

Edith Cowan University  
**Research Online**

---

ECU Publications 2012

---

1-1-2012

## Internal Whistle-Blowing Intentions: A Study of Demographic and Individual Factors

Syahrul Ahmad

George Smith  
*Edith Cowan University*

Zubaidah Ismail  
*Edith Cowan University*

Follow this and additional works at: <https://ro.ecu.edu.au/ecuworks2012>



Part of the **Business Commons**

---

Ahmad, S., Smith, G. M., & Ismail, Z. (2012). Internal Whistle-Blowing Intentions: A Study of Demographic and Individual Factors. *Journal of Modern Accounting and Auditing*, 8(11), 1632-1645. Available [here](#)

This Journal Article is posted at Research Online.

<https://ro.ecu.edu.au/ecuworks2012/638>

# Internal Whistleblowing Intentions: A Study of Demographic and Individual Factors

**Syahrul Ahmar Ahmad**

Faculty of Accountancy

Universiti Teknologi MARA, Johor

85000 Segamat, Johor, Malaysia

Email: syahrul.ahmar@johor.uitm.edu.my

**Malcolm Smith<sup>1</sup> and Zubaidah Ismail<sup>2</sup>**

Faculty of Business and Law

Edith Cowan University

270 Joondalup Drive, Joondalup WA 6027, Australia

Email: malcolm.smith@ecu.edu.au<sup>1</sup>

z.ismail@ecu.edu.au<sup>2</sup>

**ABSTRACT:** Internal auditors hold a unique position in their organisation to prevent, deter and detect corporate wrongdoings; however, the role of this profession in investigating their ethical decision-making behaviour towards internal whistleblowing intentions has been very much neglected. Furthermore, although extensive research has been undertaken on the issue of whistleblowing globally, empirical study in this area is still scarce in Malaysia. This paper examines internal whistleblowing intentions among internal auditors in Malaysia utilising three independent vignettes. A mail survey was conducted to investigate demographic and individual factors that could influence internal auditors' ethical decision-making processes. The likelihood for internal whistleblowing intentions was significant among internal auditors' ethical judgments for all the three vignettes. Demographic factors (gender, age, and tenure) and other individual factors (locus of control and organisational commitment) failed to explain the likelihood of internal auditors' internal whistleblowing intentions. Findings should aid researchers in their understanding of the determinants of individuals' internal whistleblowing behaviour.

**Keywords:** *Whistleblowing, ethics, internal auditors, prosocial behaviour*

## 1. INTRODUCTION

The issue of 'whistleblowing' has garnered widespread attention globally over the past several decades. Such interests were spurred by the spin-off effect of infamous corporate debacles (e.g., Enron and WorldCom) that led to the passage of the Sarbanes-Oxley Act of 2002 (Eaton & Akers, 2007; Lacayo & Ripley, 2003). Since then, previous studies agree that whistleblowing is an important internal organisational structure for countering corporate wrongdoing and questionable acts (Kaplan & Schultz, 2007). Near and Miceli (1995) found that in the absence of this organisational reporting channel, employees who discover corporate wrongdoings will not disclose their observations to anyone, thus placing the organisation itself in jeopardy.

Whistleblowing may improve organisations' effectiveness and efficiency (Kaplan & Schultz, 2007) and could therefore be regarded as a mitigating factor to prevent unwanted negative events.

Whistleblowing has been aptly defined as: "the disclosure by organisation members (former or current) of illegal, immoral, or illegitimate practices under the control of their employers, to persons or organisations that may be able to effect action" (Near & Miceli, 1985, p. 4). The definition acknowledged that whistleblowing about organisational wrongdoings can either be made internally or externally (Brennan & Kelly, 2007; Near & Miceli, 2008). Studies have shown that individuals' characteristics are relevant in influencing their whistleblowing decisions (MacNab & Worthley, 2008; Mclain & Keenan, 1999; Miceli & Near, 1984; Near & Miceli, 1990; Sims & Keenan, 1998). Gobert and Punch (2000) highlighted that, no two individual whistleblowers are alike as their whistleblowing decisions were driven by complex psychological and sociological factors. Previous studies have emphasised that further whistleblowing research is required to examine how individuals within organisations form their whistleblowing intentions (Ayers & Kaplan, 2005; Brennan & Kelly, 2007). Specifically, there have been very limited empirical studies on whistleblowing in Malaysian organisations (see Chavan & Lamba, 2007; Patel, 2003). As such, the present study examines the impact of two types of intrapersonal traits; demographic and individual factors, on the internal auditors' whistleblowing intentions. The demographic variables are gender, age and tenure in an organisation while individuals' factors are ethical judgment, locus of control and organisational commitment. The study attempts to make two contributions to whistleblowing theory and practice: to determine the theoretical fact that whistleblowing is a prosocial behaviour, and to extend the whistleblowing research to a Malaysian context.

## **2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

### **2.1. Whistleblowing as prosocial behaviour**

Much of the empirical and conceptual research on whistleblowing has been motivated by the study of prosocial behavioural theory (e.g. Brennan & Kelly, 2007; Brief & Motowidlo, 1986; Dozier & Miceli, 1985; Miceli & Near, 1988). 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, the act is considered as a form of positive social behaviour (Miceli, Near, & Dworkin, 2008) as it incorporates both selfish (egoistic) and unselfish (altruistic) motives on the part of whistleblowers in stopping organisational wrongdoing (Dozier & Miceli, 1985).

### **2.2. Demographic variables**

Studies 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 such studies provided mixed results on the relationships between individuals' whistleblowing intentions, any possible effect of these factors in the current study should be investigated. With regards to gender, 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, studies have found that, women are 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 more easily subjected to retaliation than men (Rehg, Miceli, Near, & Van Scotter, 2008), and this makes their careers more vulnerable in. It is expected that similar findings would occur with regard to internal auditors' reporting intentions in this study.

Although some studies found that age is not a significant predictor of the intention to whistleblow (see Dworkin & Baucus, 1998; Keenan, 2000; Sims & Keenan, 1998), older organisational members are said 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).. The current study argues that older employees are powerful organisational member in organisations. Such an argument relating age and whistleblowing is based on power theories: Lee, Heilmann, and Near (2004, p. 304) argued that "more powerful employees who observed wrongdoing have less to fear from their organization than do less powerful employees, and are therefore more likely to blow the whistle" and age poses that power variable. Finally, organisational tenure can also be expected to be related to the likelihood of whistleblowing. Senior employees are said to be more likely to whistleblow because they are closer to retirement, and 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 their corporate culture operates and are less concerned with stopping the wrongdoing (Dworkin & Baucus, 1998). They may also be less familiar with appropriate channels for whistleblowing (Miceli & Near, 1992). Overall, this study expects that these demographic variables in general may be associated with the internal auditors' tendency to whistleblow, leading to the first set of hypotheses:

### ***Hypothesis 1:***

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

### ***2.3. Ethical judgment***

Ethical judgment has been shown to be a variable that may influence individuals' behavioural intentions (Hunt & Vitell, 2006; Patel, 2003; Trevino, 1986). Previous ethics studies have utilised Reidenbach and Robin's (1988, 1990) Multidimensional Ethics Scale (MES) instrument as a proxy for individual's ethical judgment in soliciting individuals' ethical behaviour (see Ayers & Kaplan, 2005; Ellis & Griffith, 2001; Flory, Phillips, Reidenbach, & Robin, 1992; Nguyen, Basuray, Smith, Kopka, & McCulloh, 2008a, 2008b). The MES instrument comprises three ethical dimensions; *Moral Equity*, *Relativism* and, *Contractualism*, each arranged according to their theoretical importance. Prior studies have suggested that these three philosophical dimensions provide an understanding of why a particular behaviour is judged as either ethical or unethical by an individual.

Since its inception, MES has been useful in business ethics research and the use of such instrument have been extended to accounting studies by incorporating accounting-specific scenarios to examine accountants' or accounting students' ethical decision-making about performing questionable actions (see Cohen, Pant, & Sharp, 1993, 1996, 1998, 2001; Patel, 2003; Shawver, 2008; Shawver & Clements, 2008; Shawver & Sennetti, 2009). With regards to whistleblowing studies, Chiu (2002, 2003) and Patel (2003) have incorporated this MES scale in their studies. Chiu's (2002, 2003) studies investigated the influences of individual ethical judgment of

Chinese managers and professionals on their whistleblowing intentions. Utilising a summed total of Reidenbach and Robin's ethical judgment scale, the results of their studies indicate a strong positive relationship between ethical judgments and whistleblowing intentions. In another study, Patel (2003) examined cultural influences of professional judgments of Australian, Indian and Chinese-Malaysian accountants in relation to their whistleblowing intentions. Using two whistleblowing scenarios adapted from previous study, Patel found that Australian accountants are more willing to whistleblow than their Indian and Chinese-Malaysian counterparts. More importantly, Patel (2003) suggested that the MES is capable of providing an insight into complex elements involved in ethical and professional judgments in cross-cultural settings. Although there have been studies that examined accountants whistleblowing decisions, there is obviously a need to determine internal auditors' ethical perceptions. Empirical studies have justified that the MES instrument is capable of eliciting complex judgments such as behavioural intentions (Flory et al., 1992; Reidenbach & Robin, 1990; Tuttle, Harrell, & Harrison, 1997; Tuttle, Harrell, & Jackson, 1997) including the study of individual's whistleblowing behaviour (Chiu, 2002, 2003; Patel, 2003). Therefore, the current study proposed the following hypothesis;

***Hypothesis 2:***

***The higher the ethical judgment, the more likely internal auditors will internally whistleblow.***

***2.4. Locus of control***

Another variable that may explain the probability of individual whistleblowing behaviour is Rotter's (1966) locus of control. It has been used with success in examining individuals' behaviour in numerous ethics studies (see Cherry, 2006; Donnelly, Quirin, & O'Bryan, 2003; Siu, Spector, Cooper, & Donald, 2001; Trevino & Youngblood, 1990). Locus of control, also known as "internal versus external control of reinforcement", is considered as an important personality variable for the explanation of human behaviour in organisational settings (Donnelly et al., 2003; Spector, 1982). 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). Specifically, 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).

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. Studies have suggested that internals are more likely than externals to engage in prosocial behaviour (Dozier & Miceli, 1985; Miceli, Near, & Dozier, 1991; Spector, 1982). Therefore, it is proposed that an individual with internal locus of control will be more likely to whistleblow (Dozier & Miceli, 1985; Miceli, Near, & Dozier, 1991; Miceli et al., 2008; Near & Miceli, 1985). 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. In another study, consistent with the work of Chiu (2003), 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. 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 3:***

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

***2.5. Organisational commitment***

Organisational commitment is defined as the relative strength of an individual's identification and involvement in a particular organisation (Mowday, Steers, & Porter, 1979). Theoretical and conceptual works have pointed out that individuals showcasing higher organisational commitment basically resemble prosocial behaviour directed to organisations (Brief & Motowidlo, 1986; Mowday, Porter, & Steers, 1982). Studies have indicated that organisational commitment is a viable predictor for many type of behaviours, including turnover intentions (Donnelly et al., 2003), job satisfaction (Chen, 2007), motivation levels (Pool & Pool, 2007) and professional commitment (Kwon & Banks, 2004). However, there are limited empirical studies of individual's organisational commitment in whistleblowing studies (Street, 1995). Theoretical models of whistleblowing studies have acknowledged the potential influence of organisational commitment (see Dozier & Miceli, 1985; Graham, 1986; Miceli & Near, 1988; Near & Miceli, 1985; Street, 1995) to the likelihood of whistleblowing. Street (1995) argued that if individuals have a high organisational commitment, they are more likely to display prosocial behaviour of whistleblowing than those with lower organisational commitment.

Somers and Casal (1994) had empirically examined the direct relationship between organisational commitment and the willingness of management accountants to whistleblow. 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. Somers and Casal (1994) suggested that organisational commitment increases the likelihood of whistleblowing as the whistleblowers who are committed organisational members wish to put their organisations back on course. In another study, Mesmer-Magnus and Viswesvaran (2005) proposed organisational commitment to be positively related to both reporting intention and actual reporting. Their study however failed to find significant results. Mesmer-Magnus and Viswesvaran (2005) reported that differences between internal and external reporting may account for their results. Generally, theoretical and empirical studies of whistleblowing have acknowledged that organisational commitment can directly influence willingness to whistleblow (see Dozier & Miceli, 1985; Miceli & Near, 1988; Near & Miceli, 1985; Somers & Casal, 1994; Street, 1995). However, 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 proposed:

***Hypothesis 4:***

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

### **3. RESEARCH METHOD**

#### **3.1. Participants**

Members of the Institute of Internal Auditors of Malaysia (IIAM) were chosen as participants for this study due to the nature of their work and experience that affords them the opportunity to confront corporate wrongdoings in their organisations. Although there have been debates arguing that the acts of reporting made by these internal auditors are role-prescribed and not considered as whistleblowing (see Jubb, 1999, 2000), others have supported it (see Arnold & Ponemon, 1991; Miceli, Near, & Schwenk, 1991; Pearson, Gregson, & Wendell, 1998; Xu & Ziegenfuss, 2008). The internal auditing profession itself is unique as Tsahuridu and Vandekerckhove (2008) explained that whistleblowers know exactly what is going on at work and their jobs enable them to access specific information about their organisation. As such, this study contends that reporting by internal auditors within the organisation should be regarded as internal whistleblowing acts as 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.

#### **3.2. Survey administration and questionnaire design**

Mailed questionnaires were distributed at random in replied paid envelopes complete with covering letters explaining research purposes and written instructions to complete the questionnaire. A letter of support from IIAM was also enclosed to enhance response rates from participants. A total of 1,000 questionnaires were sent to registered individual internal auditors and 186 questionnaires were returned. However, only 180 questionnaires were found to be usable for the study (an 18% response rate). Such low response rates from Malaysian respondents were expected and not considered as unusual. Previous Malaysian studies, in various research fields, have reported response rates of 12.3% (Jusoh & Parnell, 2008), 18.8% (Salleh & Dali, 2009), 19.6% (Smith, Abdullah, & Abdul Razak, 2008) and 22.7% (Ming-Ling, 2008) respectively. A recent study by Ahmad and Taylor (2009) who utilised IIAM members, only managed a 17.9% response rate.

The questionnaire includes three independent 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 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. The first vignette concerning a Marketing Executive taking unreported paid time off was modified from an unpublished dissertation by Wortman (2006). Next, a vignette about a request for reduction in doubtful debts by the Chief Executive Officer was adapted from Cohen, Pant, and Sharp (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). Basically, the vignettes ask the respondent to indicate how likely they would be to whistleblow in their company (internal whistleblowing) based on the given hypothetical situations. The choice for utilising these three 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 get fatigued, while with too few vignettes, it may limit the chance to manipulate the study's variables of interest, thus resulting in response bias.

### 3.3. Measurement of variables

*Internal whistleblowing intention* (the dependent variable) was measured using summed of two items. One was in the first person (The probability the respondent will engage in the action, i.e. internal whistleblowing). The other was 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). *Gender* was represented by a dichotomous variable, coded as “1” for male and “2” for female. Other demographic variables (*Age* and *Tenure*) were collected on categorical variables, each were earlier categorised into four size groupings.

The measure for *Ethical Judgment (Moral Equity, Relativism, and Contractualism)* is based on Reidenbach and Robin’s (1990) MES instrument using a 5-point scale with endpoint labelled as 1 = “most unethical” and 5 = “least ethical”. Respondents were asked to indicate their perceptions of the degree of the action’s ethicality in each of the three vignettes. The summed total of MES response was calculated and used as the score for ethical judgment variable. 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). 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. And finally, 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, Steers, Mowday, & Boulian, 1974).

### 3.4. Data Analyses

Multiple regression analyses were used to test the research hypotheses and investigate the relative influences of the study variables on internal auditors’ internal whistleblowing intentions.

## 4. FINDINGS

### 4.1. Descriptive analyses

Table 1 presents the descriptive profiles of the study’s respondents and their internal whistleblowing intentions in each of the three vignettes across the demographic variables - *Gender*, *Age*, and *Tenure*. Descriptive statistics indicated that, the majority of internal auditors were male (i.e. 54.75%). The largest age group was represented by the 25–35 years old range (50.84%), and most of these internal auditors have lower working tenure (less than 5 years) with their current organisations (a total of 57.54%).

**Table 1: Analysis of Responses for Internal Whistleblowing (N = 179\*)**

Variables		N	%	Vignette 1		Vignette 2		Vignette 3	
				Mean	SD	Mean	SD	Mean	SD
<b>Gender</b>	Male	98	54.75	<b>3.80</b>	1.074	3.46	1.310	4.04	1.064
	Female	81	45.25	3.68	1.023	<b>3.69</b>	1.348	<b>4.17</b>	1.082



Note: Mean	<b>Age</b>	< 25 years old	6	3.35	3.17	1.472	2.83	1.602	3.17	1.835
		25 – 35 years old	91	50.84	3.51	1.047	3.60	1.332	4.08	1.147
		36 – 45 years old	49	27.37	4.02	.989	<b>3.63</b>	1.220	<b>4.24</b>	.723
		> 46 years old	33	18.44	<b>4.09</b>	.879	3.48	1.439	4.12	1.083
	<b>Tenure</b>	< 2 years	46	25.70	3.46	1.110	<b>3.74</b>	1.357	4.04	1.192
		2 – 5 years	57	31.84	3.70	1.085	3.40	1.462	<b>4.23</b>	1.069
		6 – 10 years	31	17.32	3.61	1.086	3.71	1.071	4.00	1.033
		> 11 years	45	25.14	<b>4.18</b>	.777	3.49	1.290	4.07	.986

results are based on 5-point Likert scale.

\* 1 missing value.

Bold item = Highest mean

With regards to their internal whistleblowing intentions, there were different reactions on their decision between genders. Female internal auditors were more likely to whistleblow in Vignettes 2 and 3, while their male counterparts were more likely only in Vignette 1. Judging from the types of wrongdoing 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 and 3. 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). 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). 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 case of Marketing Executive in Vignette 1. 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 2 and CFO in Vignette 3.

#### 4.2. Multiple regression analyses

Standard multiple regression analyses for each vignette were conducted using the six independent variables to further investigate the hypothesised relationships among the variables. For multiple regression analysis purposes, ordinal variables such as age and tenure were re-coded dichotomously (*Age*: coded 1 = Older, 0 = Younger; while *Tenure*: coded 1 = More than 5 years, 0 = Less than 5 years). Table 3 displays the standardised regression coefficients or beta weights ( $\beta$ ), standard error, and the coefficient of determinations ( $R^2$ ), for each vignette.

**Table 3: Multiple Regression Analyses Predicting Internal Whistleblowing Intentions**

Independent variables	DV = Internal whistleblowing intention					
	Vignette 1		Vignette 3		Vignette 4	
	Beta	SE	Beta	SE	Beta	SE

Gender	-0.014	-.183	.070	.200	.084	.167
Age	.140	1.494	.010	.154	.107	.130
Tenure	.043	.450	-.069	.113	-.078	.095
Ethical Judgment	.282** *	3.795	.382** *	.227	.233** *	.196
Locus of Control	-.090	-1.054	-.051	.016	-.115	.013
Organisational Commitment	.109	1.235	-.015	.015	-.022	.012
R <sup>2</sup>	.191		.165		.094	
F	6.131***		5.164***		2.719**	

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

All of the regression equations in Table 3 are statistically significant. The regression generally explain a minor amount of variation ( $R^2 = .094$  to  $.191$ ) in the measures of internal whistleblowing intentions. The results in Table 3 demonstrate that only ethical judgment is significantly related to internal whistleblowing intentions consistently in all three vignettes. Other variables were found to be not significant to explain the internal auditors' internal whistleblowing intentions.

## 5. DISCUSSION

The regression analyses reveal ethical judgment is the most consistent and the only better predictor of internal whistleblowing intentions, especially when regressed in the presence of other independent variables. Other variables fail to demonstrate their capacity to predict internal whistleblowing intentions. The failure for these variables to predict internal whistleblowing intentions in all of the vignettes might be explained in several ways.

### 5.1. Demographic factors

The current study acknowledged that all demographic variables tested in all three vignettes were found to have no significant relationships in examining the internal auditors' internal whistleblowing intentions. The current findings fall in line with the previous research (Barnett, Cochran, & Taylor, 1993; Mesmer-Magnus & Viswesvaran, 2005; Rothschild & Miethe, 1999; Rothwell & Baldwin, 2007; Sims & Keenan, 1998; Singer, Mitchell, & Turner, 1998) that fail to substantiate the significance of these demographic variables to whistleblowing. Such findings further support Brennan and Kelly's (2007) contention that demographic variables offer weak and conflicting results on the influence of individual's whistleblowing behaviour, while Park et al. (2005) stated that demographic variables made no significant difference in whistleblowing intentions. It can be seen that the same results apply to Malaysian scenario. Demographic factors are not suitable predictors for examining an individual's behavioural intentions.

### 5.2. Individual factors

As whistleblowing is regarded as a prosocial behaviour, it is not surprising that the internal auditors in this study would be more likely to whistleblow when they judged such behaviour as unethical. Looking at the

type of wrongdoings in all the three vignettes, internal auditors perceived that there are certainly clear “right versus wrong” cases that had breached their organisations’ work conduct. Obviously, the types of corporate behaviour as being portrayed in these three vignettes were not acceptable to the Malaysian internal auditors. It is apparent that internal auditors regard their ethical judgment critically in making their ethical decision. This is consistent with Chiu (2003) who stated that such variable is an integral factor in the formation of individual behavioural intention toward a certain ethical or moral issue. The outcome of this study reveals that internal auditors who believe in the ethicality of internal whistleblowing are more likely to form their behavioural intention to whistleblow than those who do not.

As for locus of control, results of multiple regression analyses in all three vignettes did not show significant relationships with 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) as possessing prosocial behaviour. The reason why the locus of control variable contradicts the expected proposition could be due to the given situations are not under the internal auditors’ control and their decision to internally whistleblow could not influence others. 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.

Finally, as with locus of control, organisational commitment also failed to show support for Hypothesis 4 in any of the vignettes. The inability of organisational commitment to explain whistleblowing behaviour is similar to 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 three vignettes in various forms to determine internal auditors’ ethical decision-making initiatives. By examining the status of wrongdoer in each vignette, Vignette 1 portrays a lower status of wrongdoer involving a Marketing Executive, unlike the other types of wrongdoer in Vignettes 2 (Chief Executive Officer) and 3 (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. CONCLUSIONS**

This is the first study that has tested the whistleblowing behaviour among internal auditors in Malaysia by examining six variables in two categories of factors: demographic and individual variables. The findings reveal 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 study provides preliminary evidence of internal auditors’ ethical behaviour and shows that generally whistleblowing behaviour among Malaysian internal auditors is consistent with the theory of prosocial behaviour. The results of the

current study have potential implications for Malaysian researchers by suggesting that internal auditing profession ought indeed to be regarded as internal whistleblowers. The outcome 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.

This study is not without its limitations. First, the most obvious shortcoming of the current study is the use of self-reported data to determine internal auditors' internal whistleblowing intentions. 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. Second, the study utilised a "set of vignettes" approach to investigate the respondents' internal whistleblowing decisions making process. 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 possibility of social desirability bias problem. Third, researchers have acknowledged that whistleblowing is a function of many different individual, organisational and situational variables (King, 1999; Miceli & Near, 1988; Near & Miceli, 1985). As this study only explores certain variables, further studies need to be conducted in examining other potential variables that may enhance internal auditors' internal whistleblowing intentions.

## REFERENCES

- Ahmad, Z., & Taylor, D. (2009). Commitment to independence by internal auditors: The effects of role ambiguity and role conflict. *Managerial Auditing Journal*, 24(9), 899-925.
- Alexander, C. S., & Becker, H. J. (1978). The use of vignettes in survey research. *The Public Opinion Quarterly*, 42(1), 93-104.
- Arnold, D. F. S., & Ponemon, L. A. (1991). Internal auditors' perceptions of whistle-blowing and the influence of moral reasoning: An experiment. *Auditing: A Journal of Practice & Theory*, 10(2), 1-15.
- Ayers, S., & Kaplan, S. E. (2005). Wrongdoing by consultants: An examination of employees' reporting intentions. *Journal of Business Ethics*, 57(2), 121-137.
- Barnett, T., Cochran, D. S., & Taylor, G. S. (1993). The internal disclosure policies of private-sector employers: An initial look at their relationship to employee whistleblowing. *Journal of Business Ethics*, 12(2), 127-136.
- Brennan, N., & Kelly, J. (2007). A study of whistleblowing among trainee auditors. *The British Accounting Review*, 39(1), 61-87.
- Brief, A. P., & Motowidlo, S. J. (1986). Prosocial organizational behaviors. *The Academy of Management Review*, 11(4), 710-725.
- Chavan, M., & Lamba, A. S. (2007). An international perspective on internal controls in small and medium enterprises. *The Business Review, Cambridge*, 8(1), 80-86.

- Chen, Y.-J. (2007). Relationships among service orientation, job satisfaction, and organizational commitment in the international tourist hotel industry. *Journal of American Academy of Business, Cambridge*, 11(2), 71-82.
- Cherry, J. (2006). The Impact of normative influence and locus of control on ethical judgments and intentions: a cross-cultural comparison. *Journal of Business Ethics*, 68(2), 113-132.
- Chiu, R. K. (2002). Ethical judgement, locus of control, and whistleblowing intention: A case study of mainland Chinese MBA students. *Managerial Auditing Journal*, 17(9), 581-587.
- Chiu, R. K. (2003). Ethical judgment and whistleblowing intention: Examining the moderating role of locus of control. *Journal of Business Ethics*, 43(1/2), 65-74.
- Cohen, J. R., Pant, L. W., & Sharp, D. J. (1993). A validation and extension of a multidimensional ethics scale. *Journal of Business Ethics*, 12(1), 13-26.
- Cohen, J. R., Pant, L. W., & Sharp, D. J. (1996). Measuring the ethical awareness and ethical orientation of Canadian auditors. *Behavioral Research in Accounting*, 8, 98-119.
- Cohen, J. R., Pant, L. W., & Sharp, D. J. (1998). The effect of gender and academic discipline diversity on the ethical evaluations, ethical intentions and ethical orientation of potential public accounting recruits. *Accounting Horizons*, 12(3), 250-270.
- Cohen, J. R., Pant, L. W., & Sharp, D. J. (2001). An examination of differences in ethical decision-making between Canadian business students and accounting professionals. *Journal of Business Ethics*, 30(4), 319-336.
- Curtis, M. B., & Taylor, E. Z. (2009). Whistleblowing in public accounting: Influence of identity disclosure, situational context, and personal characteristics. *Accounting and the Public Interest*, 9, 191-220.
- Donnelly, D. P., Quirin, J. J., & O'Bryan, D. (2003). Auditor acceptance of dysfunctional audit behavior: An explanatory model using auditors' personal characteristics. *Behavioral Research in Accounting*, 15, 87-110.
- Dozier, J. B., & Miceli, M. P. (1985). Potential predictors of whistle-blowing: A prosocial behavior perspective. *Academy of Management Review*, 10(4), 823-836.
- Dworkin, T. M., & Baucus, M. S. (1998). Internal vs. external whistleblowers: A comparison of whistleblowing processes. *Journal of Business Ethics*, 17(12), 1281-1298.
- Eaton, T. V., & Akers, M. D. (2007). Whistleblowing and good governance. *The CPA Journal*, 77(6), 66-71.
- Ellis, T. S., & Griffith, D. (2001). The evaluation of IT ethical scenarios using a multidimensional scale. *Database for Advances in Information Systems*, 32(1), 75-85.
- Flory, S. M., Phillips, T. J., Reidenbach, R. E., & Robin, D. P. (1992). A multidimensional analysis of selected ethical issues in accounting. *The Accounting Review*, 67(2), 284-302.
- Gobert, J., & Punch, M. (2000). Whistleblowers, the public interest, and the Public Interest Disclosure Act 1998. *The Modern Law Review*, 63(1), 25-54.
- Graham, J. W. (1986). Principled organizational dissent: A theoretical essay. *Research in Organizational Behavior*, 8, 1-52.
- Hunt, S. D., & Vitell, S. J. (2006). The general theory of marketing ethics: A revision and three questions. *Journal of Macromarketing*, 26(2), 143-153.
- Jubb, P. B. (1999). Whistleblowing: A restrictive definition and interpretation. *Journal of Business Ethics*, 21(1), 77-93.
- Jubb, P. B. (2000). Auditors as whistleblowers. *International Journal of Auditing*, 4(3), 153-167.
- Jusoh, R., & Parnell, J. A. (2008). Competitive strategy and performance measurement in the Malaysian context. *Management Decision*, 46(1), 5-31.
- Kaplan, S. E. (1995). An examination of auditors' reporting intentions upon discovery of procedures prematurely signed-off. *Auditing: A Journal of Practice & Theory*, 14(2), 90-104.

- Kaplan, S. E., & Schultz, J. J. (2007). Intentions to report questionable acts: An examination of the influence of anonymous reporting channel, internal audit quality, and setting. *Journal of Business Ethics*, 71(2), 109-124.
- Kaplan, S. E., & Whitecotton, S. M. (2001). An examination of auditors' reporting intentions when another auditor is offered client employment. *Auditing: A Journal of Practice & Theory*, 20(1), 45-63.
- Keenan, J. P. (2000). Blowing the whistle on less serious forms of fraud: A study of executives and managers. *Employee Responsibilities and Rights Journal*, 12(4), 85-94.
- King, G. (1999). The implications of an organization's structure on whistleblowing. *Journal of Business Ethics*, 20(4), 315-326.
- Knapp, M. C. (1985). Audit conflict: An empirical study of the perceived ability of auditors to resist management pressure. *The Accounting Review*, 60(2), 202-211.
- Kwon, I.-W. G., & Banks, D. W. (2004). Factors related to the organizational and professional commitment of internal auditors. *Managerial Auditing Journal*, 19(5), 606-622.
- Lacayo, R., & Ripley, A. (2003, January, 6). Persons of the year. *Time*, 38-39.
- Lee, J.-Y., Heilmann, S. G., & Near, J. P. (2004). Blowing the whistle on sexual harassment: Test of a model of predictors and outcomes. *Human relations*, 57(3), 297-322.
- MacNab, B. R., & Worthley, R. (2008). Self-efficacy as an intrapersonal predictor for internal whistleblowing: A US and Canada examination. *Journal of Business Ethics*, 79(4), 407-421.
- McLain, D. L., & Keenan, J. P. (1999). Risk, information, and the decision about response to wrongdoing in an organization. *Journal of Business Ethics*, 19(3), 255-271.
- Mesmer-Magnus, J. R., & Viswesvaran, C. (2005). Whistleblowing in organizations: An examination of correlates of whistleblowing intentions, actions, and retaliation. *Journal of Business Ethics*, 62(3), 277-297.
- Miceli, M. P., & Near, J. P. (1984). The relationships among beliefs, organizational position, and whistle-blowing status: A discriminant analysis. *Academy of Management Journal*, 27(4), 687-705.
- Miceli, M. P., & Near, J. P. (1988). Individual and situational correlates of whistle-blowing. *Personnel Psychology*, 41(2), 267-281.
- Miceli, M. P., & Near, J. P. (1992). *Blowing the whistle: The organizational and legal implications for companies and employees* New York: Lexington Books.
- Miceli, M. P., Near, J. P., & Dozier, J. B. (1991). Blowing the whistle on data fudging: A controlled field experiment. *Journal of Applied Social Psychology*, 21(4), 271-295.
- Miceli, M. P., Near, J. P., & Dworkin, T. M. (2008). *Whistle-blowing in organizations*. New York: Routledge: Lawrence Erlbaum Associates.
- Miceli, M. P., Near, J. P., & Schwenk, C. R. (1991). Who blows the whistle and why? *Industrial & Labor Relations Review*, 45(1), 113-130.
- Ming-Ling, L. (2008). Technology readiness, internet self-efficacy and computing experience of professional accounting students. *Campus - Wide Information Systems*, 25(1), 18-29.
- Morris, S. A., Rehbein, K. A., Hosseini, J. C., & Armacost, R. L. (1995). A test of environmental, situational, and personal influences on the ethical intentions of CEOs. *Business and Society*, 34(2), 119-146.
- Mowday, R. T., Porter, L. W., & Steers, R. M. (1982). *Employee-organization linkages*. New York: Academic Press.
- Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14, 224-247.
- Near, J. P., & Miceli, M. P. (1985). Organizational dissidence: The case of whistle-blowing. *Journal of Business Ethics* 4(1), 1-16.

- Near, J. P., & Miceli, M. P. (1990). *When whistleblowing succeeds: Predictors of effective whistle-blowing*. Paper presented at the Annual Meeting of the Academy of Management, San Francisco.
- Near, J. P., & Miceli, M. P. (1995). Effective whistle-blowing. *Academy of Management. The Academy of Management Review*, 20(3), 679-708.
- Near, J. P., & Miceli, M. P. (2008). Wrongdoing, whistle-blowing, and retaliation in the U.S. Government: What have researchers learned from the Merit Systems Protection Board (MSPB) survey results? *Review of Public Personnel Administration*, 28(3), 263-281.
- Nguyen, N. T., Basuray, M. T., Smith, W. P., Kopka, D., & McCulloh, D. (2008a). Ethics perception: Does teaching make a difference? *Journal of Education for Business*, 84(2), 66-75.
- Nguyen, N. T., Basuray, M. T., Smith, W. P., Kopka, D., & McCulloh, D. (2008b). Moral issues and gender differences in ethical judgment using Reidenbach and Robin's (1990) Multidimensional Ethics Scale: Implications in teaching of business ethics. *Journal of Business Ethics*, 77(4), 417-430.
- O'Fallon, M. J., & Butterfield, K. D. (2005). A review of the empirical ethical decision-making literature: 1996-2003. *Journal of Business Ethics*, 59(4), 375-413.
- Park, H., Rehg, M. T., & Lee, D. (2005). The influence of Confucian ethics and collectivism on whistleblowing intentions: A study of South Korean public employees. *Journal of Business Ethics*, 58(4), 387-403.
- Patel, C. (2003). Some cross-cultural evidence on whistle-blowing as an internal control mechanism. *Journal of International Accounting Research*, 2, 69-96.
- Pearson, T. C., Gregson, T., & Wendell, J. (1998). A primer for internal auditors considering whistle blowing. *Internal Auditing*, 13(5), 9-19.
- Pool, S., & Pool, B. (2007). A management development model: Measuring organizational commitment and its impact on job satisfaction among executives in a learning organization. *Journal of Management Development*, 26(4), 353-369.
- Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of Applied Psychology*, 59, 603-609.
- Rehg, M. T., Miceli, M. P., Near, J. P., & Van Scotter, J. R. (2008). Antecedents and outcomes of retaliation against whistleblowers: Gender differences and power relationships. *Organization Science*, 19(2), 221-240.
- Reidenbach, R. E., & Robin, D. P. (1988). Some initial steps toward improving the measurement of ethical evaluations of marketing activities. *Journal of Business Ethics*, 7(11), 871-879.
- Reidenbach, R. E., & Robin, D. P. (1990). Toward the development of a multidimensional scale for improving evaluations of business ethics. *Journal of Business Ethics*, 9(8), 639-653.
- Rothschild, J., & Mieth, T. D. (1999). Whistle-blower disclosures and management retaliation: The battle to control information about organization corruption. *Work and Occupations*, 26(1), 107-128.
- Rothwell, G. R., & Baldwin, J. N. (2007). Ethical climate theory, whistle-blowing, and the code of silence in police agencies in the State of Georgia. *Journal of Business Ethics*, 70(4), 341-361.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monograph*, 80, 1-28.
- Salleh, A. L., & Dali, A. (2009). Third party logistics service providers and logistics outsourcing in Malaysia. *The Business Review, Cambridge*, 13(1), 264-270.
- Schminke, M., Ambrose, M. L., & Miles, J. A. (2003). The impact of gender and setting on perceptions of others' ethics. *Sex Roles*, 48(7/8), 361-375.
- Shawver, T. J. (2008). What accounting students think about whistleblowing: are future accounting professionals willing to whistleblow internally or externally for ethics violations? *Management Accounting Quarterly*, 9(4), 33-41.

- Shawver, T. J., & Clements, L. H. (2008). Whistleblowing: Factors that contribute to management accountants reporting questionable dilemmas. *Management Accounting Quarterly*, 9(2), 26-38.
- Shawver, T. J., & Sennetti, J. T. (2009). Measuring ethical sensitivity and evaluation. *Journal of Business Ethics*, 88(4), 663-678.
- Sims, R. L., & Keenan, J. P. (1998). Predictors of external whistleblowing: Organizational and intrapersonal variables. *Journal of Business Ethics*, 17(4), 411-421.
- Singer, M., Mitchell, S., & Turner, J. (1998). Consideration of moral intensity in ethicality judgements: Its relationship with whistle-blowing and need-for-cognition. *Journal of Business Ethics*, 17(5), 527-541.
- Siu, O.-I., Spector, P. E., Cooper, C. L., & Donald, I. (2001). Age differences in coping and locus of control: A study of managerial stress in Hong Kong. *Psychology and Aging*, 16(4), 707-2001.
- Smith, M., Abdullah, Z., & Abdul Razak, R. (2008). The diffusion of technological and management accounting innovation: Malaysian evidence. *Asian Review of Accounting*, 16(3), 197-218.
- Somers, M. J., & Casal, J. C. (1994). Organizational commitment and whistle-blowing: A test of the reformer and the organization man hypothesis. *Group & Organization Management*, 19(3), 270-284.
- Spector, P. E. (1982). Behavior in organizations as a function of employee's locus of control. *Psychological bulletin*, 91(3), 482-497.
- Spector, P. E. (1988). Development of the work locus of control scale. *Journal of Occupational Psychology*, 61(4), 335-340.
- Street, M. D. (1995). Cognitive moral development and organizational commitment: Two potential predictors of whistleblowing. *Journal of Applied Business Research*, 11(4), 104-110.
- Trevino, L. K. (1986). Ethical decision making in organizations: A person-situation interactionist model. *The Academy of Management Review*, 11(3), 601-617.
- Trevino, L. K., & Youngblood, S. A. (1990). Bad apples in bad barrels: A causal analysis of ethical decision-making behavior. *Journal of Applied Psychology*, 75(4), 378-385.
- Tsahuridu, E. E., & Vandekerckhove, W. (2008). Organisational whistleblowing policies: Making employees responsible or liable? *Journal of Business Ethics*, 82(1), 107-118.
- Tuttle, B., Harrell, A., & Harrison, P. (1997). Moral hazard, ethical considerations, and the decision to implement an information system. *Journal of Management Information Systems*, 13(4), 7-27.
- Tuttle, B., Harrell, A., & Jackson, C. (1997). Incentive to shirk, privately held information, and the decision to implement an information system with known quality problems. *Advances in Accounting Information Systems*, 5, 147-165.
- Vermeir, I., & Van Kenhove, P. (2008). Gender differences in double standards. *Journal of Business Ethics*, 81(2), 281-295.
- Wortman, J. S. (2006). *Ethical decision-making: The effects of temporal immediacy, perspective-taking, moral courage and ethical work climate*. University of Nebraska, Lincoln, Nebraska.
- Xu, Y., & Ziegenfuss, D. E. (2008). Reward systems, moral reasoning, and internal auditors' reporting wrongdoing. *Journal of Business and Psychology*, 22(4), 323-331.
- Yu, O., & Zhang, L. (2006). Does acceptance of corporate wrongdoing begin on the "training ground" of professional managers? *Journal of Criminal Justice*, 34(2), 185-194.