighth hypotheses listed are offered to test the influences of the situational factors on internal auditors' intentions to internally whistleblow. The final hypothesis tests the influences of the demographic factors on internal auditors' intentions to internally whistleblow.

Figure 3.1 presents the proposed model of internal whistleblowing intentions, indicating all hypothesised relationships for the predictor and criterion variables. The positive (+) or negative (-) signs indicate the expected direction of these relationships. The next chapter reports the methods that were used to test this hypothesised model on internal whistleblowing.



**Figure 3-1: Internal Whistleblowing Intentions Model – The Hypothesised Relationships**

**Table 3-2: List of Hypotheses To Be Tested**

Factors	Lists of Hypotheses
Organisational	<p><b>H<sub>1a</sub></b>: In an organisation with an ethical climate characterised by egoism, internal auditors will be less likely to whistleblow.</p> <p><b>H<sub>1b</sub></b>: In an organisation with an ethical climate characterised by benevolence, internal auditors will be more likely to whistleblow.</p> <p><b>H<sub>1c</sub></b>: In an organisation with an ethical climate characterised by principle, internal auditors will be more likely to whistleblow.</p> <p><b>H<sub>2</sub></b>: The internal auditors' intentions to whistleblow will be negatively associated with size of organisations.</p> <p><b>H<sub>3</sub></b>: Internal auditors holding higher managerial positions are more likely to whistleblow than those in lower managerial positions.</p>
Individual	<p><b>H<sub>4a</sub></b>: The higher the moral equity dimension in ethical judgment, the more likely internal auditors will whistleblow.</p> <p><b>H<sub>4b</sub></b>: The higher the relativism dimension in ethical judgment, the more likely internal auditors will whistleblow.</p> <p><b>H<sub>4c</sub></b>: The higher the contractualism dimension in ethical judgment, the more likely internal auditors will whistleblow.</p> <p><b>H<sub>5</sub></b>: Internal auditors with internal locus of control will be more likely to whistleblow.</p> <p><b>H<sub>6</sub></b>: Internal auditors with higher organisational commitment will be more likely to whistleblow.</p>
Situational	<p><b>H<sub>7</sub></b>: The more serious the wrongdoing, the higher the influence on internal auditors' intentions to whistleblow.</p> <p><b>H<sub>8</sub></b>: The higher the status of wrongdoers in the organisational hierarchy, the less the influence on internal auditors' intentions to whistleblow</p>
Demographic	<p><b>H<sub>9a</sub></b>: Male internal auditors will be more likely to whistleblow.</p> <p><b>H<sub>9b</sub></b>: Older internal auditors will be more likely to whistleblow.</p> <p><b>H<sub>9c</sub></b>: Longer tenure internal auditors will be more likely to whistleblow.</p>

# CHAPTER 4

## RESEARCH METHOD

### 4.1. Introduction

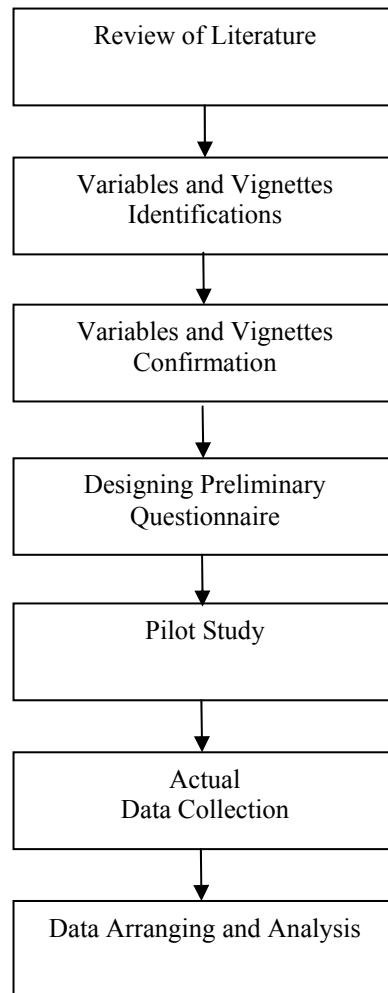
The purpose of this chapter is to discuss the research methods adopted for testing the hypotheses developed in Chapter 3. This chapter begins by describing the research design appropriate for addressing the study's research objectives in section 4.2, followed by explanations of its sampling procedure in section 4.3. Questionnaire and variables development are presented in sections 4.4 and 4.5 respectively. Next, section 4.6 describes the study's data collection method. Then the issues of reliability, validity and normality are provided in section 4.7. Finally, section 4.8 outlines the analytical techniques used in this study.

### 4.2. Research Design

Research design is "a master plan specifying the methods and procedures for collecting and analysing the needed information" (Zikmund, 2003, p. 65). In simple words, Sekaran (2006, p. 117) explained that it is "... a way that the requisite data can be gathered and analyzed to arrive at a solution". The research questions highlighted in Chapter 1 earlier, addressed issues that most survey participants will likely find sensitive. The study requires these participants to describe their actual organisations' ethical work climate, disclose whether behaviours as depicted in the given vignettes are ethical and whether they will actually take the decision to whistleblow. Therefore, this study should be able to preserve the confidentiality and the anonymity of its survey participants. As the participants in this study were required to disclose their own ethical beliefs, the use of a mail questionnaire survey will allow them to safeguard their identity and at the same time, enable them to provide honest and reliable answers.

The use of a mail questionnaire survey is the most appropriate method of inquiry to address the study's research questions, as it is a common approach used in business

ethics research (Randall & Gibson, 1990) and is appropriate for research questions asking about participants' self-reported beliefs or behaviours (Neuman, 2006). The steps of research design are indicated in Figure 4.1.



**Figure 4-1: Research Process Used in the Study**

The study combines the use of questionnaire and vignettes design (short, hypothetical cases), similar to those utilised in previous whistleblowing and ethics studies (see Arnold & Ponemon, 1991; Kaplan & Schultz, 2007; Patel, 2003; Sims & Keenan, 1998; Xu & Ziegenfuss, 2008; Zhang et al., 2009a).



### 4.3. Sampling Procedure

Population as defined by Sekaran (2006, p. 265) refers to “the entire group of people, events, or things of interest that the researcher wishes to investigate”. The population for this study consist of all registered members of the Institute of Internal Auditors Malaysia (IIA Malaysia). IIA Malaysia offers three main types of membership: Individual membership, Corporate membership and Audit Committee membership.

#### 4.3.1. Sampling frame

A sampling frame is “a listing of all the elements in the population from which the sample is drawn (Sekaran, 2006, p. 265). The sampling frame for the study was drawn from the Individual membership statistics of IIA Malaysia as at 31 July 2009. As at that date, the figures showed that the Institute has a total of 2,048 individual members in various types of categories (Refer Table 4.1).

**Table 4-1: IIA Malaysia’s individual membership statistics as at 31 July 2009**

	<b>Renewal</b>	<b>New</b>	<b>Unpaid</b>	<b>Total</b>
Honorary	3	-	-	3
Fellow	35	-	5	40
Professional	738	1	70	809
Associate	963	31	176	1,170
Student	5	-	4	9
Audit Committee	14	-	3	17
<b>Total</b>	<b>1,758</b>	<b>32</b>	<b>258</b>	<b>2,048</b>

Source: IIA Malaysia

According to IIA Malaysia’s website ([www.iiam.com.my](http://www.iiam.com.my)), the Institute offers six types of individual membership, namely: Honorary, Fellow, Professional, Associate, Student and Audit Committee members. For the purpose of this study, the sampling frame was restricted to IIA Malaysia’s individual members who were registered in “*Professional*” and “*Associate*” member categories. These groups were selected due to their on-field nature of work and experience that affords them the opportunity to confront corporate wrongdoings in their organisations. The samples in these groups held internal auditors positions at various managerial levels within their organisations and were considered

suitable for the purpose of this study. Further explanations about these two groups are discussed in the following section.

#### **4.3.2. Sample elements**

An element is “a single member of the population” (Sekaran, 2006, p. 265). The sample element for this study is the individual internal auditor, who is registered under either “*Professional*” or “*Associate*” member categories.

IIA Malaysia’s “*Professional Member*” refers to a class open to persons in private and government employment who are performing internal audit functions, no matter what the titles such persons or departments are designated, provided that: (1) they have at least 3 years of professional working experience and training in internal auditing, possess tertiary education recognised by the Institute and have satisfactorily passed the Qualifying Examination conducted by the Institute, or, (2) they have at least 5 years of professional working experience and training in internal auditing, possess at least a diploma qualification recognised by the Institute and have satisfactorily passed the Qualifying Examination conducted by the Institute, or, (3) have at least 3 years of professional working experience and training in internal auditing and possess any of the professional qualifications from CPA, CIMA, ACCA, CISA, AIA, ICSA (*This list may be varied, as approved by IIA Inc.*). IIA Malaysia’s “*Associate Member*” on the other hand, refers to a class open to persons who are engaged in fields related to internal audit or have such interests but who do not qualify for membership under “*Professional Member*”.

#### **4.3.3. Response rates**

A total of 1,000 questionnaires were sent to registered individual internal auditors in the Professional and Associate member categories. Out of these, 186 questionnaires were returned. However, only 180 questionnaires were usable for the study (an 18% response rate). Despite the extreme care taken in the survey administration, such low response rates from Malaysian respondents were expected and not considered as unusual. Previous Malaysian studies have noted that such a phenomenon is typical of Malaysian respondents coming from a developing country who are very reluctant to

participate in any mail surveys (see Jusoh, Ibrahim, & Zainuddin, 2008; Jusoh & Parnell, 2008; Ming-Ling, 2008; Salleh & Dali, 2009; Smith, Abdullah, & Abdul Razak, 2008). These studies, in various research fields, have reported response rates of 12.3% (Jusoh et al., 2008; Jusoh & Parnell, 2008), 18.8% (Salleh & Dali, 2009), 19.6% (Smith et al., 2008) and 22.7% (Ming-Ling, 2008) respectively. A recent study by Ahmad and Taylor (2009) who utilised IIA Malaysia members, managed to get a 17.9% response rate.

Smith (2011) viewed that response rates of less than 25 percent are now common in accounting research. Furthermore, the sensitivity and confidential nature of the information requested by this study may contribute to the overall low response rate (Jusoh & Parnell, 2008; Miceli & Near, 1988; Xu & Ziegenfuss, 2008) as the internal auditors in this study were required to disclose various forms of sensitive information. There were questionnaires that were returned to the researcher totally incomplete by the survey participants stating that they declined to participate in this study since they were bound by the ethical requirements of their employers.

#### **4.4. Questionnaire Development**

The development of the questionnaire was based on reviews of past literatures, with the objective of identifying appropriate instruments to measure the selected variables of the study. The primary issue in questionnaire development is that it should adequately capture all the information needed to answer the study's research questions (Dunn & Huss, 2004) and "... forms an integrated whole" (Neuman, 2006, p. 277). A structured questionnaire was developed from existing instruments on whistleblowing and ethics studies to avoid problems of validity and reliability of the measures.

The following sections describe further the development and design of the questionnaire, the choice of scale and response format, the source and development of ethical vignettes and ways to control the problems of non-response bias, social desirability bias and vignettes' order-effect bias.

#### **4.4.1. Questionnaire design**

The design of the questionnaire covered four factors i.e., *Organisational*, *Individual*, *Situational* and *Demographic* factors that directly affect the internal auditors' whistleblowing intentions. The questionnaire was divided into five major sections. The first section starts with Mowday, Steers, and Porter's (1979) Organisational Commitment questions. This was followed by the second section, comprising Rotter's (1966) Locus of Control instrument. The third section comprises Victor and Cullen's (1988) Ethical Climate Questionnaire. Section four requires respondents to judge four types of ethical vignette, followed by responding to several univariate scales derived from Reidenbach and Robin's (1988, 1990) Multidimensional Ethical Scales for each of the given vignettes. The last section requests demographic information from the respondents (refer Appendix 3 for the questionnaire).

#### **4.4.2. Scale and response format**

Scales assist in the conceptualisation and operationalisation of research processes and produce quantitative measures which can be used to test hypotheses (Neuman, 2006). There are various types of scales but Likert scales are the most commonly used scales in survey research (Neuman, 2006), with either five or seven-point scale alternatives being adequate for most items (Hinkin, 1995).

A five-point categorical Likert scale, was used for all scaled question items that denote specific ordered categories, i.e. "Strongly Disagree, Disagree, Neither, Agree and Strongly Agree" or "Completely False, False, Neither, True and Completely True". The five-point Likert scale was employed in the questionnaire for the following reasons: firstly, it allows "respondents to indicate how strongly they agree or disagree with carefully constructed statements that range from very positive to very negative toward an attitudinal object" (Zikmund, 2003, p. 312); secondly, the simplicity and ease of use of the Likert scale is its strength. When several items are combined, more comprehensive multiple indicator measurement is possible (Neuman, 2006, p. 210); and finally, coefficient alpha reliability with Likert scales has been shown to increase when the point in the scale is increased to five points, but the reliability level will drop when more than five points are used (Lissitz & Green, 1975).

Some of the items in the research questions use reversed scales. This is apparent in Mowday et al.'s (1979) Organisational Commitment and Rotter's (1966) Locus of Control items. Having negatively worded scales could minimise mechanical and unreliable responses should a person check only one end of the response for all questions (Grove & Savich, 1979) and would further avoid having problems of "response set". This "response set" problem, which is also known as response bias, could occur due to the tendency of the survey participants to provide their answers in the same manner due to laziness or a psychological disposition (Neuman, 2006).

#### **4.4.3. Vignettes development**

The questionnaire includes four whistleblowing vignettes to measure internal auditors' internal whistleblowing intentions. Vignettes are defined as, "short descriptions of a person or a social situation which contain precise references to what are thought to be the most important factors in the decision-making or judgement-making processes of respondents" (Alexander & Becker, 1978, p. 94). The vignettes approach, borrowed from ethics research (Ellis & Griffith, 2001) requires respondents to rate the ethics of a subject in a vignette using a single scale item with endpoints specified as "ethical" and "unethical", for example. Issues regarding the use of vignettes in whistleblowing research have been discussed in Chapter 2 previously (refer section 2.5.5).

Vignettes (scenarios) may be developed from practice knowledge, previous research or preliminary studies (B. J. Taylor, 2006). Randall and Gibson (1990) suggested that vignettes need to be developed with a greater concern for realism in order to mitigate the problems of ambiguity and vagueness. A realistic context of a given vignette allows the respondents to put themselves in the position of a character portrayed in a hypothetical situation (Patel, 2003). Researchers are also able to manipulate their variables of interest, making such an approach advantageous (O'Fallon & Butterfield, 2005). However, Weber (1992) recommends the use of scenarios from previous studies as it avoids the need to test for their validity and reliability. Therefore, using previously developed vignettes, the study can enhance the research instrument's construct validity.

This study has selected four vignettes that have been utilised in previous studies, and tested with various groups and settings. These four vignettes were chosen for the

following reasons. First, they cover a wide range of ethical issues that internal auditors may face within their work settings. Second, previous research suggested that individuals do not view moral issues generically but may respond to the type of moral issues (Weber, 1990). Evidence has shown that reporting intentions are case sensitive (Kaplan & Schultz, 2007; Miceli, Near, & Schwenk, 1991; Near & Miceli, 1995; Near et al., 2004; Schultz et al., 1993) and these prior research studies have indicated that the nature or type of wrongdoing can affect observers' reactions to it. Third, using vignettes from similar studies (even though modified) allows for cross-study comparisons (Weber, 1992). The choice for utilising these four vignettes is deemed as appropriate for this study as O'Fallon and Butterfield (2005) cautioned that, the use of too many vignettes may cause respondents to experience overload and getting fatigue while with too few vignettes, it may limit the chance to manipulate the study's variables of interest, thus resulting in response biases.

The first vignette concerning a Marketing Executive taking unreported paid time off was modified from an unpublished dissertation by Wortman (2006). The second vignette with regards to an act of overstating purchases amount was developed by Brennan and Kelly (2007). Next, a vignette about a request for reduction in doubtful debts by the Chief Executive Officer was adapted from J. R. Cohen et al. (1996). The last vignette, about a request from a Chief Financial Officer to ignore an amount of unrecorded liabilities to be recorded in the financial statements, was adapted from Knapp (1985). The full versions of these vignettes are available in the questionnaire in the Appendix section (see Section 4 of Appendix 3). In a generic fashion, the vignettes ask the respondent to indicate how likely they would be to whistleblow in their company (internal whistleblowing) in the given hypothetical situations.

#### **4.4.4. Controlling measurement errors**

A common problem associated with any mail survey questionnaire is the problem of non-response bias. Meanwhile, another type of problem that needs to be addressed in any ethics and behavioural research is social desirability bias. Order effect bias on the other hand, is connected with the order of vignettes in the questionnaire. All these forms of bias need to be controlled in order to enhance the validity of the study.

#### 4.4.4.1. Non-response bias

Non-response bias poses a threat in all survey method studies as it weakens the survey results, hence a study is not able to generalise its results (Neuman, 2006). In order to minimise the problem of non-response rates, the following guidelines were considered (see Dillman, 2000; Fowler, 1993; M. F. King & Bruner, 2000; Neuman, 2006; Sekaran, 2006).

1. Each questionnaire was professionally printed and accompanied with a covering letter explaining clearly the research purposes and written instructions to complete the questionnaire.
2. A letter of support from IIA Malaysia was also enclosed to enhance response rates from participants. According to Fowler (1993), anything that will make a mail questionnaire look professional may enhance respondents' response rates.
3. Written assurance was provided to guarantee confidentiality and ensure respondents' anonymity. Maximising participants' anonymity would minimise the problem of social desirability bias (M. F. King & Bruner, 2000).
4. The questionnaire has a reasonable number of pages (8 pages) that suits the selected group of participants (internal auditors) chosen for this study. Neuman (2006) states that using questionnaires of up to 15 pages is appropriate for well-educated respondents.
5. The questionnaire is printed in a booklet form, with paper folded in the middle and stapled along the spine. This is a basic format that is acceptable for use with multi-page questionnaires, as people are used to starting on the first page and then turning to the second page, and so forth (Dillman, 2000).

#### 4.4.4.2. Social desirability bias

As in any empirical ethics research that requests the use of sensitive information from respondents, the issue of social desirability bias needs to be addressed and controlled.

The bias refers to chances that, "... respondents give a "normative" response or a socially acceptable answer rather than a honest answer" (Neuman, 2006, p. 285). For that reason, Bernardi and Guptill (2008) explain that individuals have the tendency to overstate (understate) reports that are deemed to be culturally desirable (undesirable) behaviours. A majority of previous studies have infrequently controlled social desirable response bias in ethics research (Bernardi & Guptill, 2008; Randall & Gibson, 1990) and this could have an impact on the validity of these studies if such bias is not controlled for (M. F. King & Bruner, 2000; Nyaw & Ng, 1994).

The present study adopted three measures to minimise social desirability bias. First, as mentioned in the previous section, the study assured the confidentiality of information provided and the anonymity of participants in the study. The second approach is to use the first-person approach in each scenario. The participants were asked whether they themselves would consider whistleblowing on the wrongdoing as described in each vignette. This is contrary to the approach undertaken by Patel (2003) who used a third-person approach. The reason for using a first-person instead of a third-person approach is due to the fact that Malaysia is a multi-racial country. Referring to the name of the wrongdoer in the vignettes either as Ahmad (Malay), Lim (Chinese) or Raju (Indian), for example, may seriously threaten the validity of the questionnaire if answered by participants of different ethnic background from the wrongdoer in the vignette. The use of first-person approach may also avoid possibility of gender bias, as the sample names mentioned earlier are all referring to males. It would be possible that gender of the whistleblower may interact with the gender of the wrongdoer (Miceli, Near, & Dozier, 1991), hence making the results become invalid especially when gender is also a variable of interest in this study for determining respondents' internal whistleblowing intentions.

The final approach to minimise social desirability bias was by asking two additional questions to the participants. The questions were, (1) "Rate the likelihood YOU would report to internal parties in your organisation", and (2) "Rate the likelihood that YOUR COLLEAGUES would report to internal parties in your organisation". Such an approach was consistent with the method adopted in previous whistleblowing studies (Patel, 2003; Zhang et al., 2009b). The difference between these two questions provides a measure of social desirability bias (J. R. Cohen et al., 1996). Consequently, the present



study made an attempt to measure the magnitude of social desirability bias if any, among the participants.

#### 4.4.4.3. Vignettes order effect bias

This study employed four sets of vignettes presented in sequence order. Each vignette though is different in terms of its contents, types of wrongdoing and the actor of wrongdoer, but it has a similar set of Likert-scales questions at the end of it. However, methodologically, there is strong evidence that the order in which information presented in surveys significantly affects the answers that respondents provide (LaSalle, 1997; Malhotra, 2009). An order effect bias, as it is known as, is considered a potential source of bias (Greenstein & Bennett, 1974; LaSalle, 1997) and it can affect the validity of the research instrument (Dillman, 2000) and has resulting invalidity in many forms of social research studies (Greenstein & Bennett, 1974).

In the cognitive psychology literature, Hogarth and Einhorn (1992) have proposed a theory that specifies the condition in which the order of information has an effect on individual's decision-making behaviour. Specifically, Hogarth and Einhorn (1992) stipulate that information processed early in sequence will have greater or less influence than information processed later. If the information processed at the beginning has greater influence on a final belief, than the order effect is known as a primacy effect. If the information received later has greater influence, the effect is known as a recency effect. In the current study, it is a concern whether Vignette 1 will have greater influence in the internal auditors' internal whistleblowing decision than Vignette 4 or vice versa. Specifically, the study would like to determine whether the order of vignettes in the questionnaire influence their ethical choices. This argument follows Asch (1946) who found that, first impressions do matter: the first personality traits listed for an individual influenced people's impressions about that individual significantly more than ones that were listed later.

The phenomenon of order effects has been observed across a number of disciplines (see Hogarth & Einhorn, 1992; LaSalle, 1997; Malhotra, 2009), however, the effect of vignette order on survey responses has received little attention in the whistleblowing research literature. Except in the work of Xu and Ziegenfuss (2008) and Zhuang et al.,

(2005), none of the whistleblowing studies employing ethical vignettes or scenarios has examined the potential for presentation order effect bias. The majority of these studies have not acknowledged such an effect though they were using a group of vignettes or scenarios sequentially in examining their respondents' whistleblowing decisions. This could possibly be due to their studies utilising large number of samples and their respondents were selected at random, hence it was not easy to undertake a test to conduct the effect of such bias.

In the Xu and Ziegenfuss (2008) and Zhuang et al., (2005) studies however, their respondents were given surveys that contained vignettes or scenarios that had earlier been random-ordered to remove the potential order effects bias, without even testing whether such effects do exist. The current study tested if such an order effect bias existed prior to the actual mail questionnaire survey. This is very important in order to ensure that, the internal validity of the questionnaire is not endangered. If an order effect does exist, Eisenberg and Barry (1988) cautioned that, proper procedures need to be employed to ensure that the bias does not influence studies on relevant judgments. Further discussion and test of order effects are described in detail in section 4.6.2 of this thesis.

## **4.5. Variable Development**

This section discusses measures used to operationalise the selected variables for this study. As previously discussed in section 4.4.1, the variables of the study (dependent and independent) were all adopted from previous studies in the related whistleblowing field. Such an approach was undertaken as the variables have been tested for their reliability and validity measures. More importantly, since the same variables have been utilised in previous whistleblowing studies, it is safe to expect that the study's variables are able to measure a particular concept (to counter for the validity issue) and, such measures are stable and consistent across time (to counter for the reliability issue) (Sekaran, 2006). Dependent variable measurement is discussed first, followed by the four groups of independent variables; Organisational, Individual, Situational and Demographic variables.

### **4.5.1. Dependent variable**

#### 4.5.1.1. Internal whistleblowing intention

Hunt and Vitell (1986) proposed that individual behavioural intentions can be measured by asking the probability that the persons would actually perform behaviours described to them. Participants in the present study were asked to read all the four vignettes first and then indicated the likelihood that they would engage in internal whistleblowing behaviour. The four vignettes allowed for sufficient variability in the dependent variable, thus allowing for more consistent and reliable observations on internal whistleblowing intentions.

The approach used for measuring internal whistleblowing in this study examines the respondents' intentions. Since it has been acknowledged that whistleblowing is a sensitive and risky act, involving issues such as legality and confidentiality, it is not easy to develop a direct measure. Hence, the use of vignettes is deemed as most suitable for this study (refer discussion in section 4.4.3). Internal whistleblowing intention will be measured using two items. One will be in the first person (The probability the respondent will engage in the action, i.e. internal whistleblowing). The other will be in the third person (The probability that his/her peers and colleagues would take the action). A five-point Likert type scale was used with the following endpoint: 1 = "Less likely" and 5= "Very likely" to determine the internal auditors' and their colleagues' willingness to whistleblow internally. The reporting-intention measures were similar to ones used by Kaplan and colleagues (see Ayers & Kaplan, 2005; Kaplan, 1995; Kaplan & Schultz, 2007; Kaplan & Whitecotton, 2001), except that the number of Likert scales has been reduced to 5-point from 7-point for methodological reasons (refer section 4.4.2 for details).

### **4.5.2. Organisational variables**

#### 4.5.2.1. Ethical climate

Victor and Cullen's (1988) Ethical Climate Questionnaire (ECQ) was used to assess the dimensions of ethical climate perceived by the participants. The study used the original

26-item ECQ scale rather than their 36-item scale to avoid participant fatigue. The items are descriptive statements originally designed to describe the various dimensions of ethical work climate as conceptualised by Victor and Cullen (1988). The ECQ is a practical instrument for evaluating and comparing ethical climate dimensions in an organisation and in different levels within the organisation itself (Wimbush & Shepard, 1994).

The ECQ items were administered on a 5-point scale with responses ranging from “completely false” to “completely true”. Participants were asked to evaluate the extent to which each item is true about their company. The instrument places the participants in the role of observers reporting on the perceived ethical climate rather than focussing on whether participants perceive the ethical climates as being good or bad (Victor & Cullen, 1988). The responses given determined the type of ethical climate that these participants work in. Due to variability of ethical climates identified in previous studies, as well as uncertainties of how many ethical climate dimensions exist in a particular organisation (Peterson, 2002b), consistent with Cullen et al. (2003), this study was then based on the three basic criteria of moral judgment: egoistic, benevolent and principle. The items were added together and averaged to develop scale scores for each of the three dimensions. Such an approach was similar to that in the Rothwell and Baldwin (2006) study, who developed scores for five ethical climates: Independence, Instrumental, Caring, Rules, and Law and Code.

#### 4.5.2.2. Size of organisation

Size of organisation is an ordinal data item measured in terms of the number of employees. The choice of using number of employees as a proxy for size of organisation is consistent with previous whistleblowing studies (see Rothwell & Baldwin, 2006, 2007a, 2007b) The number of employees was considered as the best measure of company size for this study as it suits the notion of Latane and Darley’s (1968) bystander theory. The size of organisation variable was measured by asking the respondents to indicate the number of employees in their organisations within the four sub-categories, (a) less than 500 employees, (b) 501 – 1,000, (c) 1,001 – 3,000, and (d) more than 3,001 employees.

#### 4.5.2.3. Job level

Job level of internal auditors is also an ordinal data item and was measured based on the response of respondents to their actual work designation. Four levels of job description were designated, (a) Junior (b) Senior (c) Manager, and (d) Others (Higher than managers).

### 4.5.3. Individual variables

#### 4.5.3.1. Ethical judgments

The measures for the moral equity, relativism, and contractualism dimensions are based on Reidenbach and Robin's (1990) Multidimensional Ethics Scale (MES). The MES instrument comprises a multi-item scale which is designed to allow respondents to evaluate the ethical nature of situations that are presented to them. The ethical judgments ratings were collected on all three ethics dimensions using a 5-point scale with endpoint labelled as 1 = "most unethical" and 5 = "least ethical". The MES instrument has been validated by previous studies including in the accounting context (J. R. Cohen et al., 1996, 2001; Flory et al., 1992). Respondents were asked to indicate their perceptions of the degree of the action's ethicality in each of the four vignettes.

Overall, the MES instrument contains eight items. The *Moral equity* dimension is composed of four items, which are: "Unfair / Fair", "Unjust / Just", "Not morally right / Morally right" and "Unacceptable to my family / Acceptable to my family". Two items are used to measure *Relativism* dimension, which are: "Culturally unacceptable / Culturally acceptable" and "Traditionally unacceptable / Traditionally acceptable". The last dimension, *Contractualism*, also consists of two items, which are: "Violates / Does not violate an unwritten social contract" and "Violates / Does not violate an unspoken social contract". The mean response among each item within a dimension was calculated and used as the dimension score for each subject.

#### 4.5.3.2. Locus of control

The internal auditors' locus of control was measured using a summed total of the 16-item work locus of scale, consistent with previous studies (see Donnelly et al., 2003; Spector, 1988). The Rotter's (1966) measure however, was not used due to its extremely general scope (Donnelly et al., 2003). The adopted scale consists of eight items measuring "internal" and eight items measuring "external" control over work specific issues (Siu et al., 2001). Respondents were asked to identify the relations between reward/outcomes and causes using a 5-point scale.

Higher scores (strongly agree) on the work locus of control scale indicate a greater degree of external personality while lower scores (strongly disagree) are associated with internal traits. The instrument's reliability and validity have been deemed acceptable in prior research (e.g., Donnelly et al., 2003; Spector, 1988).

#### 4.5.3.3. Organisational commitment

A summed total of Mowday et al.'s (1979) 15-item instrument was used to measure organisational commitment. All items represent statements to which respondents answered on 5-point Likert scales, ranging from "strongly disagree" to "strongly agree". The wording of six items in the instrument was reversed in an attempt to reduce response set bias (Porter et al., 1974). Prior studies report acceptable levels of reliability and validity for the 15-item instrument (L. Y. Chen, 2004; Cullen et al., 2003).

#### **4.5.4. Situational variables**

The "seriousness of wrongdoing" and the "status of wrongdoer" were manipulated in each vignette. Respondents were asked to assess the degree of importance of these two variables in each vignette. Two 5-point Likert scales were recorded for each situational variable (seriousness of wrongdoing and the status of wrongdoer). Each five-point Likert type scale was used with the following endpoint: 1 = "Not at all serious/Not at all powerful" and 5= "Very serious/Very powerful" to determine the internal auditors' decision-making behaviour.

#### **4.5.5. Demographic variables**

Demographic variables were measured at the end of the questionnaire. Gender is measured as a dichotomous variable, while age and tenure both at ordinal level (see Appendix 3).

#### **4.6. Data Collection**

Data collection for the study has been conducted in three stages: pilot testing of the survey instrument, testing for potential order effect bias and mail survey administration.

##### **4.6.1. Stage one: General pilot testing**

The study replicated the measures other researchers have used in their previous studies. Therefore, the pilot study stage is essential to determine the understandability of the survey instrument by Malaysian internal auditors at large. More importantly, a pilot test needs to be conducted to ensure that the vignettes and accompanying questions are understandable and present accurate portrayal of the situation. The results from the pilot testing will help in the determination of the reliability of the measured scales and if possible, the identification of the items on scales which would need to be deleted. Furthermore, by obtaining information such as comments or suggestions from the pilot study participants, further improvements to the contents of the survey instrument itself may result. Smith (2011) has suggested that extensive piloting of the survey instrument is essential to test whether the instrument is capable of generating the required responses from the respondents. Accordingly, three pilot tests were undertaken in order to refine the survey instrument prior to the actual survey administration to the IIA Malaysia members.

The first draft was evaluated by two Research Consultants from Edith Cowan University, respectively a Language Editor and a Statistician. Several improvements as suggested by the Language Editor were made in some of the measurement items since the original version of the measurements had originally been developed from United States studies. Wordings in some of items have been tailored to suit Malaysian

respondents who are used to British English. This was not considered a major issue as all internal auditors who are registered with IIA Malaysia will at least be university graduates. The Statistician on the other hand, suggested employing a 5-point Likert scales consistently across all measurement items. She also recommended that for consistency purposes, the Likert scales should begin with negative items for the first point and end with positive items at the last points (e.g. unethical = 1; ethical = 5). This will smooth the flow for participants, in selecting their answer, as well as avoiding some potential confusion. The suggestions put forward by these two Research Consultants were adopted in drafting out the mail questionnaire.

After the survey had been amended, the second pilot test was conducted among four Malaysian postgraduate students enrolled in Faculty of Business and Law in Edith Cowan University. These students have diverse academic and professional backgrounds. Two of them have practical work experience in the auditing sector prior to joining the academic field and all of them are well versed in teaching auditing units. The purpose of this pilot test was to get their feedback on the understanding of the research instruments and whether they are practical and suitable to a Malaysian environment. Generally, the postgraduate students considered the research instrument as acceptable and suitable to Malaysian respondents. As such, no further change was required to the said questionnaire.

The final pilot test was conducted among 15 Malaysian internal auditors in Kuala Lumpur. The sample selected for this pilot study was IIA Malaysia members who attended a 3-day training seminar for their Continuous Professional Development requirements. The researcher attended the first day training session with the consent of IIA Malaysia. Prior to that, permission was sought from the Technical Director of IIA Malaysia after explaining the purpose and importance of the pilot study stage. The members had been informed in advance that they had been selected as participants for the pilot survey. The researcher personally administered the pilot test, starting by introducing himself and explaining the purpose of the survey. During the briefing, all participants were informed of their rights and that their participation was entirely voluntary. Research instruments were distributed to the participants and the researcher then left the room. All completed research instruments were collected by the facilitator in-charge and handed over to the researcher at the end of the three-day seminar. This



approach has similarities with the actual mail survey process that will be conducted, in that it will give ample time for participants to provide much needed honest and reliable feedback. All 15 members participated in the study. In general, there were no major problems with regard to the contents of the research instruments or with its usability. All the vignettes were considered as appropriate to be used in the study. In the comment section that was provided at the end of the research instruments, a few of the members welcomed such research being conducted in Malaysia.

#### 4.6.2. Stage two: Pilot testing for potential order effect bias

As discussed previously in section 4.4.4.3, the potential for order effect bias needs to be determined prior to the actual mail survey questionnaire collection. The test was conducted with another group of Malaysian internal auditors in Kuala Lumpur (a different group from those who involved in the pilot test session previously), who attended a one-day Continuous Professional Development seminar. The researcher did not attend the session but was assisted by the Technical Director of IIA Malaysia with the consent of IIA Malaysia. Prior to that, permission was sought from IIA Malaysia after explaining the purpose and the importance of conducting this order effect test.

The researcher had been informed that a total of twenty IIA Malaysia members will attend the said session. Hence, as there were four types of vignettes, the order of vignettes presentation for these IIA Malaysia members were organised as follows:

**Table 4-2: Vignettes Presentation Order**

Version	Vignette presentation order (Vignette No.)			
A	1	2	3	4
B	2	3	4	1
C	3	4	1	2
D	4	1	2	3

The test used 5 copies x 4 versions between-subjects design, totalling 20 copies altogether that were distributed at random. The purpose of randomising the presentation order of these four vignettes is to recognise the possibility of vignettes order influence on respondents' internal whistleblowing intentions. Each respondent received one copy

of each of the four versions available. The respondents were requested to read through all the four vignettes presented sequentially before committing to answer questions accompanying them. Out of the total 20 copies distributed, only 18 copies were returned by mail from Malaysia to the researcher. According to the Technical Director, two of the respondents did not return the questionnaire after the completion of the one-day IIA Malaysia training seminar. Hence, there are only 5 copies received for Version A, 4 copies for Version B, 4 copies for version C and 5 copies for Version D.

The Friedman Test, a non-parametric alternative to the one-way repeated measures of analysis of variance is used. The test is used when the same sample of subjects are measured under three or more different conditions (Pallant, 2007). One variable from the vignettes, *Seriousness of wrongdoing*, was chosen to test the presence of order effect bias. The result of the Friedman Test indicated that there was no statistically significant difference in *Seriousness of wrongdoings* variable across the four version of vignettes,  $\chi^2(3, n = 18) = 5.06, p > .167$ ). To test further, another variable, *Ethicality of the behaviour*, was also chosen. Again, the result of the Friedman Test indicated that there was no statistically significant difference in *Ethicality of the behaviour* variable across the four sets of vignettes,  $\chi^2(3, n = 18) = 5.91, p > .116$ ). As such, no order effect bias was found, suggesting that the section for vignettes response is free from order effects.

#### **4.6.3. Stage three: Mail questionnaire administration**

Contact was made again with the Technical Director of IIA Malaysia to gain permission to use members of IIA Malaysia for the purpose of the study. The purpose of the study was also explained in order to secure cooperation from the Institute and to encourage their members to participate in the study. The Institute agreed to support the study provided that the final phase of the survey preparation - labelling for IIA Malaysia's name lists onto the outgoing envelopes, was to be conducted in IIA Malaysia office in Kuala Lumpur. The major obstacle for this stage is that IIA Malaysia did not permit the researcher access to view and hold the complete list of its members. The reason given was due to the confidentiality of such a list, which precluded its release to the researcher. This restriction resulted in a lack of opportunity for the conduct of follow-up reminder. As such, the samples of participants chosen for the study were randomly selected by IIA Malaysia themselves. However, the researcher was able to explain to the

IIA Malaysia staff about the choice of a probability sampling design. This was essential to ensure that the sample selected was representative of the IIA Malaysia's population. Accordingly, IIA Malaysia agreed to distribute the survey instruments to their registered members.

Despite having a total lack of control in the selection of respondents for this study, the support provided by IIA Malaysia may further enhance participation from their own members. Should the study be conducted without the support of the organisation that governs the conduct of its registered members, there will likely be lack of interest among IIA Malaysia's members in participating in this study. As Fowler (1993) has indicated, anything that makes the survey look professional, may enhance respondents' response rates. As such, this study gained a letter of support from IIA Malaysia as well as getting a written assurance that guarantees the confidentiality of information and the anonymity of the respondents. It is hopeful that this would minimise the problem of non-response bias.

Each packet of the survey mailed to randomly selected internal auditors include, (a) a letter of support from IIA Malaysia – to encourage IIA Malaysia members to participate in the study, (b) a cover letter from the researcher which explains the purposes of the study as well as assuring participants' anonymity, (c) a survey instrument, and (d) a postage-paid return envelope. Participants were reminded that participation was entirely voluntary and anonymous. A copy of each IIA Malaysia letter of support, cover letter and survey instrument is shown in the Appendix section (refer Appendix 1, 2 and 3).

#### **4.6.4. Ethical considerations**

Ethics in business and social science research refers to the application of expected societal norms of behaviour or code of conduct while conducting research. In dealing with research participants, the researcher fully understands his/her responsibility to protect participants from any physical harm, physical or mental embarrassment, pain or loss of privacy. The conduct of this study followed the guidelines provided by the Edith Cowan University Ethics Committee. The guidelines require that, research involving human participants needs an ethics clearance from the said Committee before

commencing primary data collection. The guidelines consider and protect the welfare of any person involved in the research in general.

Based on ethical and professional principles, the researcher has to take primary responsibility for conducting this research. The ethical considerations in terms of confidentiality and anonymity of the research participants were fully observed and addressed in the process of sample selection and data collection, where each stage of the methodology has been approved by the Ethics Committee. Basically, the ethical conduct of the study follows the approach provided by Smith (2011) who stated that, any consideration of ethics would normally address at least appropriate written permission from participating organisations to conduct the study using their staff as respondents, informing participants of the motives for the research, providing feedback of the results to the participants, gaining permission from participating individuals (other than for mail surveys, where return of the questionnaire is taken to imply permission), guaranteeing and delivering both confidentiality and anonymity to the participants, granting the right of withdrawal to participants at any time and guaranteeing the storage of research data, usually for a period up to seven years.

#### **4.7. Reliability, Validity and Normality**

The estimates of reliability and validity are critical. The operationalisation of the construct is likely to be inadequate if an instrument has poor estimates of reliability and validity. Normality is also important in the sense that distributions of variables to be used in analysis should be normal, as it is one of the assumptions to be satisfied prior to using any inferential statistics.

##### **4.7.1. Reliability**

Reliability is defined as “the degree to which measures are free from error and therefore yield consistent results” (Zikmund, 2003, p. 300). It is the consistency of an instrument measurement, or the degree to which an instrument measures the same way each time it is used under the same condition with the same subjects. In other words, reliability is the extent to which measurements of a particular test are replicable. A reliable instrument works well at different times under different conditions. There are several

commonly used methods of measuring reliability – stability, equivalence, and internal consistency.

The internal consistency approach is used to estimate the reliability of the measurement scales in this study. This approach measures the degree to which instrument items are homogeneous and reflect the same underlying constructs (Zikmund, 2003). The most widely used formulae to measure the internal consistency of the survey instrument is the Cronbach's alpha coefficient (Smith, 2011). The higher the coefficients, the better the measuring instrument. Generally a measure of Alpha coefficient above 0.7 is considered to be highly reliable. The result of the study's internal consistency of the survey instrument is shown at section 5.3.3 of this thesis.

#### **4.7.2. Validity**

Validity refers to “the ability of a scale or measuring instrument to measure what it is intended to measure (Zikmund, 2003, p. 302). Validity features two major forms: external and internal validity. The external validity of research findings refers to the ability of the data to be generalised across persons, settings and times. The internal validity on the other hand, is the ability of a research instrument to measure what it purports to measure. Internal validity is discussed in detail as the focus of the current study is on whether the instrument actually measures what its designer claims it does. Three types of internal validity were considered – content validity, criterion-related validity and construct validity.

*Content validity:* The content validity ensures that the measuring instrument provides adequate coverage of a set of items and the clarity of definitions and concepts used. A major threat to content validity is the poor definition of terms and/or concepts. The variables measurement in the present study followed previous studies, hence any threat to content validity is minimised. Furthermore, various pilot testings have been conducted to ensure the content validity of this study's survey instrument (see section 4.6.1 earlier).

*Criterion-related validity:* The criterion-related validity deals with the instrument's ability to measure an item accurately. The major aspect of criterion-related validity is

performance measurement. According to Grove and Savich (1979), the type of response scale is an important factor in measuring performance. The study utilises a five-point Likert scale, which according to Grove and Savich (1979) tends to provide roughly equal frequencies. On the other hand, the use of a seven-point scale may provide significantly lower frequencies, and the use of a three-point scale may cause respondents to experience, “frustration at not being able to discriminate finely enough” (Grove & Savich, 1979, p. 529). This has been discussed in detail in section 4.4.2 on the choice for choosing the five-point Likert scales approach.

*Construct validity:* Construct validity attempts to identify the underlying constructs being measured and determine how well the test represents them. It is assessed through convergent and discriminant validities. As the study have mostly used a set of published measures established for the instrument, it offers the “goodness of fit” of the measure (Sekaran, 2006).

#### **4.7.3. Normality**

The assumption of normality is a pre-requisite for many inferential statistical techniques. There are a number of different ways to explore this assumption graphically: histogram, stem-and-leaf plot, boxplot, normal probability plot and detrended normality plot. A number of statistical analyses are also available to test normality: Kolmogorov-Smirnov statistics, with a Lilliefors significance level, the Shapiro-Wilks statistic, and Skewness and Kurtosis.

As such, data screening is useful to ensure that data have been correctly entered and the distributions of variables are normal. If variable distributions deviate dramatically, this may affect the validity of the results produced. Therefore, transforming the values of the variable may be needed in order to satisfy the distribution requirements for the use of a particular parametric statistic (Field, 2009). However, there are arguments on transforming variables to meet the assumptions of various parametric techniques, where some authors argued against it (see Field, 2009; Grissom, 2000; Pallant, 2007; Tabachnick & Fidell, 2007). Tabachnick and Fidell (2007) point out that, although data transformations are feasible as a remedy for outliers and for failures of normality, they are not usually recommended. This is due to an analysis being interpreted from the

variables that are in it, and transformed variables are harder to interpret (Tabachnick & Fidell, 2007). Field (2009), on the other hand, cautioned that transforming the raw data will not necessarily affect the residuals. Furthermore, Grissom (2000) reports that the means of transformed variables can occasionally reverse the difference of means of the original variables. Therefore, should a study fail to satisfy the assumptions for the parametric statistics, then Pallant (2007) states that the study needs to abandon parametric analyses and to use non-parametric alternatives instead.

#### **4.8. Analysis Plan**

Various statistical techniques were used in this study to test the stated hypotheses. Specifically, statistical analysis software, SPSS version 17.0 (for Windows) was employed. The SPSS software is a tool that provides a wide variety of statistical methods for analysing data. Data analyses include both descriptive and inferential statistics.

At the univariate level, descriptive statistics were computed for each of the study variables. Descriptive statistics include mean, standard deviation, frequencies and percentage where appropriate and will be provided in table form. First, it was used to assess the accuracy of data entry, missing data, and the distributions of the variables with respect to normality. Then, it was used to present the profiles of the study's respondents and analysis of variables across all four vignettes.

At the bivariate level, bivariate statistical techniques were used to investigate the study variables. Pearson's correlations between all the study variables were calculated to investigate the degree of correlation as well as the direction of the correlation. Pearson's correlations also assist in determining if any of the independent variables are highly correlated with each other.

At the multivariate level, multiple regression statistical techniques were used to test the research hypotheses and investigate the relative influences of the study variables on internal auditors' internal whistleblowing intentions. Multiple regression generally explains the relationship between multiple independent or multiple predictor variables and one dependent or criterion variable (Field, 2009). In the current study, a standard

multiple regression was used to estimate the extent to which each of the study variables influenced internal auditors' internal whistleblowing intentions while controlling for the influences of the other variables included in the regression model. The following equation illustrates the full regression model that is used to predict internal auditors' internal whistleblowing intentions.

$$\hat{Y} = \alpha + \beta_1 (\text{Egoism}) + \beta_2 (\text{Benevolence}) + \beta_3 (\text{Principle}) + \beta_4 (\text{Size of Organisation}) + \beta_5 (\text{Job Level}) + \beta_6 (\text{Moral Equity}) + \beta_7 (\text{Relativism}) + \beta_8 (\text{Contractualism}) + \beta_9 (\text{Locus of Control}) + \beta_{10} (\text{Organisational Commitment}) + \beta_{11} (\text{Seriousness of Wrongdoing}) + \beta_{12} (\text{Status of Wrongdoer}) + \beta_{13} (\text{Gender}) + \beta_{14} (\text{Age}) + \beta_{15} (\text{Tenure}) + \varepsilon$$

Where, “ $\hat{Y}$ ” is the predicted value for internal auditors' internal whistleblowing intentions, “ $\alpha$ ” is the estimate of the Y – intercept, “ $\beta$ ” is the slope of the regression line, and “ $\varepsilon$ ” is the representative of the errors of prediction.

#### **4.9. Summary**

This chapter discusses the research method used in this study, which include the overall research design, variables used in this study and the development of the data collection survey instrument. This chapter also discusses the method used to test the proposed relationships among the hypotheses as explained in Chapter 3. A mail questionnaire survey was used to gather data from the internal auditors. Various statistical analyses were used in analysing the variables influencing the internal whistleblowing intentions behaviour. The next chapter, Chapter 5, presents detailed analyses of data and the presentation of the results from the survey.



# CHAPTER 5

## ANALYSIS AND RESULTS

### 5.1. Introduction

The purpose of this chapter is to explain and present the results of statistical analyses used in testing the hypothesised relationships among the study variables. It begins with examining the descriptive characteristics of the sample, explaining the respondents' profile and their responses in each vignette. Next, this chapter describes the results of various exploratory data analyses. It includes analysis of missing data, normality, reliability, social desirability response, and testing the assumptions of multiple regressions. Then, the correlation statistics among the independent and dependent variables are presented. The final section, discusses the results of multiple regression analysis.

### 5.2. Descriptive Analysis

Three types of descriptive analysis were provided. It begins with characteristics of the study's respondents, their general responses to the vignettes and finally, comparisons on their internal whistleblowing intentions across demographic variables.

#### 5.2.1. Respondents profiles

Table 5.1 below presents the profiles of the study's respondents. Descriptive statistics indicated that, the majority of internal auditors were male (i.e. 54.4%). The largest age group was represented by the 25–35 years old range (51.1%), and most of these internal auditors have lower working tenure (less than 5 years) with their current organisations (a total of 57.8%). In terms of job level, the majority of them were at Senior and Manager levels (37.2% and 37.8%, respectively). The largest representation of respondents (34.4%) worked in smaller organisations (having less than 500 employees).

**Table 5-1: Respondents' Profile (N = 180)**

Variables		N	%
Gender	Male	98	<b>54.4</b>
	Female	82	45.6
	<b>Total</b>	<b>180</b>	
Age	< 25 years old	6	3.3
	25 – 35 years old	92	<b>51.1</b>
	36 – 45 years old	49	27.2
	> 46 years old	33	18.3
	<b>Total</b>	<b>180</b>	
Tenure	< 2 years	46	25.6
	2 – 5 years	58	<b>32.2</b>
	6 – 10 years	31	17.2
	> 11 years	45	25.0
	<b>Total</b>	<b>180</b>	
Job level	Junior	23	12.8
	Senior	67	37.2
	Manager	68	<b>37.8</b>
	Higher than Manager	22	12.2
	<b>Total</b>	<b>180</b>	
Size	< 500 employees	62	<b>34.4</b>
	501 – 1,000 employees	27	15.0
	1,001 – 3,000 employees	37	20.6
	> 3,001 employees	54	30.0
	<b>Total</b>	<b>180</b>	

### 5.2.2. Response across vignettes

The descriptive statistics for the organisational, individual and situational variables as well as internal whistleblowing intentions (the dependent variables), are presented in Table 5.2. The table shows the descriptive analyses of all variables across all four vignettes. As such, discussions were centred on differences of reporting analyses across vignettes.

#### 5.2.2.1. Vignette 1

An interesting observation can be made with Vignette 1. The vignette can be regarded as a non-financial wrongdoing since it involved a situation where a Marketing Executive (the wrongdoer) took paid-time off without reporting it to his superior. The internal auditors rated the situation as very unethical ( $M = 1.56$ ,  $SD = .785$ ) and as a serious type of wrongdoing ( $M = 4.14$ ,  $SD = .806$ ). Status of the wrongdoer (level of power) and the respondents' intention to whistleblow were rated as moderate.

Previous studies have associated seriousness as being measured either in terms of materiality (Curtis, 2006; Miceli & Near, 1985), frequency the activity occurred (Near, Ryan, & Miceli, 1995) or that it involved safety or health consequences (G. King, 1997). The scenario used in this study, however, captured a wrongdoing by the said wrongdoer in the form of violation of organisational policy. As the role of internal auditors is wider and different from external auditors whose job roles are limited to attesting to the “truth and fairness” of financial statements, the finding proved that internal auditors are indeed aptly described as the “eyes and ears of management” (Xu & Ziegenfuss, 2008). Internal auditors in this study were concerned with the waste of organisational resources in paying for an unperformed task by the wrongdoer.

#### 5.2.2.2. Vignette 2

The table shows that, overall, Vignette 2 was rated as very unethical ( $M = 1.16$ ,  $SD = .541$ ), the nature of wrongdoing was rated as very serious ( $M = 4.83$ ,  $SD = .512$ ) and the event was more likely to be whistleblowed either by respondents themselves or by their colleagues ( $M = 4.49$ ,  $SD = .895$  and  $M = 4.00$ ,  $SD = 1.091$  respectively). Vignette 2 involved a Production Manager (the wrongdoer) who overstated company’s cash purchases from a supplier and misappropriated the remaining cash balance for an amount of RM12,000.

The wrongdoing conducted by the Production Manager clearly benefited him or her rather than the organisation. Miceli, Near, and Schwenk (1991) explained that theft is an act that is only intended to benefit the individuals themselves and such an act will hurt the organisation’s bottom line. Therefore, the reason why internal auditors are more likely to internally whistleblow in Vignette 2 was due to the fact that, “... auditors might be more likely to blow the whistle on an act of an individual who is trying to illegally enrich himself or herself at the organization’s expense than someone who may appear to be acting on behalf of the organization” (Miceli, Near, & Schwenk, 1991, p. 118).

**Table 5-2: Descriptive Statistics for Scale Variables**

<b>Variables</b>	<b>N</b>	<b>Mean</b>	<b>Std</b>	<b>Min</b>	<b>Max</b>
Organisational Commitment	171	53.94	8.112	24.00	75.00
Locus of Control	174	40.37	7.340	18.00	61.00
Ethical Climate - Egoism Dimension	178	3.38	0.432	2.38	4.75
Ethical Climate - Benevolence Dimension	178	3.48	0.531	2.00	4.80
Ethical Climate - Principle Dimension	172	3.59	0.405	2.50	4.58
<b>Vignette 1:</b>					
Ethical	180	1.56	0.785	1	4
Seriousness	179	4.11	0.806	2	5
Status of wrongdoer (level of power)	180	3.07	1.003	1	5
Internal whistleblowing intention - You	179	3.74	1.050	1	5
Internal whistleblowing intention - Colleagues	179	3.32	1.047	1	5
Moral Equity Dimension	173	4.25	0.695	1.75	5.00
Relativism Dimension	177	4.01	0.820	2.00	5.00
Contractualism Dimension	179	1.86	0.799	1.00	4.00
<b>Vignette 2:</b>					
Ethical	180	1.16	0.541	1	4
Seriousness	180	4.83	0.512	1	5
Status of wrongdoer (level of power)	180	4.09	0.821	1	5
Internal whistleblowing intention - You	179	4.49	0.895	1	5
Internal whistleblowing intention - Colleagues	179	4.00	1.091	1	5
Moral Equity Dimension	175	4.78	0.551	2.00	5.00
Relativism Dimension	178	4.66	0.678	2.00	5.00
Contractualism Dimension	178	1.29	0.605	1.00	4.00
<b>Vignette 3:</b>					
Ethical	180	1.99	0.918	1	5
Seriousness	180	3.80	1.022	1	5
Status of wrongdoer (level of power)	180	4.68	0.657	1	5
Internal whistleblowing intention - You	179	3.56	1.328	1	5
Internal whistleblowing intention - Colleagues	179	3.25	1.234	1	5
Moral Equity Dimension	174	3.92	0.866	2.00	5.00
Relativism Dimension	177	3.71	0.981	1.00	5.00
Contractualism Dimension	179	2.25	1.064	1.00	5.00
<b>Vignette 4:</b>					
Ethical	180	1.78	0.836	1	4
Seriousness	180	4.30	0.845	1	5
Status of wrongdoer (level of power)	180	4.41	0.789	1	5
Internal whistleblowing intention - You	179	4.10	1.071	1	5
Internal whistleblowing intention - Colleagues	179	3.63	1.175	1	5
Moral Equity Dimension	173	4.14	0.789	2.00	5.00
Relativism Dimension	177	3.90	0.906	1.00	5.00
Contractualism Dimension	179	1.99	0.902	1.00	5.00

### 5.2.2.3. Vignettes 3 and 4

Other interesting observations were with regard to Vignette 3 and Vignette 4. The situation in Vignette 3 was about a request by the Chief Executive Officer (CEO) of the organisation to the accountant to reduce the provision for doubtful debts in order to increase the company's reported income. Vignette 4 on the other hand, was related to a Chief Financial Officer (CFO) who was reluctant to record a substantial amount of unrecorded liabilities into the company's financial statements, as the CFO argued that it

will affect the company's current year's bonus payment. Though both the wrongdoers were acknowledged as very powerful persons within the organisations ( $M = 4.68$ ,  $SD = .657$ ;  $M = 4.41$ ,  $SD = .789$ ), as compared to the other two wrongdoers in Vignette 1 and 2, the means for whistleblowing were clearly lower than those in the other two vignettes, with Vignette 3 showing the lowest mean ( $M = 3.56$ ,  $SD = 1.328$ ) of internal whistleblowing.

There are three good reasons for these two outcomes. First, the higher status of wrongdoers could have made them feel less obliged to whistleblow. Next, it could possibly be due to the reward that the internal auditors themselves, as employees of the organisation could reap in terms of bonus payments should they allow both the CEO and CFO to commit to such unethical behaviour. This brings us back to the argument put forward by Miceli, Near, and Schwenk (1991) on Vignette 1 earlier. The acts conducted by both the CEO and CFO were clearly not intended for their own benefit, but for the welfare of all members of the organisation. The final reason could be attributed to the fact that the situations as described in Vignettes 3 and 4 involved irregularities in the organisation's financial statements (the main role of external auditors is to attest the truth and fairness of company's financial statements). The internal auditors in this study seem to feel less obligated to whistleblow presumably because they perceived that the external auditors would potentially pick up such irregularities during their financial statement audit.

### **5.2.3. Internal whistleblowing intentions across respondents' profiles**

Table 5.3 below provides descriptive statistics for internal whistleblowing intentions in each of the four vignettes across five respondents' profiles items: *Gender*, *Age*, *Tenure*, *Job Level*, and *Size of organisation*. The discussion centred on each individual respondents' profiles with regards to the differences of internal whistleblowing intentions across the four vignettes.

**Table 5-3: Analysis of Responses for Internal Whistleblowing**

Variables		N	Vignette 1		Vignette 2		Vignette 3		Vignette 4	
			Mean	SD	Mean	SD	Mean	SD	Mean	SD
<b>Gender</b>	Male	98	<b>3.80</b>	1.074	4.38	.969	3.46	1.310	4.04	1.064
	Female	81	3.68	1.023	<b>4.63</b>	.782	<b>3.69</b>	1.348	<b>4.17</b>	1.082
<b>Age</b>	< 25 years old	6	3.17	1.472	3.83	1.472	2.83	1.602	3.17	1.835
	25 – 35 years old	91	3.51	1.047	4.51	.848	3.60	1.332	4.08	1.147
	36 – 45 years old	49	4.02	.989	<b>4.55</b>	.843	<b>3.63</b>	1.220	<b>4.24</b>	.723
	> 46 years old	33	<b>4.09</b>	.879	4.48	.972	3.48	1.439	4.12	1.083
<b>Tenure</b>	< 2 years	46	3.46	1.110	4.46	.912	<b>3.74</b>	1.357	4.04	1.192
	2 – 5 years	57	3.70	1.085	4.47	.966	3.40	1.462	<b>4.23</b>	1.069
	6 – 10 years	31	3.61	1.086	<b>4.55</b>	.810	3.71	1.071	4.00	1.033
	> 11 years	45	<b>4.18</b>	.777	4.51	.869	3.49	1.290	4.07	.986
<b>Job level</b>	Junior	23	3.52	1.275	4.48	.898	3.39	1.588	3.78	1.476
	Senior	66	3.50	.996	4.39	.909	3.48	1.256	4.00	1.081
	Manager	68	3.85	1.011	4.46	.984	3.57	1.331	4.21	.971
	Higher than	22	<b>4.36</b>	.790	<b>4.91</b>	.294	<b>3.95</b>	1.253	<b>4.41</b>	.734
<b>Orgn Size</b>	< 500 employees	62	<b>3.82</b>	1.124	4.52	.805	<b>3.69</b>	1.249	4.11	1.088
	501 – 1,000	27	3.67	1.038	<b>4.67</b>	.679	3.59	1.394	<b>4.26</b>	.903
	1,001 – 3,000	36	3.67	.926	4.50	.910	3.33	1.242	4.03	.971
	> 3,001 employees	54	3.74	1.067	4.37	1.069	3.56	1.449	4.06	1.204

Bold item = Highest mean

N = 179

### 5.2.3.1. Gender

There were different reactions on the decision to internally whistleblow between genders. Female internal auditors were more likely to whistleblow in Vignettes 2, 3 and 4, while their male counterparts more likely only in Vignette 1. Judging from the type of wrongdoings in each vignette, the situation in Vignette 1 only involved a minor type of organisational wrongdoing, i.e. taking unpaid time off by its Marketing Executive, unlike major types of wrongdoings in Vignettes 2, 3 and 4. As females are said to possess lower tolerance for illegal and unethical behaviours (Yu & Zhang, 2006), such behaviour is typified in this sample. This is also consistent with the theory put forward by studies suggesting that women are thought to be more ethical in their judgment and behaviour than men (Vermeir & Van Kenhove, 2008).

#### 5.2.3.2. Age

The result showed that older internal auditors (more than 36 years old) are more likely to internally whistleblow than those in younger age categories (35 years old and lower). Basically, the notion as suggested by previous studies that older organisational members have minimal restraints to whistleblow appears to be true (Keenan, 2000; Mesmer-Magnus & Viswesvaran, 2005; Sims & Keenan, 1998).

#### 5.2.3.3. Tenure

There were mixed results with regards to working tenure of the respondents and their internal whistleblowing intentions. By comparing the differences across the vignettes, it is clear that, internal auditors who possessed longer working tenure (6 years and more) are more likely to whistleblow on lower level wrongdoers such as the Marketing Executive in Vignette 1 and Production Manager in Vignette 2. Those who have shorter working tenure (5 years and below) are seen to be more likely to whistleblow on higher status wrongdoers such as CEO in Vignette 3 and CFO in Vignette 4.

#### 5.2.3.4. Job level

All vignettes displayed the highest means of internal whistleblowing intentions in the “Higher than manager” level group. The table shows that organisational members holding a higher managerial level, i.e. higher than manager position, are most likely to internally whistleblow. Clearly, this group of organisational members are said to have more power and authority in their organisation and hence have greater responsibility to report any cases of corporate wrongdoings.

#### 5.2.3.5. Size of organisation

The highest means for internal whistleblowing intentions were found in smaller size organisations. The results show that internal auditors in organisations having less than 1,000 employees were more likely to whistleblow. This finding is consistent with bystander theory suggesting that the instance of whistleblowing would be lower in a

larger organisation, hence consistent with the notion of “diffusion of responsibility” by Latane and Darley (1968).

### **5.3. Exploratory Data Analyses**

Prior to conducting any formal statistical analyses, preliminary steps to ensure the quality of data were conducted. It is important to ensure that the data have been correctly entered into the Data Editor of SPSS. This will provide an assurance that data to be examined are of good quality for further analysis (Sekaran, 2006). The process began with inspection of missing data, checking the distributions of variables with respect to normality, and conducting reliability analysis and the social desirability response analysis.

#### **5.3.1. Missing data**

It is essential to inspect the data file for the possibility for any missing data. Missing data may cause problems in the study’s validity and reliability (Neuman, 2006). Missing values when randomly scattered are less problematic than those are not normally scattered because non-randomly missing values reduce the generalisability of the findings (Tabachnick & Fidell, 2007). If the missing data were found to have a systematic pattern (not normally scattered), then the results of research could be seriously flawed by non-response bias (Neuman, 2006).

The patterns of the study’s missing data were examined using the SPSS MVA (missing value analysis) function to identify the existence of any potential systematic missing data. The SPSS MVA function provides a slightly different set of descriptive tools for analysing missing data. The statistics showed that none of the variables have missing values of over 5% of the sample. These missing data were further inspected to assess whether they occurred randomly or due to some systematic pattern. The correlations with Little’s MCAR (missing completely at random) test were conducted for all variables utilised to assess each vignette. The test showed that the probability that the patterns of cases deviates from randomness was greater than 0.05 in all vignettes (Vignette 1,  $p = 0.907$ ; Vignette 2,  $p = 0.998$ ; Vignette 3,  $p = 0.947$ ; Vignette 4,  $p =$



0.999). As a statistically non-significant result is desired, MCAR may be inferred for all variables in each vignette.

### 5.3.2. Normality analysis

Utilising Kolmogorov-Smirnov statistics for each individual variable, the test of normality for all variables showed that only the Locus of Control variable was normally distributed. For all other variables, the Kolmogorov-Smirnov statistics for testing normality is less than the required value of  $> 0.05$  (see Table 5.4). As the current study fails to satisfy the assumptions for the required parametric statistics, Pallant (2007) states that the study needs to abandon parametric analyses and to use non-parametric alternatives instead. Using parametric statistical techniques on non-parametric data could provide inaccurate results (Field, 2009). Transformations were not undertaken due to arguments discussed in Chapter 4 earlier (refer section 4.7.3).

**Table 5-4: Tests of Normality**

Items	Kolmogorov-Smirnov**			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
Organisational Commitment	.070	171	.038	.984	171	.052
Locus of Control	.057	174	.200*	.993	174	.601
Ethical Climate - Egoism Dimension	.073	178	.022	.986	178	.065
Ethical Climate - Benevolence Dimension	.100	178	.000	.978	178	.006
Ethical Climate - Principle Dimension	.070	172	.037	.985	172	.063
Scenario 1: MES – Overall	.156	171	.000	.922	171	.000
Scenario 1: MES - Moral Equity Dimension	.147	173	.000	.887	173	.000
Scenario 1: MES - Relativism Dimension	.212	177	.000	.873	177	.000
Scenario 1: MES - Contractualism Dimension	.223	179	.000	.844	179	.000
Scenario 2: MES – Overall	.418	173	.000	.567	173	.000
Scenario 2: MES - Moral Equity Dimension	.429	175	.000	.454	175	.000
Scenario 2: MES - Relativism Dimension	.438	178	.000	.564	178	.000
Scenario 2: MES - Contractualism Dimension	.459	178	.000	.537	178	.000
Scenario 3: MES – Overall	.169	173	.000	.919	173	.000
Scenario 3: MES - Moral Equity Dimension	.176	174	.000	.902	174	.000
Scenario 3: MES - Relativism Dimension	.195	177	.000	.891	177	.000
Scenario 3: MES - Contractualism Dimension	.199	179	.000	.873	179	.000
Scenario 4: MES – Overall	.166	172	.000	.921	172	.000
Scenario 4: MES - Moral Equity Dimension	.186	173	.000	.872	173	.000
Scenario 4: MES - Relativism Dimension	.186	177	.000	.871	177	.000
Scenario 4: MES - Contractualism Dimension	.221	179	.000	.845	179	.000

\* This is lower bound of true significance

\*\* Lilliefors Significance Correction

Hence, non-parametric methods to test for group differences such as Mann-Whitney test and the Kruskal-Wallis test were employed. To explore the relationship between two variables, non-parametric Spearman's Rank Order Correlation ( $\rho$ ) were presented. Non-parametric techniques do not make assumptions about population distribution and do not have strict requirements as the parametric techniques required (Field, 2009; Pallant, 2007). When standard assumptions (that are commonly violated in social science research) such as normal distribution or equal sample sizes between groups, are not met, non-parametric techniques have little effect on the power of the test and the subsequent results. These methods have the benefit of requiring fewer assumptions, thus non-parametric techniques are able to preserve Type I error rates to nominal alpha when testing hypotheses without making an appeal to population parameters. Furthermore, as part of the study's data were measured on nominal (categorical) and ordinal (ranked) scales, the choice of non-parametric analyses for the study was considered appropriate (Pallant, 2007).

### **5.3.3. Reliability analysis**

Reliability is a measure of the internal consistency of a set of scale items (Sekaran, 2006). There are a number of different internal indicators of internal consistency, but the most commonly used is Cronbach's Alpha (Coakes, Steed, & Price, 2008; Smith, 2011). Cronbach's Alpha can be interpreted as a correlation coefficient and its value ranges from 0 to 1. Cronbach's Alpha is concerned with the degree to which the items that make up a scale are internally consistent with each other (Pallant, 2007).

The results indicate that the Cronbach's Alpha reliability coefficients for all variables are all above 0.6. Generally, Sekaran (2006) stated that reliabilities of less than 0.6 are considered to be poor, those of 0.7 are considered acceptable, those above 0.8 are good, while the closer the reliability coefficient to 1.0, the better. Table 5.5 indicates that, the internal consistency reliability of the variables used in this study is considered good.

**Table 5-5: Reliability Analysis**

Items	Cronbach Alpha	N
Overall items	.854	117
Organisational Commitment	.882	15
Locus of Control	.817	16
Ethical Climate – Overall items	.844	26
Ethical Climate - Egoism Dimension	.605	8
Ethical Climate - Benevolence Dimension	.702	5
Ethical Climate - Principle Dimension	.748	12
Vignette 1: Moral Equity Dimension	.896	4
Vignette 1: Relativism Dimension	.954	2
Vignette 1: Contractualism Dimension	.945	2
Vignette 2: Moral Equity Dimension	.933	4
Vignette 2: Relativism Dimension	.958	2
Vignette 2: Contractualism Dimension	.989	2
Vignette 3: Moral Equity Dimension	.941	4
Vignette 3: Relativism Dimension	.941	2
Vignette 3: Contractualism Dimension	.985	2
Vignette 4: Moral Equity Dimension	.940	4
Vignette 4: Relativism Dimension	.966	2
Vignette 4: Contractualism Dimension	.986	2

#### 5.3.4. Social desirability response bias analysis

Consistent with the approach used in previous ethics research (J. R. Cohen, Pant, & Sharp, 1995; J. R. Cohen et al., 1996, 1998; Patel, 2003; Zhang et al., 2009b), the study measured social desirability response bias (SDRB) by asking the respondents two set of questions in each of the four vignettes: (1) “Rate the likelihood “YOU” would report to internal parties in your organisation”, and (2) “Rate the likelihood that “YOUR COLLEAGUES” would report to internal parties in your organisation”. The purpose of asking the question from the respondents' perspective, as well as the respondents' perception of their colleagues' judgment, was to attempt to control any systematic errors resulting from social desirability response bias. Responses were captured on a five-point Likert scale ranging from 1 to 5, in which 1 was equal to “Less likely”, and 5 equal to “Very likely”. The difference in responses between these two questions is the measure of SDRB (J. R. Cohen et al., 1995, 1996, 1998).

As shown in Table 5.6 below, compared to the “You” question, the mean scores were higher than the “Your Colleagues” internal whistleblowing intentions in each of the four vignettes. Respondents indicated that their colleagues were less likely to perform internal whistleblowing intentions, compared to their own intentions. The largest likely difference (0.49) is in the responses to Vignette 2. The next largest social bias difference

(0.47) is in Vignette 4 responses. The smallest difference (0.31) is found in the Vignette 3 responses.

**Table 5-6: Test of Social Desirability Response Bias in Each Vignette**

	You (A)		Your Colleague (B)		Mean Difference	Wilcoxon Signed Rank Test	
	Mean	Std Dev	Mean	Std Dev	(A) - (B)	Z	Sig
Vignette 1	3.74	1.050	3.32	1.047	0.42	-5.542	.000
Vignette 2	4.49	0.895	4.00	1.091	0.49	-6.098	.000
Vignette 3	3.56	1.328	3.25	1.234	0.31	-4.864	.000
Vignette 4	4.10	1.071	3.63	1.175	0.47	-6.211	.000

The Wilcoxon Signed rank test (equivalent to parametric t-tests for paired samples) was used to find out whether SDRB existed among internal auditors within their responses to each of the four vignettes. The analysis (see Table 5.6) demonstrated that there were significant differences between the scores on "You" and "Your Colleagues" questions on all of the four vignettes (2-tailed,  $p < .001$ ). These results reveal the existence of SDRB among internal auditors in this study. Although social desirability response bias existed in this study, prior ethics studies have stated that it was not a salient threat to the internal validity of the study's findings (Nguyen et al., 2008b). Furthermore, Randall and Fernandes (1991, p. 813) stated that, "previous research has convincingly demonstrated that observed levels of socially desirable responding vary with the levels of anonymity". As the anonymity of the respondents in this study has been assured (refer section 4.4.4.1 earlier), the level of social desirability response bias in this study is considered as minimal.

### 5.3.5. Assumptions of multiple regressions

As stated in section 5.5.2 earlier, all individual variables (except Locus of Control) were not normally distributed. Multiple regression analyses on the other hand, are based on specific assumptions, which if not met, may lead to inaccurate and invalid inferences (Hair, Black, Babin, Anderson, & Tatham, 2006; Tabachnick & Fidell, 2007). However, to some, the issue of meeting assumptions is a matter of degree, sometimes referred to as robustness, which suggest that a statistical procedure can be used even if some of the assumptions of analyses are violated (Hair et al., 2006; Tabachnick & Fidell, 2007).

Since this study involves multivariate analysis, all of the variables together were examined with respect to multivariate normality. As such, discussions about testing the assumptions of multivariate analyses are hereby provided:

#### 5.3.5.1. Examination of residual statistics

Major assumptions of multiple regression analyses include normality, linearity and homoscedasticity, which could be assessed simultaneously through the examination of residual statistics and graphical examination of scatterplots, histograms, and normal probability plots for each regression model (Tabachnick & Fidell, 2007). Tabachnick and Fidell (2007, p. 125) stated that “assumptions of the analysis are the residuals (differences between obtained and predicted DV scores) are normally distributed about the predicted DV score, that residuals have a straight-line relationship with predicted DV scores, and that the variance of the residuals about predicted DV scores is the same for all predicted scores”.

Graphical examination of residual scatterplots for each model (one model for each vignette) showed acceptance of the multiple regression assumptions. The scatterplot for each vignette showed a systematic pattern to the residuals, with most of the scores concentrated in the centre. Additionally, examinations of the normal probability plots for each model showed an upward diagonal line, with slight curvature. Graphical observation of histograms showed that the assumption of normality had been met in all four models. All histograms showed a roughly normal distribution (a bell-shaped curve), where data were distributed almost symmetrically around the centre of the distribution. Model 1 (Vignette 1) and 3 (Vignette 3) were normally distributed, and Model 2 (Vignette 2) and 4 (Vignette 4) approximated normality.

#### 5.3.5.2. Multicollinearity

Multicollinearity exists when there is a strong correlation between two or more predictors in a regression model. The independent variables are said to be highly correlated when their  $r$  value is equal to 0.9 and above (Field, 2009; Pallant, 2007). Multicollinearity was assessed through the examination of correlation matrices (see Appendix 4A, 4B, 4C, and 4D). An examination of Spearman’s rho correlation matrices

for each model, revealed correlations of .70 or greater were detected in three of the models, i.e. Models 2, 3, and 4. The highest was between Moral Equity and Relativism variables (.866) detected in Model 3. Further tests were conducted based on SPSS's colinearity statistics analysis by examining the variables' tolerance scores and variance inflation factor (VIF). Specifically, all of the models had independent variables with tolerance scores above the cut-off point of .10 and VIF scores less than 10 (Pallant, 2007). This indicates the absence of serious multicollinearity. Therefore, these variables were retained for analysis.

#### 5.3.5.3. Sample size

It is extremely important to have enough data to obtain a reliable regression model (Field, 2009; Pallant, 2007), as small sample size may cause a result that does not generalise with other samples. Pallant (2007) stated that, multiple regression should not be used on small samples, where the distribution of scores is very skewed. So, the issue is how many cases or subjects are required to enable generalisability of results? Tabachnick and Fidell (2007, p. 123) give a formula for calculating sample size requirements, taking into account the number of independent variables any study wish to use:  $N > 50 + 8m$  (where  $m$  = number of independent variables). A higher cases-to-independent variables ratio is needed when the dependent variable is skewed (Pallant, 2007; Tabachnick & Fidell, 2007). Tabachnick and Fidell (2007) added that more cases are required if the dependent variable is not normally distributed, transformations are not undertaken (as the case in this study) and substantial measurement error is expected from less reliable variables. The current study has 15 independent variables and as such, according to the given formula, requires a total of 170 cases or subjects. This study received 180 usable responses, which superseded this initial requirement.

## 5.4. Bivariate Correlations

Spearman rho correlation coefficients ( $r_s$ ) presented in Appendix 4A, 4B, 4C, and 4D are used to assess the relationship between the variables investigated in this study. All independent variables in each model were consistently correlated with *Internal Whistleblowing Intentions* (dependent variables) in the hypothesised directions except for *Egoism* (positive sign in all models), *Contractualism* (negative sign in all models),

*Status of Wrongdoer* (positive sign in Model 1, 3, and 4), *Gender* (negative sign in Model 2, 3, and 4) and lastly, *Tenure* (negative sign in Model 3 and 4).

Only independent variables that have significant correlations with dependent variables (internal whistleblowing intentions) as well as among independent variables are hereby discussed. Of the 15 independent variables, only four variables, i.e. *Moral Equity*, *Relativism*, *Contractualism* and *Seriousness of Wrongdoing*, were consistently showing significant correlations with internal auditors' *Internal Whistleblowing Intentions* (dependent variables) in all four models. These indicate that internal auditors use more than one dimension in making their ethical judgment prior to making their internal whistleblowing intentions. Moreover, the nature and severity of the wrongdoing will spark the likelihood that these internal auditors will engage in such behaviour. Other variables such as, *Principle* was significantly correlated only in Model 1 and 3, *Gender*, only significant in Model 2, while *Job Level*, *Age* and *Tenure* were significant only in Model 1. These suggest that such variables are dependent on the case or type of wrongdoings as well as the status of the wrongdoer portrayed by these four vignettes.

Interesting observations are also found in correlations between the independent variables. With respect to *Locus of Control* variable, internal auditors in this study were found to possess internal traits of locus of control, as shown by negative correlations in all four vignettes. A significant and negative correlation between *Locus of Control* and *Organisational Commitment* indicates that internal auditors with internal traits possess higher organisational commitment. Additionally, *Locus of Control* is found to be negatively correlated with *Age*, suggesting that older internal auditors possess internal traits of locus of control. With respect to the *Organisational Commitment* variable, it is significantly correlated to *Job Level*, *Gender*, *Age* and *Tenure*. Internal auditors possessing higher organisational commitment are mostly from higher managerial levels, are men, older and have longer working tenure in their organisations. Finally, with respect to *Gender* variable, it is significantly correlated with *Job Level* and *Age*, suggesting that most male internal auditors in this study hold higher managerial positions and are older employees in their organisations.

According to interpretation by J. W. Cohen (1988), the bivariate correlation results showed that the variables' strength of relationship ranged between small to medium size

effects. It is important to note that the bivariate results are limited to the strength and direction of the linear relationship between the independent variables and the dependent variables. Bivariate findings do not provide information as to whether and how these independent variables influence internal auditors' whistleblowing intentions.

## **5.5. Multiple Regressions Analysis**

A standard multiple regression was conducted using the 15 independent variables to further investigate the hypothesised relationships among the variables. Multiple regressions supersede bivariate correlation analysis by allowing the study to investigate the influence of each of the independent variables on the dependent variable while simultaneously controlling for other independent variables. The study ran four regression models, one for each vignette, to assess the intentions to internally whistleblow.

For multiple regression analysis purposes, ordinal variables such as *Size of Organisation* (coded 1 = 1,000 and more employees, 0 = Less than 1,000 employees), *Job Level* (coded 1 = Lower level, 0 = Higher level), *Age* (coded 1 = Older, 0 = Younger) and *Tenure* (coded 1 = More than 5 years, 0 = Less than 5 years) were re-coded dichotomously. The regression results presented in the tables are discussed below with regard to the overall efficiency of each model, the absolute impact of each independent variable on internal whistleblowing, and the relative contribution of each independent variable to the model in predicting internal auditors' whistleblowing intentions. Tables 5.7, 5.8, 5.9, and 5.10 display the unstandardised regression coefficients or slopes (B), the intercepts, standardised regression coefficients or beta weights ( $\beta$ ), and the multiple correlation coefficients (R), the coefficient of determinations ( $R^2$ ), for each vignette.

### **5.5.1. Regression result – Model 1**

Table 5.7 illustrates the impact of all independent variables on internal auditors' internal whistleblowing intentions for Vignette 1. To recap, Vignette 1 is about a Marketing Executive taking unreported paid time off. According to the regression results, the linear combination of the 15 independent variables in model 1 significantly predicts internal



auditors' internal whistleblowing intentions,  $R^2 = .33$ ,  $F(15, 148) = 4.98$ ,  $p < .01$ . This model accounts for 33% of the variance in internal whistleblowing. The F ratio of 4.98 is statistically significant at 1% level. The model appears to be efficient in predicting internal auditors' internal whistleblowing intentions.

**Table 5-7: Regression Results for Vignette 1**

	<b>B</b>	<b>S.E</b>	<b><math>\beta</math></b>	<b>t</b>	<b>Sig.</b>
(Constant)	-.187	1.346		-.139	.890
Egoism	.028	.205	.011	.135	.893
Benevolence	-.149	.202	-.075	-.737	.462
Principle	.218	.255	.084	.857	.393
Size of Organisation	-.036	.149	-.017	-.239	.812
Job Level	.272	.174	.130	1.561	.121
Moral Equity	-.015	.149	-.010	-.103	.918
Relativism	.291	.131	.228	<b>2.221**</b>	<b>.028</b>
Contractualism	.093	.134	.071	.694	.489
Locus of Control	-.014	.012	-.096	-1.160	.248
Organ. Commitment	.006	.012	.048	.517	.606
Seriousness of Wrongdoing	.517	.102	.397	<b>5.095***</b>	<b>.000</b>
Status of Wrongdoer	.082	.074	.078	1.105	.271
Gender	-.128	.151	-.061	-.846	.399
Age	.280	.207	.133	1.351	.179
Tenure	-.110	.185	-.052	-.598	.551
$R^2 = .336$					
$R = .579$					
$F\text{-value} = 4.984***$					

Note: \*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .10$

A review of the regression coefficients reveals that only two variables (*Relativism* and *Seriousness of Wrongdoing*) have positive impacts on internal whistleblowing and are significant at 5% and 1% level respectively, on internal whistleblowing when controlling for the other variables in the equation. The beta weights ( $\beta$ ), indicate that *Seriousness of Wrongdoing* has the strongest impact on internal auditors' internal whistleblowing intentions in Vignette 1, followed by *Relativism* variable.

### 5.5.2. Regression result – Model 2

Table 5.8 illustrates the impact of all independent variables for Vignette 2. The case in Vignette 2 concerns an act of overstating purchases amount by a Production Manager. Regression results indicate that the linear combination of the 15 independent variables

in model 2 also significantly predicts internal auditors' internal whistleblowing intentions,  $R^2 = .13$ ,  $F(15, 149) = 1.51$ ,  $p < .10$ . This model accounts only for 13% of the variance in internal whistleblowing. The F ratio of 1.51 is statistically significant at 10% level. The model appears to be minimally efficient in predicting internal auditors' internal whistleblowing intentions.

**Table 5-8: Regression Results for Vignette 2**

	<b>B</b>	<b>S.E</b>	<b>β</b>	<b>t</b>	<b>Sig.</b>
(Constant)	2.343	1.631		1.436	.153
Egoism	-.147	.201	-.071	-.733	.465
Benevolence	-.219	.196	-.130	-1.117	.266
Principle	.494	.255	.224	<b>1.939*</b>	<b>.054</b>
Size of Organisation	-.129	.143	-.072	-.901	.369
Job Level	.089	.172	.050	.517	.606
Moral Equity	-.057	.224	-.035	-.252	.801
Relativism	.336	.168	.254	<b>1.999**</b>	<b>.047</b>
Contractualism	.167	.185	.113	.903	.368
Locus of Control	-.001	.011	-.010	-.104	.918
Organ. Commitment	.001	.012	.009	.084	.933
Seriousness of Wrongdoing	.201	.158	.115	1.273	.205
Status of Wrongdoer	-.161	.092	-.147	<b>-1.751*</b>	<b>.082</b>
Gender	-.334	.153	-.186	<b>-2.185**</b>	<b>.030</b>
Age	-.019	.201	-.011	-.094	.925
Tenure	.026	.177	.014	.145	.885
$R^2 = .132$					
$R = .363$					
$F\text{-value} = 1.510^*$					

Note: \*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .10$

The results reveal that *Principle* and *Relativism* have positive impacts and significant at 10% and 5% respectively, while *Status of Wrongdoer* and *Gender*, on the other hand, have negative impacts and significant at 10% and 1%, on internal whistleblowing when controlling for the other variables in the equation. The beta weights ( $\beta$ ), indicate that *Gender* has the strongest impact on internal auditors' internal whistleblowing intentions in Vignette 2, followed by *Relativism*, *Principle*, and *Status of Wrongdoer*.

### 5.5.3. Regression result – Model 3

Table 5.9 illustrates the impact for Vignette 3. Vignette 3 is about a request for reduction in doubtful debts by the Chief Executive Officer. The linear combination of

the 15 independent variables in model 3 significantly predicts internal auditors' internal whistleblowing intentions,  $R^2 = .34$ ,  $F(15, 149) = 5.11$ ,  $p < .01$ . This model accounts for 34% of the variance in internal whistleblowing. The F ratio of 5.11 is statistically significant at 1% level. The model also appears to be efficient in predicting internal auditors' internal whistleblowing intentions.

**Table 5-9: Regression Results for Vignette 3**

	<b>B</b>	<b>S.E</b>	<b><math>\beta</math></b>	<b>t</b>	<b>Sig.</b>
(Constant)	.997	1.995		.500	.618
Egoism	-.013	.257	-.004	-.052	.959
Benevolence	-.121	.250	-.048	-.482	.630
Principle	.603	.326	.184	<b>1.849*</b>	<b>.066</b>
Size of Organisation	-.293	.185	-.111	-1.587	.115
Job Level	.306	.217	.116	1.410	.161
Moral Equity	-.111	.266	-.072	-.417	.677
Relativism	.237	.196	.175	1.204	.230
Contractualism	.060	.174	.048	.345	.731
Locus of Control	-.016	.015	-.090	-1.057	.292
Organ. Commitment	-.020	.015	-.122	-1.308	.193
Seriousness of Wrongdoing	.628	.130	.483	<b>4.822***</b>	<b>.000</b>
Status of Wrongdoer	-.023	.139	-.011	-.165	.869
Gender	-.332	.190	-.125	<b>-1.746*</b>	<b>.083</b>
Age	-.208	.258	-.078	-.808	.420
Tenure	.036	.229	.013	.158	.875
$R^2 = .340$					
$R = .583$					
$F\text{-value} = 5.106***$					

Note: \*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .10$

Regression coefficients reveal that *Principle* and *Seriousness of Wrongdoing* have positive impacts on internal whistleblowing and are significant at 10% and 1% level respectively, while *Gender*, on the other hand, has negative impact and significant at 10%, on internal whistleblowing when controlling for the other variables in the equation. The beta weights ( $\beta$ ), indicate that *Seriousness of Wrongdoing* has the strongest impact on internal auditors' internal whistleblowing intentions in Vignette 3, followed by *Principle* and *Gender*.

#### 5.5.4. Regression result – Model 4

Table 5.10 illustrates the impact of all independent variables for Vignette 4. This final vignette is about a request from a Chief Financial Officer to ignore an amount of liabilities to be recorded in the financial statements. The regression model showed that, the linear combination of the 15 independent variables in model 4 significantly predicts internal auditors' internal whistleblowing intentions,  $R^2 = .29$ ,  $F(15, 149) = 3.98$ ,  $p < .01$ . This model accounts for 29% of the variance in internal whistleblowing. The F ratio of 3.98 is statistically significant at 1% level. Overall, this model also appears to be efficient in predicting internal auditors' internal whistleblowing intentions.

**Table 5-10: Regression Results for Vignette 4**

	<b>B</b>	<b>S.E</b>	<b><math>\beta</math></b>	<b>t</b>	<b>Sig.</b>
(Constant)	1.285	1.617		.795	.428
Egoism	-.019	.218	-.007	-.085	.932
Benevolence	-.321	.210	-.159	-1.525	.129
Principle	.768	.269	.291	<b>2.856**</b>	<b>.005</b>
Size of Organisation	-.131	.155	-.061	-.843	.400
Job Level	.235	.184	.110	1.274	.205
Moral Equity	-.055	.178	-.041	-.308	.758
Relativism	.168	.149	.142	1.129	.261
Contractualism	.030	.150	.025	.199	.843
Locus of Control	-.017	.013	-.115	-1.317	.190
Organ. Commitment	-.010	.013	-.076	-.779	.437
Seriousness of Wrongdoing	.509	.110	.402	<b>4.639***</b>	<b>.000</b>
Status of Wrongdoer	-.033	.104	-.024	-.315	.754
Gender	-.178	.160	-.083	-1.112	.268
Age	.073	.217	.034	.337	.737
Tenure	-.172	.195	-.079	-.879	.381

$R^2 = .286$

$R = .535$

F-value = 3.973\*\*\*

Note: \*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .10$

A review of the regression coefficients reveals that only two variables; *Principle* and *Seriousness of Wrongdoing*, have positive impacts on internal whistleblowing and are significant at 5% and 1% level respectively, on internal whistleblowing when controlling for the other variables in the equation. Again, the beta weights ( $\beta$ ), indicate that *Seriousness of Wrongdoing* has the strongest impact on internal auditors' internal whistleblowing intentions, followed by *Principle* variable.

### 5.5.5. Regression result – Model 5 (Overall Vignettes)

Attempts also have been undertaken to examine the overall impact of these 15 independent variables to overall internal auditors' whistleblowing intentions. In addition to the separate analysis undertaken on each of the four vignettes presented earlier, this study aggregated the four vignettes into one measure. Independent variables such as *Moral Equity*, *Relativism*, *Contractualism*, *Seriousness of Wrongdoing* and *Status of Wrongdoer* as well as the dependent variable, *Internal Whistleblowing Intentions*, which are vignette-specific, were each summed and averaged to determine a score for each variable. Table 5.11 illustrates the impact of all independent variables on internal auditors' internal whistleblowing intentions for overall vignettes.

**Table 5-11: Regression Results for Overall Vignettes**

	<b>B</b>	<b>S.E</b>	<b>β</b>	<b>t</b>	<b>Sig.</b>
(Constant)	.612	1.781		.344	.732
Egoism	-.011	.177	-.005	-.060	.953
Benevolence	-.222	.174	-.141	-1.274	.205
Principle	.506	.222	.246	<b>2.277**</b>	<b>.024</b>
Size of Organisation	-.152	.127	-.092	-1.197	.233
Job Level	.242	.151	.146	1.607	.110
Moral Equity	-.212	.248	-.134	-.854	.395
Relativism	.366	.170	.280	<b>2.155**</b>	<b>.033</b>
Contractualism	.159	.194	.121	.820	.413
Locus of Control	-.013	.010	-.117	-1.270	.206
Organ. Commitment	-.005	.011	-.049	-.474	.636
Seriousness of Wrongdoing	.586	.152	.382	<b>3.866***</b>	<b>.000</b>
Status of Wrongdoer	-.032	.119	-.022	-.266	.791
Gender	-.233	.132	-.139	<b>-1.761*</b>	<b>.080</b>
Age	.005	.177	.003	.028	.978
Tenure	-.038	.158	-.023	-.241	.810
R <sup>2</sup> = .263					
R = .513					
F = 3.309***					

Note: \*\*\* p < .01, \*\* p < .05, \* p < .10

The regression model showed that, the linear combination of the 15 independent variables in Model 5 significantly predicts internal auditors' internal whistleblowing intentions,  $R^2 = .26$ ,  $F(15, 139) = 3.31$ ,  $p < .01$ . This model accounts for 26% of the variance in internal whistleblowing. The F ratio of 3.31 is statistically significant at 1%

level. Overall, this model appears to be efficient in predicting internal auditors' internal whistleblowing intentions.

The results show that *Principle*, *Relativism* and *Seriousness of Wrongdoing*, have statistically significant positive relationships with the intentions to whistleblow. Negative coefficient of *Gender* suggests that male internal auditors are less likely to internally whistleblow. This is contrary to the prediction. The beta weights ( $\beta$ ), indicate that overall, *Seriousness of Wrongdoing* has the strongest impact on internal auditors' internal whistleblowing intentions, followed by *Principle*, *Relativism* and *Gender*.

## 5.6. Additional Analyses

Test of multiple regression showed that variables with ordinal data such as *Size of Organisation*, *Job Level*, *Age* and *Tenure* do not show any significant relationships in any of the four models. However, additional tests were conducted to determine whether there were any significant differences in the levels of internal auditors' internal whistleblowing intentions between the ordinal groups within the variables. Data in each variable are reported in four ordinal group type as explained in Chapter 4 earlier.

As such, the Kruskal-Wallis test, a nonparametric equivalent of the parametric analysis of variance (ANOVA) was chosen because the independent variables consisted of more than two groups and the dependent variable, internal whistleblowing intention, was measured at the ordinal level. While the Kruskal-Wallis statistic tests for differences among multiple groups, it does not indicate where specific differences lie. When a difference was found through the Kruskal-Wallis test, the Mann-Whitney U test was used as a post-hoc statistic to determine which groups were different from one another in their internal whistleblowing intentions. The Mann-Whitney test is a nonparametric equivalent of the parametric independent sample t-test. Instead of comparing means of the two groups, as in the t-test, the Mann-Whitney test compares medians. The scores were grouped and compared with one another to determine if there were significant differences in the ranks for the two groups.

### 5.6.1. Size of organisation

The first additional test begins with the effect of four different size groups of organisations to internal auditors' internal whistleblowing intentions. However, the results of the Kruskal-Wallis test across all four vignettes did not find any significant differences in the internal whistleblowing intentions for the four different size groups of organisations in each of the vignette.

### 5.6.2. Job level

With regards to the effect of different type of internal auditors' *Job Level*, the Kruskal-Wallis test found that there are significant differences in Vignettes 1 and 2 only. For Vignette 1, there was a significant difference within the *Job Level* in the internal whistleblowing intentions between the four groups,  $\chi^2(3, n = 179) = 14.618, p = 0.002$ . There was a rank difference among groups (refer Table 5.12). The "Higher than manager" group recorded a higher mean rank score than the other three managerial level groups.

Because the overall test was significant, the Mann-Whitney U test was used as a post-hoc statistic to determine which groups were different from one another in their internal whistleblowing intentions in Vignette 1. Specifically, those in the "Higher than manager" group are more likely to whistleblow than their juniors, ( $Z = -2.505, p = 0.012$ ), seniors, ( $Z = -3.663, p = 0.000$ ), and managers, ( $Z = -2.184, p = 0.029$ ).

**Table 5-12: Kruskal-Wallis comparing Job Level for Vignette 1**

	Job level	N	Mean Rank	P value
Internal whistleblowing intentions (Vignette 1)	Junior	23	83.13	.002
	Senior	66	76.79	
	Manager	68	95.05	
	Higher than manager	22	121.20	
	Total	179		

For Vignette 2, there was also a significant difference within the *Job Level* in the internal whistleblowing intentions between the four groups,  $\chi^2(3, n = 179) = 8.217, p = 0.042$ . There was a rank difference among groups (refer Table 5.13). Again, the "Higher

than manager” group recorded a higher mean rank score than the other three managerial level groups.

**Table 5-13: Kruskal-Wallis comparing Job Level for Vignette 2**

	Job level	N	Mean Rank	P value
Internal whistleblowing intentions (Vignette 2)	Junior	23	87.04	.042
	Senior	66	82.78	
	Manager	68	90.54	
	Higher than manager	22	113.09	
	Total	179		

The Mann-Whitney U test was used as a post-hoc statistic to determine which groups were different from one another in their internal whistleblowing intentions in Vignette 2. Specifically, those in the “Higher than manager” group are more likely to whistleblow than their juniors, ( $Z = -2.341, p = 0.019$ ), seniors, ( $Z = -2.876, p = 0.004$ ), and managers, ( $Z = -2.206, p = 0.027$ ).

### 5.6.3. Age

With regards to the effect of different level of internal auditors’ Age, the Kruskal-Wallis test found that there are significant differences only in Vignette 1. For Vignette 1, there was a significant difference by age group in the internal whistleblowing intentions of internal auditors between the four age classification groups,  $\chi^2(3, n = 179) = 13.391, p = 0.004$ . There was a rank difference among groups, with the highest age group (Group 4: 46 or older) recording a higher mean rank score than the other three age groups (refer Table 5.14).

**Table 5-14: Kruskal-Wallis comparing Age for Vignette 1**

	Age	N	Mean Rank	P value
Internal whistleblowing intentions (Vignette 1)	Under 25 years old	6	69.25	.004
	25 – 35 years old	91	78.23	
	36 – 45 years old	49	103.49	
	46 or older	33	106.20	
	Total	179		



As the overall test was significant, Mann-Whitney test was used as a post-hoc statistic to determine which groups were different from one another in their internal whistleblowing intentions in Vignette 1. Specifically, those in the “46 or older” group were more likely to whistleblow than those in “25-35 years old”, ( $Z = -2.850, p = 0.004$ ) only. Meanwhile, those under “25-35 years old” were less likely to whistleblow than those in “36-45 years old” group ( $Z = -2.853, p = 0.004$ ).

#### 5.6.4. Tenure

The final additional analysis concerns the effect of different level of internal auditors’ *Tenure* in their organisation. Again, the result of Kruskal-Wallis test was only significant in Vignette 1. For Vignette 1, there was a significant difference by working tenure in the internal whistleblowing intentions between the four groups,  $\chi^2(3, n = 179) = 11.320, p = 0.010$ . There was a rank difference among working tenure groups, with the longest working tenure (Group 4: 11 years or more) recorded a higher mean rank score than the other three groups (refer Table 5.15).

**Table 5-15: Kruskal-Wallis results comparing Tenure for Vignette 1**

	Tenure	N	Mean Rank	P value
Internal whistleblowing intentions (Vignette 1)	Less than 2 years	46	76.58	.010
	2 – 5 years	57	88.54	
	6 – 10 years	31	83.56	
	11 years or more	45	110.00	
	Total	179		

The Mann-Whitney test was used as a post-hoc statistic to determine which groups were different from one another in their internal whistleblowing intentions in Vignette 1. Specifically, those internal auditors whose working tenure was in the “11 years or more” group were more likely to whistleblow than those in “less than 2 years”, ( $Z = -3.250, p = 0.001$ ), “2-5 years”, ( $Z = -2.174, p = 0.030$ ), and “6-10 years” groups, ( $Z = -2.304, p = 0.021$ ).

## 5.7. Summary

There are five research questions that this study aimed to address in regards to internal auditors' internal whistleblowing intentions. To address these questions, fifteen hypotheses were developed and tested through standard multiple regression models. The summary of the results of the multiple regression analyses are displayed in Table 5.16 and summarised with respect to the research hypotheses.

**Table 5-16: Summary of Hypotheses Results**

<b>Factors</b>	<b>H</b>	<b>Items</b>	<b>Vig 1</b>	<b>Vig 2</b>	<b>Vig 3</b>	<b>Vig 4</b>	<b>Overall</b>
			<b>Sig</b>	<b>Sig</b>	<b>Sig</b>	<b>Sig</b>	<b>Sig</b>
<b>Orgn</b>	H <sub>1a</sub>	Egoism	No	No	No	No	No
	H <sub>1b</sub>	Benevolence	No	No	No	No	No
	H <sub>1c</sub>	Principle	No	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
	H <sub>2</sub>	Size of Organisation	No	No	No	No	No
	H <sub>3</sub>	Job Level	No	No	No	No	No
<b>Ind</b>	H <sub>4a</sub>	Moral Equity	No	No	No	No	No
	H <sub>4b</sub>	Relativism	<b>Yes</b>	<b>Yes</b>	No	No	<b>Yes</b>
	H <sub>4c</sub>	Contractualism	No	No	No	No	No
	H <sub>5</sub>	Locus of Control	No	No	No	No	No
	H <sub>6</sub>	Org. Commitment	No	No	No	No	No
<b>Sit</b>	H <sub>7</sub>	Seriousness of wrongdoing	<b>Yes</b>	No	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>
	H <sub>8</sub>	Status of Wrongdoer	No	<b>Yes</b>	No	No	No
<b>Demo</b>	H <sub>9a</sub>	Gender	No	<b>Yes</b>	<b>Yes</b>	No	<b>Yes</b>
	H <sub>9b</sub>	Age	No	No	No	No	No
	H <sub>9c</sub>	Tenure	No	No	No	No	No

Note:

Sig = significant

No = reject hypothesis

Yes = accept hypothesis

Five hypotheses were tested to address the influences organisational factors had on internal auditors' internal whistleblowing intentions. The hypotheses proposed that *Benevolence*, *Principle*, and *Job Level* would positively influence internal auditors' internal whistleblowing intentions across the four vignettes. *Egoism* and *Size of Organisation*, on the other hand, were predicted to negatively influence internal auditors' internal whistleblowing intentions. Multiple regression results revealed that

only *Principle* variable has significant and positive influence in all models except for Model 1.

To address what influences individual factors had on internal auditors' internal whistleblowing intentions, five hypotheses were tested. The hypotheses proposed that *Moral Equity*, *Relativism*, *Contractualism*, and *Organisational Commitment* would positively influence internal auditors' internal whistleblowing intentions across the four vignettes. *Locus of Control*, on the other hand, was predicted to negatively influence internal auditors' internal whistleblowing intentions. The multiple regression results revealed that only the *Relativism* variable has significant and positive influence on internal whistleblowing intentions in Models 1 and 2.

Two research hypotheses were tested to address the influence of situational factors on internal auditors' internal whistleblowing intentions. *Seriousness of Wrongdoing* was posited to positively influence internal auditors' internal whistleblowing intentions across the four vignettes, while *Status of Wrongdoer* was predicted to negatively influence internal auditors' internal whistleblowing intentions. Results reveal that *Seriousness of Wrongdoing* variable has significant and positive influence on internal whistleblowing intentions in Models 1, 3 and 4. *Status of Wrongdoer* was found to be negatively significant only in Model 2.

To address what influences individual demographic factors (*Gender*, *Age*, and *Tenure*) had on internal auditors' internal whistleblowing intentions, three hypotheses were tested. As opposed to the hypothesised relationship, the influence of *Gender* was statistically significant and negative across Models 2 and 3 only. *Age* and *Tenure*, on the other hand, were not statically significant in any of the models.

The final research question sought to answer which of the organisational, individual, situational and demographic factors had the strongest influence on internal auditors' internal whistleblowing intentions. In the study, the examination of beta weights indicated that the variables of *Seriousness of Wrongdoing*, *Relativism*, and *Principle* significantly contributed to the models in predicting internal auditors' internal whistleblowing intentions. *Seriousness of Wrongdoing* was the strongest predictor of internal auditors' internal whistleblowing intentions in all models, except in Model 2.

The current quantitative, correlational research study was intended to generate an understanding of why internal auditors make their ethical decisions to internally whistleblow based on four given types of vignettes. The findings and analyses of the data were produced from 180 responses from a random sample of 1,000 Malaysian internal auditors who responded to a direct mail survey. A discussion of the findings, limitations and future directions of study of whistleblowing are offered in Chapter 6.

## CHAPTER 6

### DISCUSSION OF RESULTS, CONTRIBUTION, LIMITATIONS AND FUTURE RESEARCH

#### 6.1. Introduction

The study examines factors that will affect Malaysian internal auditors' internal whistleblowing intentions. The study focused on four main factors; Organisational, Individual, Situational and Demographic factors to gain an understanding of ethical decision-making by internal auditors in organisational settings. Several variables within these four main factors were selected based on previous research. This chapter provides a discussion of the research findings, contribution of this study, limitations of the current study, and directions for future research. The chapter will relate the analysis performed in the previous chapter with the whistleblowing literature and offers some insights with regards to the Malaysian environment.

#### 6.2. Discussion of Research Findings

The results in Chapter 5 indicate that each type of wrongdoing portrayed in each vignette is unique and that the internal auditors' ethical behaviour is case specific. This conforms to Miceli, Near, and Schwenk's (1991) suggestions that organisational members have different reactions to different types of wrongdoing. The findings which emerged from the current study suggest that the main predictors of internal auditors' internal whistleblowing intentions were *Principle* ethical climate (Organisational factor), *Relativism* dimensions of ethical judgment (Individual factor), *Seriousness of Wrongdoing* (Situational factor) and *Gender* (Demographic factor).

## 6.2.1. Organisational factors as related to internal whistleblowing

### 6.2.1.1. Ethical climate

The study explored the links between the three types of ethical climate dimensions, namely: *Egoism*, *Benevolence* and *Principle* with the internal auditors' internal whistleblowing tendencies. As such, this study hypothesised that internal auditors were less likely to internally whistleblow in organisations characterised as having *Egoism* dimensions. Meanwhile, where organisations were characterised as possessing either *Benevolence* or *Principle* dimensions, it is expected that, these internal auditors are more likely to whistleblow internally.

The multiple regression results showed that, only perception of principle climate was significant in predicting internal auditors' internal whistleblowing intentions (except for Vignette 1). Victor and Cullen (1988) argued that organisations have distinct ethical climates and the result of this study proved that that internal auditors have a distinct principle ethical climate dimension within their own organisations or specifically within their departments. Principle climate is based on the belief that there are universal principles of right and wrong and ethical decisions taken by the organisational members are based upon the application or interpretation of rules, laws and standards (Victor & Cullen, 1988). As such, the results supported the principle environment possessed by these internal auditors in Malaysia who are rule-abiding organisational members. Although the scenario in Vignette 1 did show that internal auditors have some concern (as shown in descriptive results for Vignette 1), it is more likely that internal auditors in this study regard the financial type of organisational wrongdoing in Vignettes 2, 3 and 4 to be far more serious than the non-financial type of wrongdoing as portrayed in Vignette 1 (merely taking unreported time off).

In the current study, obviously the principle climate adhered to by the internal auditors was shown to be more salient than egoism and benevolence climate within the internal auditing environment. This suggests that the climates of egoism and benevolence do not exist within the internal auditing departments in Malaysia. In other words, the internal auditing departments in Malaysian organisations do not foster an environment where members behave entirely for their own self interest (as denoted within egoism climate

dimension) or concern for the well-being of others within and outside of their organisations (as represented by the benevolence climate dimension). This indicates that the internal auditors internalised the value of principled reasoning that is related to their occupational task. Internal auditors as rule-abiding professionals ought to conduct their audit work objectively as required by the IIA's Professional Practices Framework (that set the rules and conduct of the internal auditing profession). The perception of principle climate as internalised by these internal auditors is also consistent with the requirement of the International Standard for the Professional Practices of Internal Auditing (ISPPIA) which explains the "objectivity" of the profession, whereby internal auditors are expected not to subordinate their judgment on any audit matters to others, especially to their management (IIA, 2006).

#### 6.2.1.2. Size of organisation

The bystander intervention theory suggests that the diffusion of responsibility found in larger groups would dissuade individuals from engaging in their prosocial behaviour in helping out a victim. With regards to whistleblowing behaviour, the theory would suggest that an increase in the size of organisation may generate greater diffusion of individuals' responsibility to take remedial action. Therefore, the study hypothesised that, the larger the size of organisation, the less likely anyone would engage in whistleblowing behaviour.

Initially, descriptive results in all four vignettes showed that internal auditors working in organisations having more than 1,001 employees (larger organisations) have lower means for internal whistleblowing (refer Table 5.3). Although multiple regression results showed the expected negative relationship between the size of organisation and the likelihood of internal auditors' whistleblowing intentions across all the four vignettes, the results however, are not significant in all the vignettes and as such, failed to support the notion of Latane and Darley's (1968) "diffusion of responsibility". The result showed that size of organisation was not strongly associated with whistleblowing, and this is similar with the findings in other previous studies (see Barnett, Cochran, & Taylor, 1993; Mesmer-Magnus & Viswesvaran, 2005; Read & Rama, 2003; Rothwell & Baldwin, 2006, 2007a, 2007b). These prior studies however, did not acknowledge the concept of "diffusion of responsibility" in developing their hypotheses.

One possible explanation for such insignificant outcomes resulted in this study could be due to the type of the wrongdoings portrayed in the vignettes. As highlighted by Latane and Darley (1968), the term of “diffusion of responsibility” is to explain the likelihood a person (the whistleblower) would intervene in an emergency situation. Although these internal auditors acknowledged that such wrongdoings in some vignettes were regarded as serious, to them, the situations in the vignettes may not be regarded as emergency situations that require immediate solutions. Whistleblowing is a complex phenomenon and internal auditors in this study would necessarily examine various internal measures before taking further actions. Furthermore, Latane and Darley (1968) stated that the decision process for whistleblowing behaviour goes through five steps (refer section 2.2.1 earlier) and each step is critical in making the whistleblowing decision. The five-step processes showcased such tedious ethical decision-making that is required to be made prior to the decision to internally whistleblow and also highlighted the dilemmas that could be faced by these internal auditors in mitigating the so-called “emergency situation”.

#### 6.2.1.3. Job level

Hypothesis 3 proposed that internal auditors holding higher managerial positions are more likely to internally whistleblow than those in lower level positions. Results from the descriptive statistics showed that a majority of internal auditors who are willing to whistleblow in all four vignettes came from the “Higher than managers” group level (refer Table 5.3). However, multiple regression results failed to demonstrate significant relationships between internal auditors’ job level and their internal whistleblowing intentions in all four vignettes. Such insignificant outcomes seem to be similar to previous studies by Fritzsche (1988), Lee, Heilmann, and Near (2004), and Rothschild and Miethe (1999).

Rothschild and Miethe (1999) argued that contrary to the general expectations, whistleblowing by higher job levels may be seen as a retaliatory action as their acts are seen as a serious violation of normal company loyalty norms. Furthermore, Fritzsche (1988) reasoned that though higher job levels are more likely to undertake sound ethical decisions, they actually have lower ranking in organisational power structure. As such, this brings us back to the notion of power theories by Miceli et al., (2008) and Near and



Miceli (1995) earlier. Even though whistleblowing represents an influence process (Near & Miceli, 1995), it is however, not influential to those in higher rankings of organisational power structure (higher management levels). Though internal auditors may be said as having the credibility and knowledge to react, they may be not able to persuade those in higher rankings levels to agree to such action. These actually validate the kind of dilemmas that the internal auditors are currently facing.

Additional analyses using Kruskal-Wallis were then conducted to investigate whether there are any significant differences between internal auditors' job level in their intentions to whistleblow. The results were significant only for Vignettes 1 and 2. It seems that internal auditors holding a higher managerial level are more willing to internally whistleblow for wrongdoings conducted by wrongdoers in a lower level hierarchy. Vignettes 1 and 2 demonstrated that those wrongdoers were merely a Marketing Executive and a Production Manager, while in Vignettes 3 and 4, the wrongdoers were a Chief Executive Officer and a Chief Financial Controller. This inconsistency with regards to these internal auditors' choice for whistleblowing behaviour demonstrated the kind of dilemma that these internal auditors could face in the event of actual whistleblowing.

Such inconsistency showed that the credibility of a potential whistleblower is dependent on the status of wrongdoers. The power that such higher managerial levels possess is only limited to their lower level subordinates or staff under their control. This explains the reason why action (internal whistleblowing intentions) could only be taken against wrongdoers in lower level groups as demonstrated in Vignettes 1 and 2 respectively. This finding may also indicate that lower level group fear the possibility of management retaliation where the wrongdoer is of a higher status than themselves. Prior studies have indicated a relationship between fear of retaliation and whistleblowing (Keenan, 1995; Near & Miceli, 1990).

No significant difference was found for job level for Vignettes 3 (wrongdoer was a Chief Executive Officer) and 4 (wrongdoer was a Chief Financial Controller). As indicated earlier, the power of wrongdoers may further influence the retaliation process (Cortina & Magley, 2003). Specifically, exposing the wrongdoing conducted by members of a higher organisational hierarchy actually means that the whistleblowers

challenge their position (Cortina & Magley, 2003). Questioning the actions of top personnel, which Black (1976) likened to “upward deviance”, is considered as the most serious kind of deviant behaviour and is considered as a serious offence in a socially stratified society (Black, 1976; Miceli et al., 1999). As such, management, including the wrongdoer, may then retaliate against the whistleblower (Near et al., 1993). Additionally, Cortina and Magley (2003) added that, peers or colleagues that are supportive of the whistleblowers could only respond at a distance, particularly if a powerful wrongdoer is involved, as they may be fearful of being seen as aligning with the whistleblowers. As such, they provide a logical explanation for such behaviour as demonstrated by these Malaysian internal auditors.

## **6.2.2. Individual factors as related to internal whistleblowing**

### 6.2.2.1. Ethical judgment

It is hypothesised that internal auditors’ internal whistleblowing intentions would increase when the evaluation of their *Moral Equity*, *Relativism* and *Contractualism* dimensions are greater. Descriptive results indicated that internal auditors’ ethical concerns are mainly a function of the *Moral Equity* dimension in undertaking their ethical judgments (refer Table 5.2). This is similar to findings in prior ethics studies (Ayers & Kaplan, 2005; Cruz, Shafer, & Strawser, 2000; Ellis & Griffith, 2001; Flory et al., 1992). This is then followed by the *Relativism* and *Contractualism* dimensions. The highest mean for the *Moral Equity* dimension was shown in Vignette 2, then followed by Vignettes 1, 4 and 3 respectively. It is interesting to note that Vignette 2 was also ranked as the most serious type of wrongdoing by internal auditors compared to all other forms of vignette.

On the other hand, the results of multiple regressions reveal that *Relativism* dimension was found to be the only significant ethical judgment predictor for internal whistleblowing intentions. This outcome however, was limited to Vignettes 1 and 2 only. *Relativism* dimension was defined by Reidenbach and Robin (1990) as perception of what is right versus wrong based on guidelines or parameters embedded in the social or cultural system rather than individual consideration. Looking at the type of wrongdoings in both Vignettes 1 and 2, internal auditors perceived that there are

certainly clear “right versus wrong” cases that had breached their organisations’ work conduct. Obviously, the act of work absenteeism (Vignette 1) and stealing (Vignette 2) were not culturally acceptable to Malaysian internal auditors.

Neither the *Moral Equity* nor *Contractualism* dimensions appeared to influence internal whistleblowing intentions in any of the vignettes. Generally the results provide less support for the MES than had been found in previous studies. Based on the interpretation given by Reidenbach and Robin (1990), *Moral Equity* and *Contractualism* dimensions are interpreted solely based on individual perceptions, unlike the *Relativism* dimension, which is governed by social or cultural values, and not based on individual perceptions. As the role of internal auditing is solely based on the guidelines set by internal auditors’ organisations and their professional associations, these two dimensions do not seem to work with the internal auditing profession.

#### 6.2.2.2. Locus of control

Hypothesis 5 posited that internal auditors with an internal locus of control will be more likely to whistleblow than those with external locus of control. Results of multiple regression analysis in all four vignettes did not show a significant relationship between locus of control and internal whistleblowing intentions. The results however, supported the direction of such a relationship (negative relationship) and provided evidence that internal auditors in this study possessed an internal trait of locus of control. This confirms the statement by Donnelly et al. (2003) who stated that individuals having internal locus of control are better suited for positions in an audit setting, and that of Spector (1982), who suggested that internals are more likely than externals to engage in prosocial behaviour. Thus, the internal auditors’ actions in the current study appear to conform with the notion by Brief and Motowidlo (1986) that defined prosocial behaviour as an act performed by organisational members to stop wrongdoing within their organisation, with the intention of benefiting persons within and outside the organisation.

The reason why the locus of control variable contradicts the expected proposition could be related to the findings of the Miceli, Near, and Dozier (1991) study, which also showed an insignificant relationship between these two variables. Miceli, Near, and

Dozier (1991) also suggested that the distinction between internals and externals in their study appears to be irrelevant under the condition of threat of retaliation. To relate with the current study, the judgment of the ethicality of the vignettes made by the internal auditors in the current study seems somehow to be limited and is dependent on the higher managements' judgment and their acceptance as a whole. Although internal auditors in this study engaged in prosocial behaviour, the given situations are not under their control and their decision to internally whistleblow could not influence others, in this case their managements outcomes which are contrary to the expectation of previous studies (see Chiu, 2003; Curtis & Taylor, 2009; Miceli et al., 2008). This brings us back to the kind of dilemma that these internal auditors had to face prior to making their ethical decision. Furthermore, in the Malaysian context, whistleblowing is still in its infancy stage and is regarded as a stigma resulting in hesitancy on the part of the whistleblower to reveal the wrongdoing and the wrongdoer.

#### 6.2.2.3. Organisational commitment

Hypothesis 6 proposed that internal auditors with higher organisational commitment are more likely to whistleblow. Basically, the internal auditors' level of commitment to their organisations will determine how far they will go in acting on their internal whistleblowing intentions. However, there appears to be a lack of studies investigating the effect of organisational commitment and internal whistleblowing intentions. As studies have advocated that individuals with higher organisational commitment levels will showcase their prosocial behaviour of whistleblowing (Brief & Motowidlo, 1986; Street, 1995), this study would also expect the internal auditors to exercise such behaviour.

Contrary to expectations, the results of the study failed to show support for Hypothesis 6 in any of the vignettes. The inability of organisational commitment to explain whistleblowing behaviour is similar with that demonstrated in the Mesmer-Magnus and Viswesvaran's (2005) study. A study by Somers and Casal (1994) however, found that only moderate levels of organisational commitment may affect the likelihood of whistleblowing. However, unlike the Mesmer-Magnus and Viswesvaran (2005) and Somers and Casal (1994) studies, this study utilised four vignettes in various forms to determine internal auditors' ethical decision-making initiatives.

By examining the status of wrongdoer in each vignette, Vignettes 1 and 2 portrays a lower status of wrongdoer involving a Marketing Executive and Production Manager, unlike the other types of wrongdoer in Vignettes 3 (Chief Executive Officer) and 4 (Chief Financial Officer). It seems that the organisational commitment of these internal auditors appears to be hampered by the status of the wrongdoers. This validates the pertinent ethical dilemma issues that these internal auditors faced in executing their internal whistleblowing intentions in these two vignettes.

### **6.2.3. Situational factors as related to internal whistleblowing**

#### **6.2.3.1. Seriousness of wrongdoing**

As discussed in Chapter 3 of the study, a number of studies have examined, and consistently provided evidence, that seriousness of the wrongdoing is the consistent predictor of individual whistleblowing intentions (e.g. Ayers & Kaplan, 2005; Curtis, 2006; Schultz et al., 1993; E. Z. Taylor & Curtis, 2010). The current study contributes to the literature by applying it to an internal auditors' sample. The study hypothesised that seriousness of wrongdoing will have a positive influence on internal auditors' internal whistleblowing intentions. The multiple regression results showed that the seriousness of wrongdoing depicted in all vignettes was found to have a significant influence (except for Vignette 2) on internal auditors' internal whistleblowing intentions. Internal auditors who perceived the wrongdoings to be more serious were more likely to report these behaviours than internal auditors who perceived the wrongdoings to be less serious. This finding was consistent with the previous research.

Vignette 2 however failed to indicate a similar significant result although the descriptive finding showed that the vignette was rated having the highest means on its seriousness of wrongdoing variable as compared to other vignettes being studied. To recap, Vignette 2 described a situation where a Production Manager involved in a cash misappropriation scheme; a highly serious act as compared to other three vignettes being rated by these internal auditors. The possible reason for such results could be due to an internal channel of reporting that may not be suitable for this type of wrongdoing. If the internal auditors have found substantial evidence that such wrongdoing did occur, it would be most appropriate for such type of wrongdoing to be reported directly to the Royal

Malaysian Police, Commercial Crime Division. Such a wrongdoing could be categorised as an *occupational crime* which was defined by Clinard, Quinney, and Wildeman (1994) as offences committed by individuals for themselves in the course of their occupations and offences of employees against their employers. In Malaysia such an offence may be prosecuted under Section 403 to 404 (criminal misappropriation of property) or Sections 405 to 409 (criminal breach of trust) of the Penal Code which carry serious penalties.

#### 6.2.3.2. Status of wrongdoer

Hypothesis eight posits that internal auditors would be less likely to whistleblow on a more powerful wrongdoer compared to a less powerful one. Descriptive results indicated that status of wrongdoers in Vignette 3 was rated as very powerful ( $M = 4.68$ ) and this is followed by Vignette 4 ( $M = 4.41$ ), Vignette 2 ( $M = 4.09$ ) and Vignette 1 ( $M = 3.07$ ) respectively. Although the beta direction in Vignettes 3 and 4 was as expected (negative signs), the multiple regression results however, showed that only Vignette 2 indicated such a relationship as significant (only at 10% level).

The wrongdoer in this vignette holds only a lower organisational position in their organisation (i.e. Production Manager, as opposed to CEO or CFO as in Vignettes 3 and 4). The results showed that internal auditors are more likely to whistleblow on less powerful wrongdoers. This is in contrast to findings from previous studies (e.g. Cortina & Magley, 2003; Miceli, Near, & Schwenk, 1991). These internal auditors acknowledged that powerful wrongdoers have significant control in their organisations in terms of resources as well as having the required technical and management skills. Hence, it is not easy for the internal auditors to terminate wrongdoings conducted by these powerful wrongdoers in their own organisation due to fear of many forms of negative consequences, including retaliation.

#### 6.2.4. Demographic characteristics as related to internal whistleblowing

Analyses were also conducted to test the effect of three types of demographic variables on internal auditors' internal whistleblowing intentions. Review of previous whistleblowing studies have validated that these demographic variables have shown

consistently mixed results when being tested. Even in the review of literature concerning ethical decision making, these demographic variables have consistently been found to be insignificant and unrelated to ethical decision making (see Loe, Ferrell, & Mansfield, 2000; O'Fallon & Butterfield, 2005). In whistleblowing studies, Brennan and Kelly (2007) stated that these demographic variables offer weak and conflicting results on the influence of individual's whistleblowing behaviour, while Park et al.(2005) showed that demographic variables made no significant difference in whistleblowing intentions. Internal auditors' internal whistleblowing intentions were analysed by reference to three demographic factors: gender, age and their working tenure in organisations.

With regards to gender, significant differences contributed to internal auditors' whistleblowing intentions, only in Vignettes 2 and 3. The fact that Vignette 2 in the study was rated by internal auditors as very unethical, and had a very serious nature of wrongdoing as compared to other three vignettes, while the wrongdoer in Vignette 3 was a Chief Executive Officer could be contributing factors for this significant association. Hypothesis 9 (a) which proposed that male internal auditors would be more likely to whistleblow than their female counterparts is only true in situations where the fact of the case is being regarded as very serious and very unethical in nature or the wrongdoing was perpetrated by someone from the highest management level. As such, this is consistent with prior studies that have found that women are less likely than men to engage in whistleblowing acts (Dworkin & Baucus, 1998; Miceli & Near, 1988, 1992; Miceli, Near, & Schwenk, 1991; Sims & Keenan, 1998). However, such a finding would only be limited to highly serious and very unethical types of organisational wrongdoings as portrayed in Vignettes 2 and 3. Furthermore, although previous studies indicated that men are more likely to whistleblow than women, such differences are said to be minimal and the reasons are not entirely clear (Miceli & Near, 1988, 1992). Overall, more recent studies have acknowledged that gender does not account for differences in individual whistleblowing tendencies (MacNab & Worthley, 2008; Miceli et al., 2008; Zhang et al., 2009a). This is clearly portrayed by the insignificant relationships in Vignettes 1 and 4 respectively. These findings are consistent with much of the work on gender differences in accounting/auditing research generally (see Coram, Ng, & Woodliff, 2003; Gammie & Gammie, 2009; Radtke, 2000).

The study also investigated the influence of age in internal auditors' internal whistleblowing intentions. The finding showed that whistleblowing is not significantly associated with age in any of the vignettes. As such, Hypothesis 9 (b) is not supported. Although the study predicted that younger internal auditors are less likely to blow the whistle, Miceli and Near (1992, p. 116) have actually argued that "it is difficult to assume whether younger members will be more or less likely to blow the whistle than older members". This again confirmed that the relationship between age and whistleblowing intention has been fairly weak, as evidenced by insignificant relationships in the all four vignettes.

Tenure was also hypothesised to have a positive impact on internal whistleblowing intentions (Hypothesis 9 (c)). However, multiple regression results again showed that this relationship was not supported in all vignettes. Similar with the age variable, the outcomes for working tenure also show weak support for internal whistleblowing intentions. The link between tenure and whistleblowing is inconclusive due to insignificant results found in this study. The current findings fall in line with the previous research (Barnett et al., 1993; Mesmer-Magnus & Viswesvaran, 2005; Rothschild & Miethe, 1999; Rothwell & Baldwin, 2007a; Sims & Keenan, 1998; Singer, Mitchell, & Turner, 1998) that fail to substantiate the significance of these variables to whistleblowing.

Thus, in the current study, internal auditors' intentions to whistleblow on organisational wrongdoings cannot be explained or predicted by these demographic variables (i.e., gender, age and tenure). The absence of support for the hypothesised relationships between these demographic variables and internal whistleblowing is consistent with the inconclusive findings in prior whistleblowing literature. One potential explanation for the lack of statistically significant findings from the current study may be due to there being something about the internal auditing profession that has resulted in their individual differences with regard to their intentions to whistleblow to disappear. The fact that such a profession is said to be in a unique position to prevent, deter, and detect corporate wrongdoing (Hillison et al., 1999; Pearson et al., 1998) and that the whistleblowing by these internal auditors is regarded as being role-prescribed (Dozier & Miceli, 1985), may cause such individual differences to become invalid.



## 6.3. Contribution of the Current Study

### 6.3.1. Contribution of findings to theory

This study explored the determinants of whistleblowing intentions by using prosocial behaviour theory and ethical climate theory to provide the general framework for predicting the individual behavioural intentions used in this study. The link between these two theories and internal whistleblowing was developed, but the findings were not conclusive. The results of this study extend an organisation's ability to predict whistleblowing intentions among internal auditors in Malaysia.

1. **Prosocial behaviour theory:** The empirical results confirm that perceptions of prosocial behaviour are generally lower among internal auditors when it involved situations where the type of wrongdoing is serious and involves a higher level of wrongdoer. This confirms the findings of previous studies that have suggested that characteristics of the wrongdoing and/or characteristics of the wrongdoer may have significant implications on the decision to blow the whistle (Mesmer-Magnus & Viswesvaran, 2005). Though studies have advocated that prosocial behaviour theory could explain the behaviour of whistleblowers in an emergency situation, the behaviour is actually dependent on the nature of the case and actors involved in that situation. The research on the "bystander effect" in explaining the concept of diffusion of responsibility by Latane and Darley (1968) in this study, proved that not only are internal auditors less likely to help in larger organisations, but they were also seen as unlikely to engage their internal whistleblowing intentions when such wrongdoings involved higher levels of organisational members.
2. **Ethical climate theory:** The current study extends and delimits the capacity of ethical climate theory to explain internal auditors' whistleblowing behaviour. According to Cullen et al., (1993, p. 103), ethical climates are "the ethical dimensions of organization culture" that members perceive to be the ethical norms and identity of organisations. The current study provides more insights of how the "principle dimension" of ethical climate, a climate associated with the requirement of the internal auditing profession, was found to be associated with their willingness to internally whistleblow. Ethical climate research has been enhanced through

investigating problems reflecting a variety of ethical dilemmas and types of wrongdoings in the current study. The results confirm that “principle dimensions” of ethical climate have a significant relationship with internal auditors’ internal whistleblowing intentions. Ethical climate research has been enhanced through addressing the predictive capacity of ethical climates more directly related to the internal auditing profession, whereby their values are associated with both requirements to their profession as well as to their employers. Rothwell and Baldwin (2006) argued that the ethical climates variable is not generalisable to public organisations and may not be a valid predictor for whistleblowing behaviour. Their statements are understandable as their study showed that none of the ethical climates showed consistent results when utilising employees from one U.S. state government department. Specifically, unlike prior whistleblowing studies by Rothwell and Baldwin (2006, 2007a) which used employees in public organisations, this study utilised internal auditors from private organisations who have real knowledge in mitigating corporate wrongdoings. Furthermore, another argument put forward by Rothwell and Baldwin (2006) stating that the Victor and Cullen’s (1988) ethical climates variable has limited capacity to affect whistleblowing, contrasts with the results of this study, which show the opposite to be the case. This study found that organisational climate may influence the behaviour of its employees however, it may very well depend on the type of the case.

### **6.3.2. Contribution of findings to practice**

From a practical perspective, the findings of the current study have implications for both Malaysian researchers and local regulators. Miceli et al., (2009, p. 381) acknowledged that “the body of empirical literature concerning whistleblowing outside of North American settings is in its infancy ...”. As such, the following findings in Malaysian specific settings are likely to be insightful in terms of:

1. **Internal auditors as whistleblowers:** The issue of whistleblowing is particularly important to the internal auditing profession. The current study has contributed to the current literature in the internal auditing field which previously had been neglected. Undeniably, internal auditors could indeed be regarded as internal whistleblowers to correct their organisational wrongdoings. Employees whose job

roles require them to whistleblow are willing to report wrongdoing, unlike other typical employees (Miceli et al., 2008). The arguments that the disclosures of corporate wrongdoings by these internal auditors are role-prescribed and should not be considered as whistleblowing acts are unfounded. The fact that internal auditors' unique full-time focus as independent but inside observers, on risks and controls is vital to a sound governance process as well as to sound financial reporting. The need for internal auditing within corporate governance structures has never been more clearly demonstrated than by previous events affecting organisations such as Enron and WorldCom. Internal whistleblowing by internal auditors provides organisations with the opportunity to correct the wrongdoing before the consequences escalate to cause devastating loss of reputation and general public embarrassment. However, the actual ethical dilemma and conflict of interest faced by this profession cannot be discounted. Unless the Malaysian organisations lay out clear and unbiased internal mechanisms for internal auditors to stem organisational wrongdoing internally from the very beginning, the end results will likely be disastrous to the whole organisation.

- 2. Factors affecting whistleblowing decisions:** The study indicated two major predictors of internal auditors' internal whistleblowing decisions, i.e. principle ethical climate dimension and the seriousness of wrongdoing. This suggests the need for increasing awareness and legitimisation of whistleblowing in the workplace, which in turn will hopefully increase internal auditors' intentions to whistleblow internally. Such a need could be improved through educational and training programs that could be conducted by the local regulatory agencies such as the Securities Commission and Institute of Internal Auditors of Malaysia (IIA Malaysia). Potential ethical problem areas or possible types of wrongdoing that are most likely to occur in organisations should be identified initially. The vignettes used in this study provide some indication of ethical problems on which management may need to focus. The influence of different types of unethical behaviour and wrongdoing conducted by different types of wrongdoers has shown the actual challenges of the whistleblowing dilemma and how internal auditors respond to it. It is important to note key differences across the four vignettes in the formation of internal whistleblowing intentions within organisations. However, the vignettes are not exhaustive as internal auditors need to be aware of new and

evolving ethical issues and new forms of organisational wrongdoing that they may confront. Malaysian regulatory agencies need to focus on emerging problem areas that reflect contemporary situations that internal auditors will most likely to face.

3. **Whistleblowing policy as a corporate internal control mechanism:** The internal auditors' job level, their internal locus of control and their organisational commitment variables were found to be unrelated to internal whistleblowing behaviour. This further validates the call by IIA Malaysia of the need for Malaysian firms to adopt an internal structure for whistleblowing. Currently, Malaysian companies do not have an internal structure for that purpose (Tan, 2006), as such, there is a need to institutionalise such a structure to enhance communication channels within the organisation to address questions, concerns, suggestions or complaints internally. Should there be a concern for any incidence of corporate wrongdoing, a whistleblowing policy offers the organisation the opportunity to resolve the issue internally, before being exposed to the public (Barnett, 1992b). As such, organisations need to introduce their own "Whistleblowing Policy" to protect any person wishing to report fraud and wrongdoing. Whistleblowers, whose identities should be protected, need to have direct access to the appropriate parties depending on the position of the suspected wrongdoer within the organisation. The policy should guarantee the anonymity necessary and appropriate response to reports of fraud. If employees have any concerns about what is proper conduct for themselves or others, it is expected they will do the right thing and raise their concern without fear or favour. A sound internal mechanism may further heighten the prevention and detection of wrongdoing and boost employees' confidence in their organisational internal reporting structure. This move should exemplify Malaysian firms' zero-tolerance towards any attempt to commit corporate fraud and wrongdoing.

4. **Research on whistleblowing studies in Malaysia:** The study of whistleblowing is relatively new in Malaysia and many of the variables that may influence the whistleblowing decisions have not been fully examined. The current study has provided some insights to several of the variables involved in this complex ethical decision-making behaviour. In addition, this study adds to the literature by using a Malaysian sample to complement the gap in the previous studies and to extend the

use of vignettes to cover research in the Malaysian internal auditing field. This would hopefully stimulate further research on ethics and whistleblowing intentions in other business sectors. It is recommended that a larger sample size, not only among internal auditors, but with other different groups of professionals involved in Malaysian firms, should also be included. This should produce more generalisable results.

#### **6.4. Limitations of the Current Study**

Despite the contributions of this study, a number of limitations are to be noted. Many of these limitations represent opportunities for future research. The main limitations of this study concern the following:

1. **The use of self-reported data:** The most obvious shortcoming of the current study is the use of self-reported data to determine internal auditors' internal whistleblowing intentions. All data were obtained from one source – the respondents. This may raise some concerns regarding the validity and generalisability of the findings. Some respondents may perceive themselves as being bolder, more ethical or more capable than others. However, Miceli and Near (1984, p. 703) highlighted that, “although self-reported data may be flawed, it is not known how better data can be obtained practically”. Chiu (2003) has also suggested that it is difficult to find a second source of information about an individual's ethical behaviour, one that is neither distorted nor biased. As the study relied upon the perceptions of internal auditors, the usefulness of the results depends upon the accuracy and honesty of the self-reported data. As such, the decisions for internal auditors to whistleblow or not on observed organisational violations is a personal experience that can only be captured by merely asking internal auditors' intentions to report it.
2. **The effect of social desirability bias:** As the study utilised the use of self-reported data, the presence of social desirability bias may result. It is known from this study that, there exist differences in reported behaviours between the internal auditors themselves and their colleagues, thus, clearly indicating the presence of social

desirability bias. Though the possibility of social desirability bias was meticulously addressed in the Research Method chapter earlier, the respondents however, may be tempted to give the socially desirable response rather than describe what they actually think, believe or do.

3. **The use of vignettes:** Although scenarios or vignettes are said to be the most widely used approach in ethics research (O'Fallon & Butterfield, 2005), the use of hypothetical vignettes carries with it further limitations. While the use of a vignette approach allows one to address potentially sensitive issues by presenting the issues hypothetically (Alexander & Becker, 1978; Morris, Rehbein, Hosseini, & Armacost, 1995), respondents may feel free to indicate their intentions with no real commitment to the actual behaviour. This may then lead to the social desirability bias problems discussed earlier. Furthermore, vignettes are also susceptible to satisficing by respondents (Stolte, 1994), a tendency for respondents to process vignette information less carefully and effectively than they would under ideal or real conditions (Krosnick, 1991). This may then lead to the respondents misunderstanding or overlooking certain key constructs. Furthermore, a key finding from the study of meta-analysis by Mesmer-Magnus and Viswesvaran (2005) found that the predictors from studies that use vignettes to gauge whistleblowing intentions were not similar to those studies that examine actual whistleblowing behaviour. They pointed out that the differences were probably due to “psychological distance” (Mesmer-Magnus & Viswesvaran, 2005, p. 292) between behavioural intentions versus actual action. However, they too acknowledged that it is very difficult to study actual whistleblowing behaviour in such a sensitive field of study as this. However, as previous ethics researchers (see Ayers & Kaplan, 2005; Kaplan & Schultz, 2007; Mesmer-Magnus & Viswesvaran, 2005; Patel, 2003) have supported and recognised the approach of utilising hypothetical vignettes in ethics research, such method is deemed as practical and suitable for this study.
4. **Cross-sectional research:** The study employed a cross-sectional questionnaire survey whereby participants were asked to imagine situations as described by the given hypothetical vignettes and report on their internal whistleblowing intentions. Thus, participants may have engaged in some form of justification in order to be congruent with their ethical decision behaviour and its underlying antecedents.

Furthermore, due to the cross-sectional nature of the sample, significant relationships may have been diluted and gone undetected. Though researchers have called for more cause-effect research to understand the complexities of whistleblowing behaviour, unfortunately, such cause-effect research (such as field experimental and longitudinal survey designs) is not suitable in whistleblowing studies. As such, previous researchers (Chiu, 2003; Keenan, 2002a; Patel, 2003; Zhang et al., 2009b) have pointed out that, although research based on cross-sectional survey data have some limitations, this could be the best option for some time to come. Miceli, Near, and Schwenk (1991, p. 127) had cautioned that, “because of obvious ethical concerns, one cannot randomly select employees to witness manipulated wrongdoing in order to determine which individual or situational characteristics are associated with whistleblowing”. Furthermore, such studies if conducted may require the respondents to be identified, which may then violate the ethical conduct of this research.

5. **Sensitiveness of the study:** It is known that the nature of whistleblowing studies is very complicated as it involves serious ethical issues (Miceli & Near, 1984; Miceli, Near, & Schwenk, 1991). As such, it is possible that the respondents involved in this study may draw different conclusions relative to the whole population. Another point to consider is that, as a whistleblowing study may raise various sensitive organisational issues, respondents may be reluctant to identify themselves or, worst of all, may not even respond to the study’s questionnaire. Therefore, although cross-sectional survey data has its own limitations, such data for whistleblowing studies are considered as acceptable. Due to this sensitivity, the study only focuses on internal auditors’ internal whistleblowing intentions rather than their actual intentions. Although intention has been the main concern in most ethics study and the theoretical relationship between moral intent and moral behaviour has been supported in previous research (i.e. Victor, Trevino, & Shapiro, 1993) the findings of this study may not be indicative of internal auditors’ actual internal whistleblowing decisions. Internal auditors who stated that they will report on organisational wrongdoing activity may not actually do so.
6. **Generalisability:** Lastly, the issue of generalisability should be considered. The generalisability of the current study’s results is limited by the particular context of

the study's experiment. The effects of different combinations of the factors that affect the likelihood of internal whistleblowing represent interesting extensions for future research. Whether the behaviours observed in this study are generalisable to other areas of the business environment and individuals other than internal auditors also represent interesting avenues for future research. Within the internal auditing field, although previous researchers have taken the initiative to utilise internal auditors in their empirical whistleblowing studies (see Arnold & Ponemon, 1991; Miceli, Near, & Schwenk, 1991; Xu & Ziegenfuss, 2008), caution should also be taken when generalising the results of this study. The most pertinent differences from these previous studies were, among others, the methodologies adopted (actual behaviour vs hypothetical scenarios or vignettes), types of scenarios or vignettes being examined, number of scenarios or vignettes being utilised, as well as various different types of variables that were being studied. Therefore, any inferences derived from the results of this study should be cautiously interpreted.

## **6.5. Suggestions for Future Research**

While this research effort breaks new ground in verifying links between organisational, individual, situational and demographic factors and internal whistleblowing intentions in Malaysia, there is still a need for more research in this area. Given the evidence presented in this thesis, there are several avenues possible for future research:

1. In the present study, the validity of the model of the study assesses only its ability to predict and explain the formation of intentions to whistleblow within the organisation and not its ability to predict whistleblowing behaviour. Future research needs to expand the understanding of whistleblowing acts by exploring the relationship between behavioural intentions to whistleblow on organisational wrongdoings and actual whistleblowing behaviour, the factors that influence this relationship as well as the consequences that follow in engaging such behaviour.
2. Future research about internal whistleblowing should explore the influence of additional variables on whistleblowing behaviour that have been consistently found to be related to individual ethical decision making in organisations in the literature.



Due to study constraints, this study has ignored other potential organisational and individual variables that could affect individual's internal whistleblowing decisions. These variables might include organisational variables, such as whistleblowing policy (Barnett, 1992b). Possible individual variables would be cognitive moral development (Rest, 1986), and the relationship between violator and would-be reporter (Jones, 1991). As such future research should try to explore the effects of these potential variables to expand the current findings about internal auditors' intentions to whistleblow.

3. Since the introduction of the Sarbanes Oxley Act in 2002, legislatures in several countries have adopted laws to encourage individuals to engage in whistleblowing. The influence of the newly installed Malaysian legislation in whistleblowing also merits additional consideration. As the laws may also protect whistleblowers from retaliation, the influence of this legislation on other than internal auditing profession or specifically other organisational members in Malaysia may likely yield new insights. The influence of different approaches (e.g., organisational whistleblowing policy) to laws and regulations can be studied by comparing responses of respondents within the organisations. This may provide evidence of whether this new Malaysian legislation will have a supportive effect on the incidence of whistleblowing and on termination of organisational wrongdoing. Such outcomes may well depend on how well the legislation is implemented and whether it has any tangible effect on wrongdoing in organisations.
4. Further, as mentioned in the limitation section, the self reported information about sensitive issues like whistleblowing may solicit socially desired responses to the questions. Although the current study had exercised caution to reduce the influence of social desirability on study findings (refer section 5.3.4 of the thesis), internal auditors who said they intended to whistleblow might not do so. The data for social desirability are not part of the research objectives for this study and the purpose of collecting the social desirability data was basically to address and control the problem of social desirability bias, which have been disregarded in ethics research (Bernardi & Guptill, 2008; Randall & Gibson, 1990). Initial findings from the social desirability bias test indicated that there are significant differences between the scores of "You" and "Your Colleagues" internal whistleblowing intention

questions on all four vignettes. Although this is regarded as not a salient threat to the internal validity of the study's findings (Nguyen et al., 2008b), the reason for such differences should be further investigated and this should be regarded as an interesting avenue for future empirical research. Furthermore, Cavanagh and Fritzsche (1985) argue that responses to questions such as "what I would do" compared to "what others would do" provide a valuable and quite different information.

## **6.6. Conclusion**

The literature has recognised that the internal auditing profession has evolved and gained an important role in their organisations. Currently, despite focussing on the traditional role of organisational compliance procedure, there have been new demands for the internal auditing profession to extend their efforts beyond the regulatory compliance issues. There have been growing responsibilities for internal auditors to ensure effective risk management and to promote corporate governance procedures within their organisations. These responsibilities also include the need for internal auditors to internally whistleblow on any type of corporate wrongdoings that occurred within the organisations. However, such requirements have consequences in the form of subsequent ethical dilemmas.

As such, this is the first study to test an internal whistleblowing decision-making model among Malaysian internal auditors. Specifically, the study examined internal auditors' intentions to whistleblow and the factors that influence their internal whistleblowing intentions in Malaysian organisations. For this purpose, an internal whistleblowing theoretical model that included a number of organisational, individual, situational and demographic factors was developed and tested using data from a sample of Malaysian internal auditors. The results of this study showed several of the variables that may influence Malaysian internal auditors' ethical decisions to whistleblow internally within their own organisations. Clearly the findings demonstrate that, internal auditors' internal whistleblowing behaviour in organisations appears to be a complex phenomenon influenced by the interplay of: organisational factors - how organisations manage to encourage the reporting of organisational wrongdoings; individual factors - how the

internal auditors think about the ethical decision, situational factors - types of wrongdoing and the status of wrongdoers, and demographic factors – the effect of gender, age, and tenure of internal auditors. Table 6.1 summarised the overall conclusion of the current study.

**Table 6-1: Summary of the conclusion of the study**

<b>Objective of study</b>	To examine factors that will affect Malaysian internal auditors' internal whistleblowing intentions.
<b>Focus of the study</b>	Organisational, individual, situational and demographic variables and their impact on the internal auditors' internal whistleblowing intentions.
<b>General findings</b>	Internal auditors' internal whistleblowing intentions are case-specific and this confirms the results of previous studies that organisational members have different reactions to different types of wrongdoing.
<b>Main findings</b>	Depending on types of wrongdoing, the findings which emerged from the current study suggest that the main predictors of internal auditors' internal whistleblowing intentions were: <ul style="list-style-type: none"> <li>• <i>Principle</i> ethical climate (Organisational factor),</li> <li>• <i>Relativism</i> dimensions of ethical judgment (Individual factor),</li> <li>• <i>Seriousness of Wrongdoing</i> (Situational factor), and</li> <li>• <i>Gender</i> (Demographic factor).</li> </ul>

The results of the current study have potential implications for both Malaysian researchers and local regulators to promote internal whistleblowing mechanisms within Malaysian organisations. As discussed previously, these implications may further clarify that internal auditing profession ought to be regarded as internal whistleblowers in order to mitigate organisational wrongdoings. As in most social studies, the results of this study also revealed the need to expand current knowledge and to explore the influence of additional factors involved in internal auditors' internal whistleblowing decisions.

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# APPENDICES

## Appendix 1: Letter of Support from IIA Malaysia



30 September 2009

Dear Members

### LETTER OF SUPPORT - PhD SURVEY ON INTERNAL AUDITORS' REPORTING INTENTIONS

This is to confirm that Syahrul Ahmar Ahmad is an Accounting lecturer with Universiti Teknologi Mara (UiTM) Segamat and is currently pursuing his Doctor of Philosophy (Business) at Edith Cowan University, Perth, Western Australia. As part of his PhD programme, he is conducting a survey on Internal Auditors reporting intentions.

His research will focus on organisational, individual and situational factors and their impact on internal auditors' reporting intentions on corporate wrongdoings or questionable acts.

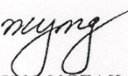
IIA Malaysia is pleased to support his survey and would like to encourage our members to participate in the survey. It would take approximately take 30 minutes of your time to complete the questionnaire.

The findings from this survey is definitely very beneficial to the professional and your invaluable contribution in making this survey a success is greatly appreciated.

Thank you

PROGRESS THROUGH SHARING

For and on behalf of  
THE INSTITUTE OF INTERNAL AUDITORS MALAYSIA

  
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## Appendix 2: Cover Letter

Dear participants,

### **Re: Survey on Internal Auditors' Reporting Intentions**

You are invited to participate in a study which is being conducted as a requirement toward the degree of Doctor of Philosophy (Business) at Edith Cowan University, Perth, Western Australia (W.A.). The study will focus on organisational, individual and situational factors and their impact on internal auditors' reporting intentions on corporate wrongdoings or questionable acts.

This survey is divided into five sections. It is important that you complete all sections. The usefulness and outcome of the study will depend upon the honesty and care with which you answer the questions. Please read the instructions for each section carefully. Choose a response that gives the best indication of how you would typically think, feel and experience. You will require about 25 to 30 minutes to complete the questionnaire.

This is an anonymous questionnaire and participation in this project is entirely voluntary. No personally identifiable information will be collected from you. Participants for this study have been selected at random from the Institute of Internal Auditors of Malaysia's (IIAM) database with the permission of the IIAM. All data will be treated with the strictest confidence and will only be used for the purposes of this study. If the information you provide is published, you will not be identified in any written work as presentation of the data will be aggregated. Your assistance to the successful completion of the questionnaire is both invaluable and fundamental. Please return the completed questionnaire in the attached self-addressed envelope provided.

If you have any questions or require any further information regarding this research, please contact:

Syahrul Ahmar Ahmad  
7/18 Bennevis Turn  
Kinross, WA 6028  
Perth, Australia.  
Email: syahrula@student.ecu.edu.au

Professor Malcolm Smith  
(Principal Supervisor)  
Edith Cowan University  
Faculty of Business and Law  
270 Joondalup Drive  
Joondalup W.A. 6027  
Perth, Australia.  
Email: malcolm.smith@ecu.edu.au

If you have any concerns or complaints about the study and wish to speak to an independent person, you may contact:

Research Ethics Officer  
Edith Cowan University  
Phone: +61 8 63042170  
Email: research.ethics@ecu.edu.au

Thank you very much for your participation.  
Yours faithfully,

Syahrul Ahmar Ahmad  
Doctoral Candidate  
Edith Cowan University

## Appendix 3: Survey Instrument

### A Survey on Internal Auditors' Reporting Intentions

#### Confidentiality

The views expressed in the completed questionnaire will be treated in the strictest confidence. Any information identifying the respondents will not be disclosed.

Please answer **ALL** questions

#### SECTION 1

**Instructions:** Below is a series of statements designed to indicate how you feel about working in your present organisation. **CIRCLE** the number corresponding to your level of agreement with each statement using the following response scale.

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
1. I am willing to put in much more effort than is normally expected to make this organisation successful.	1	2	3	4	5
2. I tell my friends that this is a great organisation to work for.	1	2	3	4	5
3. I feel very little loyalty to this organisation.	1	2	3	4	5
4. I would accept almost any type of job assignment in order working for this organisation.	1	2	3	4	5
5. I find that my values and the organisation's values are very similar.	1	2	3	4	5
6. I am proud to tell others that I am part of this organisation.	1	2	3	4	5
7. I could just as easily work for a different organisation provided the type of work was similar.	1	2	3	4	5
8. This organisation really inspires me to perform well in this job.	1	2	3	4	5
9. It would take very little change in my present circumstances to cause me to leave this organisation.	1	2	3	4	5
10. I am extremely glad I chose this organisation to work for, over others I was considering at	1	2	3	4	5

the time I joined.

11. There's not much to be gained by sticking with this organisation indefinitely.	1	2	3	4	5
12. Often, I find it difficult to agree with this organisation's policies on important matters relating to its employees.	1	2	3	4	5
13. I really care about the fate of this organisation.	1	2	3	4	5
14. I prefer to work with this organisation.	1	2	3	4	5
15. Deciding to work for this organisation was a definite mistake.	1	2	3	4	5

## SECTION 2

**Instructions:** In this section, the level of agreement related to individual control will be measured. **CIRCLE** the number corresponding to your level of agreement with each statement using the following response scale.

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
1. A job is what you make of it.	1	2	3	4	5
2. On most jobs, employees can achieve whatever they set out to accomplish.	1	2	3	4	5
3. If you know what you want out of a job, you can find a job that gives it to you.	1	2	3	4	5
4. If employees are unhappy with a decision made by their boss, they should do something about it.	1	2	3	4	5
5. Getting the job you want is mostly a matter of luck.	1	2	3	4	5
6. Making money is primarily a matter of good fortune.	1	2	3	4	5
7. Most people are capable of doing their jobs well if they make the effort.	1	2	3	4	5
8. In order to get a really good job you need to have family members or friends in high places.	1	2	3	4	5
9. Promotions are usually a matter of good luck.	1	2	3	4	5
10. When it comes to landing a really good job, who you know is more important than what you know.	1	2	3	4	5



11. Promotions are given to employees who perform their job well.	1	2	3	4	5
12. To make a lot of money you have to know the right people.	1	2	3	4	5
13. It takes a lot of luck to be an outstanding employee on most jobs.	1	2	3	4	5
14. People who perform their jobs well generally get rewarded for it.	1	2	3	4	5
15. Most employees have more influence on their supervisors than they think they do.	1	2	3	4	5
16. The main difference between people who make a lot of money and people who make a little money is luck.	1	2	3	4	5

**SECTION 3**

**Instructions:** The following questions relate to the general climate in your company. Please answer the following in terms of how it really is in your company, **NOT** how you would prefer it to be. Indicate by circling the number which best represents your opinion. **To what extent are these statements true about your company?**

	Completely			Completely	
	False	False	Neither	True	True
1. Employees are mostly out for themselves.	1	2	3	4	5
2. Employees' major responsibility to consider efficiency first.	1	2	3	4	5
3. Employees are expected to follow their own moral beliefs.	1	2	3	4	5
4. Employees are expected to do anything for the co.'s interests.	1	2	3	4	5
5. Employees look out for each others' good.	1	2	3	4	5
6. There is no room for one's own personal ethics.	1	2	3	4	5
7. It is very important to follow strictly the co.'s rules.	1	2	3	4	5
8. Work is sub-standard only when it hurts the co.'s interests.	1	2	3	4	5
9. Each employee decides for his/herself what is right and wrong.	1	2	3	4	5
10. Employees protect their own interest above other considerations.	1	2	3	4	5

11. The most important consideration is each employee's sense of right and wrong.	1	2	3	4	5
12. The most important concern is the good of all employees.	1	2	3	4	5
13. The first consideration is whether a decision violates any law.	1	2	3	4	5
14. Employees are expected to comply with both the law and professional standards over and above other considerations.	1	2	3	4	5
15. Everyone is expected to stick by co.'s rules and procedures.	1	2	3	4	5
16. Employee' major concern is always what is best for others.	1	2	3	4	5
17. Employees are concerned with the co.'s interests—to the exclusions of all else.	1	2	3	4	5
18. Successful employees in this co. go by the book.	1	2	3	4	5
19. The most efficient way is always the right way.	1	2	3	4	5
20. Employees are expected to strictly follow legal or professional standards.	1	2	3	4	5
21. Employees' major consideration is what is best for everyone.	1	2	3	4	5
22. Employees are guided by their own personal ethics.	1	2	3	4	5
23. Successful employees strictly obey the co.'s policies.	1	2	3	4	5
24. The law or ethical code of your profession is the major consideration.	1	2	3	4	5
25. Each employee is expected, above all, to work efficiently.	1	2	3	4	5
26. It is expected that you will always do what is right for the customer and public.	1	2	3	4	5

#### SECTION 4

**Instructions:** In this section, there are 4 case scenarios which deal with issues that you **might face as an internal auditor in your organisation**. Please read each of the case and then respond to **ALL** five questions accompanying each case. Keep in mind that there are no right or wrong answers; the study is only interested in your perceptions. **CIRCLE** the number you feel best reflects your opinion.

### Scenario 1

Last week, you overheard a Marketing Executive, talking to his colleague about taking paid time off (PTO) and how he did not report it to his manager. The Marketing Executive even mentioned to his friend that his manager will not likely follow up on the missed work time.

You know that this behaviour is against company policy and is facilitated by inconsistent management practices in your organisation. You know that as long as the Marketing Executive's manager is unaware of his behaviour, he will continue to take PTO without reporting it.

- a. Rate the seriousness of the behaviour (taking paid time off) in the above scenario.

Not at all serious	←				→	Very serious
1	2	3	4	5		

- b. Rate how powerful the Marketing Executive is in the organisation.

Not at all powerful				Very powerful	
1	2	3	4	5	

- c. Rate the likelihood that **YOU** would report the above behaviour committed by the Marketing Executive to:

- a. **internal parties** in your organisation.

Less likely				Very likely	
1	2	3	4	5	

- b. **external parties** outside your organisation.

Less likely				Very likely	
1	2	3	4	5	

- d. Rate the likelihood that **YOUR COLLEAGUES** would report the above behaviour committed by the Marketing Executive to:
- a. **internal parties** in your organisation.

Less likely					Very likely
1	2	3	4	5	

- b. **external parties** outside your organisation.

Less likely					Very likely
1	2	3	4	5	

- e. Evaluate the Marketing Executive's behaviour in the above scenario.

Unethical					Ethical
1	2	3	4	5	

Unfair

1 2 3 4 5

Unjust

1 2 3 4 5

Not morally right

1 2 3 4 5

Unacceptable to my family

1 2 3 4 5

Culturally unacceptable

1 2 3 4 5

Traditionally unacceptable

1 2 3 4 5

Violates an unwritten

social contract

1 2 3 4 5

Violates an unspoken

social contract

1 2 3 4 5

### Scenario 2

While auditing the stock purchases you discover that the Production Manager insists on paying one of the suppliers in cash only. When you ask the Production Manager about this situation he explains that he is able to negotiate discounts by paying for the goods in cash.

However, upon further investigation you discover that the Production Manager is in fact overstating purchases from this supplier and taking the money for himself. The transaction has gone unnoticed because of weak internal controls and the close relationship between the Production Manager and the Managing Director. You estimate the amount of the cash misappropriated in the current year to be RM12,000.

- a. Rate the seriousness of the behaviour (overstating purchases and taking the money) in the above scenario.

Not at all serious	←	→	Very serious	
1	2	3	4	5

- b. Rate how powerful the Production Manager is in the organisation.

Not at all powerful	1	2	3	4	5	Very powerful
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- c. Rate the likelihood that **YOU** would report the above behaviour committed by the Production Manager to:

- a. **internal parties** in your organisation.

Less likely	1	2	3	4	5	Very likely
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- b. **external parties** outside your organisation.

Less likely	1	2	3	4	5	Very likely
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- d. Rate the likelihood that **YOUR COLLEAGUES** would report the above behaviour to:

- a. **internal parties** in your organisation.

Less likely	1	2	3	4	5	Very likely
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- b. **external parties** outside your organisation.

Less likely	1	2	3	4	5	Very likely
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- e. Evaluate the Production Manager's behaviour in the above scenario.

Unethical						Ethical
-----------	--	--	--	--	--	---------

1	2	3	4	5
Unfair				Fair
1	2	3	4	5
Unjust				Just
1	2	3	4	5
Not morally right				Morally right
1	2	3	4	5
Unacceptable to my family				Acceptable to my family
1	2	3	4	5
Culturally unacceptable				Culturally acceptable
1	2	3	4	5
Traditionally unacceptable				Traditionally acceptable
1	2	3	4	5
Violates an unwritten social contract				Does not violate an unwritten social contract
1	2	3	4	5
Violates an unspoken social contract				Does not violate an unspoken social contract
1	2	3	4	5

### Scenario 3

During the audit of trade receivables, the accountant told you that the Chief Executive Officer (CEO) of your company has requested him to reduce the estimate for doubtful debts in order to increase reported income. The CEO argued that it is a common practice in the industry when times are hard.

Historically, the company has made very conservative allowances for doubtful accounts, even in bad years. The CEO's request would make it one of the least conservative in the industry. In order to satisfy the request by the CEO, the accountant makes the adjustment.

- a. Rate the seriousness of the request (reduction of provision for doubtful debts) in the above scenario.

Not at all serious	←	→	Very serious	
1	2	3	4	5

- b. Rate how powerful the CEO is in the organisation.

Not at all powerful				Very powerful
1	2	3	4	5

- c. Rate the likelihood that **YOU** would report the above request committed by the CEO to:  
a. **internal parties** in your organisation.

Less likely				Very likely
1	2	3	4	5

- b. **external parties** outside your organisation.

Less likely				Very likely
1	2	3	4	5

- d. Rate the likelihood that **YOUR COLLEAGUES** would report the above request committed by the CEO to:

- a. **internal parties** in your organisation.

Less likely				Very likely
1	2	3	4	5

- b. **external parties** outside your organisation.

Less likely				Very likely
1	2	3	4	5

- e. Evaluate the CEO's request in the above scenario.

Unethical				Ethical
-----------	--	--	--	---------

1	2	3	4	5
Unfair				Fair
1	2	3	4	5
Unjust				Just
1	2	3	4	5
Not morally right				Morally right
1	2	3	4	5
Unacceptable to my family				Acceptable to my family
1	2	3	4	5
Culturally unacceptable				Culturally acceptable
1	2	3	4	5
Traditionally unacceptable				Traditionally acceptable
1	2	3	4	5
Violates an unwritten social contract				Does not violate an unwritten social contract
1	2	3	4	5
Violates an unspoken social contract				Does not violate an unspoken social contract
1	2	3	4	5



### Scenario 4

In the current year's financial audit, you discovered a substantial amount of unrecorded liabilities. You consulted the company's Chief Financial Officer (CFO) to discuss the matter, however he argues that the amount is immaterial and therefore it is unnecessary to make adjusting entries to the financial statements. The CFO believes that he should know as well as anyone what financial statement readers would or would not deem to be material.

You feel that the amount is material and the financial statements should be adjusted accordingly, however the CFO is firm with his decision as he explain that the adjustment will affect current year' bonus payment to all employees of Jackson Manufacturing Bhd.

- a. Rate the seriousness of the decision (unrecorded liabilities) in the above scenario.

Not at all serious	←				→	Very serious
1	2	3	4	5		

- b. Rate how powerful the CFO is in the organisation.

Not at all powerful				Very powerful
1	2	3	4	5

- c. Rate the likelihood that **YOU** would report the above decision made by the CFO to:

- a. **internal parties** in your organisation.

Less likely				Very likely
1	2	3	4	5

- b. **external parties** outside your organisation.

Less likely				Very likely
1	2	3	4	5

- d. Rate the likelihood that **YOUR COLLEAGUES** would report the above decision made by the CFO to:

- a. **internal parties** in your organisation.

Less likely				Very likely
1	2	3	4	5

- b. **external parties** outside your organisation.

Less likely				Very likely
1	2	3	4	5

- e. Evaluate the CFO's decision made in the above scenario.

Unethical				Ethical
-----------	--	--	--	---------

1	2	3	4	5
Unfair				Fair
1	2	3	4	5
Unjust				Just
1	2	3	4	5
Not morally right				Morally right
1	2	3	4	5
Unacceptable to my family				Acceptable to my family
1	2	3	4	5
Culturally unacceptable				Culturally acceptable
1	2	3	4	5
Traditionally unacceptable				Traditionally acceptable
1	2	3	4	5
Violates an unwritten social contract				Does not violate an unwritten social contract
1	2	3	4	5
Violates an unspoken social contract				Does not violate an unspoken social contract
1	2	3	4	5

**SECTION 5**

This section relates to demographic information about you and your company. Please tick (✓) the appropriate box. All answers will remain strictly confidential and anonymous.

a. What is your gender?

Male

Female

b. What is your age?

Under 25 years old

36 – 45 years old

25 – 35 years old

46 or older

c. How many years have you been with your present employer?

Less than 2 years

6 to 10 years

2 to 5 years

11 years or more

d. Which of the following best describes the level of your current job?

Junior

Manager

Senior

Other (please specify) \_\_\_\_\_

e. How many people are employed by your company?

0 to 500 employees

1,001 to 3,000 employees

501 to 1,000 employees

More than 3,000 employees

f. Type of individual membership with IIAM?

Professional member

Associate member

## ***End of Questionnaire***

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Thank you for your time and co-operation in completing this questionnaire. Your opinions are valuable and your participation is required for the completion of this project. Please return the completed research instrument in the postage-paid, self addressed envelop provided. Please also ensure that you have answered **ALL** questions.

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**Appendix 4A: Spearman's rho Bivariate Correlation Matrics : Vignette 1**

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Int whistleblowing	<b>1.000</b>															
2. Egoism	.093	<b>1.000</b>														
3. Benevolence	.120	.564**	<b>1.000</b>													
4. Principle	.198**	.521**	.621**	<b>1.000</b>												
5. Size	-.042	.052	-.010	.034	<b>1.000</b>											
6. Job level	.233**	-.022	-.023	.103	-.056	<b>1.000</b>										
7. Moral equity	.391**	.027	.021	.034	.023	.165*	<b>1.000</b>									
8. Relativism	.383**	.111	.200**	.157*	.056	.147	.656**	<b>1.000</b>								
9. Contractualism	-.349**	-.077	-.114	-.120	-.069	-.139	-.646**	-.691**	<b>1.000</b>							
10. Locus of control	-.235**	.034	-.037	-.099	-.159*	-.141	-.197*	-.180*	.264**	<b>1.000</b>						
11. Org. commitment	.313**	.211**	.392**	.440**	.116	.217**	.202**	.259**	-.205**	-.501**	<b>1.000</b>					
12. Seriousness	.488**	.192*	.212**	.191*	-.040	.047	.432**	.315**	-.376**	-.161*	.261**	<b>1.000</b>				
13. Status	.059	.061	.075	.031	.075	-.143	-.060	-.080	.119	.119	-.087	.040	<b>1.000</b>			
14. Gender	.067	.016	.074	.131	-.012	.268**	-.045	.009	-.016	-.115	.179*	.108	-.015	<b>1.000</b>		
15. Age	.272**	-.059	-.041	.069	-.099	.558**	.205**	.209**	-.209**	-.247**	.280**	.125	-.090	.232**	<b>1.000</b>	
16. Tenure	.161*	.062	.065	.214**	.080	.337**	.139	.153*	-.090	-.066	.279**	.119	.076	.104	.551**	<b>1.000</b>

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

**Appendix 4B: Spearman's rho Bivariate Correlation Matrics : Vignette 2**

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Int whistleblowing	<b>1.000</b>															
2. Egoism	.011	<b>1.000</b>														
3. Benevolence	.013	.564**	<b>1.000</b>													
4. Principle	.148	.521**	.621**	<b>1.000</b>												
5. Size	-.045	.052	-.010	.034	<b>1.000</b>											
6. Job level	.141	-.022	-.023	.103	-.056	<b>1.000</b>										
7. Moral equity	.161*	.057	.055	.074	.083	.034	<b>1.000</b>									
8. Relativism	.277**	.068	.156*	.150	.046	.073	.660**	<b>1.000</b>								
9. Contractualism	-.234**	-.083	-.139	-.178*	-.125	.035	-.661**	-.719**	<b>1.000</b>							
10. Locus of control	-.070	.034	-.037	-.099	-.159*	-.141	-.127	-.148	.115	<b>1.000</b>						
11. Org. commitment	.071	.211**	.392**	.440**	.116	.217**	.041	.061	-.156*	-.501**	<b>1.000</b>					
12. Seriousness	.240**	.002	.099	.127	-.076	.053	.261**	.209**	-.267**	-.006	.109	<b>1.000</b>				
13. Status	-.037	.069	.064	.004	-.010	-.142	.139	.027	-.073	.037	-.013	.266**	<b>1.000</b>			
14. Gender	-.158*	.016	.074	.131	-.012	.268**	-.130	-.166*	.135	-.115	.179*	-.149*	-.275**	<b>1.000</b>		
15. Age	.058	-.059	-.041	.069	-.099	.558**	.056	.014	.006	-.247**	.280**	.047	.000	.232**	<b>1.000</b>	
16. Tenure	.026	.062	.065	.214**	.080	.337**	.000	.009	.033	-.066	.279**	.050	.032	.104	.551**	<b>1.000</b>

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

**Appendix 4C: Spearman's rho Bivariate Correlation Matrics : Vignette 3**

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Int whistleblowing	<b>1.000</b>															
2. Egoism	.042	<b>1.000</b>														
3. Benevolence	.052	.564**	<b>1.000</b>													
4. Principle	.162*	.521**	.621**	<b>1.000</b>												
5. Size	-.069	.052	-.010	.034	<b>1.000</b>											
6. Job level	.086	-.022	-.023	.103	-.056	<b>1.000</b>										
7. Moral equity	.416**	.061	.107	.111	.053	.054	<b>1.000</b>									
8. Relativism	.371**	.063	.100	.120	.051	.041	.866**	<b>1.000</b>								
9. Contractualism	-.362**	-.093	-.164*	-.104	-.079	-.023	-.848**	-.816**	<b>1.000</b>							
10. Locus of control	-.133	.034	-.037	-.099	-.159*	-.141	-.231**	-.140	.125	<b>1.000</b>						
11. Org. commitment	.006	.211**	.392**	.440**	.116	.217**	.105	.026	-.061	-.501**	<b>1.000</b>					
12. Seriousness	.538**	.050	.070	.145	.045	.060	.740**	.573**	-.633**	-.225**	.132	<b>1.000</b>				
13. Status	.124	-.060	-.050	-.050	.025	-.008	.093	.090	-.101	-.074	.021	.204**	<b>1.000</b>			
14. Gender	-.103	.016	.074	.131	-.012	.268**	-.031	-.046	.064	-.115	.179*	.026	-.174*	<b>1.000</b>		
15. Age	.001	-.059	-.041	.069	-.099	.558**	.096	.071	.009	-.247**	.280**	.054	-.026	.232**	<b>1.000</b>	
16. Tenure	-.023	.062	.065	.214**	.080	.337**	.108	.096	-.045	-.066	.279**	.021	-.020	.104	.551**	<b>1.000</b>

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

**Appendix 4D: Spearman's rho Bivariate Correlation Matrics : Vignette 4**

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Int whistleblowing	<b>1.000</b>															
2. Egoism	.036	<b>1.000</b>														
3. Benevolence	.043	.564**	<b>1.000</b>													
4. Principle	.142	.521**	.621**	<b>1.000</b>												
5. Size	-.047	.052	-.010	.034	<b>1.000</b>											
6. Job level	.117	-.022	-.023	.103	-.056	<b>1.000</b>										
7. Moral equity	.348**	-.002	.077	.038	-.018	.103	<b>1.000</b>									
8. Relativism	.302**	.036	.131	.074	-.002	.063	.786**	<b>1.000</b>								
9. Contractualism	-.333**	-.008	-.164*	-.089	-.050	-.059	-.787**	-.769**	<b>1.000</b>							
10. Locus of control	-.133	.034	-.037	-.099	-.159*	-.141	-.218**	-.170*	.199**	<b>1.000</b>						
11. Org. commitment	.028	.211**	.392**	.440**	.116	.217**	.133	.080	-.140	-.501**	<b>1.000</b>					
12. Seriousness	.488**	-.039	.077	.006	-.034	.088	.562**	.422**	-.486**	-.130	.045	<b>1.000</b>				
13. Status	.138	-.028	-.023	-.007	.020	.001	.090	-.040	-.119	-.071	.013	.352**	<b>1.000</b>			
14. Gender	-.085	.016	.074	.131	-.012	.268**	-.003	.004	.058	-.115	.179*	-.098	-.154*	<b>1.000</b>		
15. Age	.022	-.059	-.041	.069	-.099	.558**	.090	.110	-.026	-.247**	.280**	.035	-.045	.232**	<b>1.000</b>	
16. Tenure	-.096	.062	.065	.214**	.080	.337**	-.031	.010	.042	-.066	.279**	-.090	.030	.104	.551**	<b>1.000</b>

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).