

PREDICTING WHISTLE-BLOWING INTENTION AMONG SUPERVISORS IN MALAYSIA

Nadzri Ab Ghani

Curtin Graduate School of Business, Curtin University, Perth, Australia
nadzri.abghani@gmail.com

Jeremy Galbreath

Curtin Graduate School of Business, Curtin University, Perth, Australia
Jeremy.Galbreath@gsb.curtin.edu.au

Robert Evans

Curtin Graduate School of Business, Curtin University, Perth, Australia
Robert.Evans@gsb.curtin.edu.au

The function of whistle-blowing as an effective internal control mechanism has long been accepted around the globe. Several individual factors have been considered as predictive variables of whistle-blowing intention. However, findings are still inconclusive. Using the theory of planned behaviour as a framework, this study examines the relationship between the selected predictive variables (internal locus of control, work experience and ethics training) and whistle-blowing intention. Data were collected randomly from 311 supervisors within large manufacturing companies in Malaysia. Applying multiple regression analysis, results indicated that work experience and ethics training are significantly related to whistle-blowing intention. On the other hand, there is no significant relationship between internal locus of control and whistle-blowing intention. Implications for theory and practice from the findings are discussed.

Keywords: whistle-blowing intention, theory of planned behaviour, internal locus of control, work experience, ethics training, Malaysia

INTRODUCTION

Ethical breaches have constituted many accounting scandals which have resulted in the collapse of some high profile corporations around the world, including Enron and World Com (MacNab and Worthley, 2008). These accounting scandals, generally referred to as corporate misconduct, came to light due to whistle-blowing actions of company employees (both former and present employees) who believed that any misconduct occurring in their corporation should be dealt with correctively by the authorities (Pulliam and Solomon, 2002). The actions of the concerned employees in reporting corporate misconduct is known as whistle-blowing. They, themselves, are known as whistle-blowers (Saha 2008) and are sometimes considered as a “model employee to organizations” (Vinten 1999).

Whistle-blowing has been defined 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 who may be able to effect action” (Near and Miceli, 1985, p. 4). Read and Rama (2003) suggest that whistle-blowing is an aspect of ethics management. Thus, effective corporate governance in an organization can be enhanced through whistle-blowing practice. This is substantiated by Ponemon (1994, p. 118), who states that “whistle-blowing can play an essential role as a perspective and defective control if organization explicitly incorporates reporting mechanism that discloses incident of wrongdoing into its internal control structure”. In other words, whistle-blowing can play an important role in the internal control environment of an organization (Read and Rama, 2003).

At present, whistle-blowers in US corporations appear to be more courageous, compared to their Asian counterparts, in embracing whistle-blowing actions (Park, Rehg and Lee, 2005). One of the possible reasons could be due to the perception of the whistle-blowing action itself. For instance, in countries such as China, Japan and Hong Kong, whistle-blowing can be regarded as unacceptable behaviour (Bond 1996; Fukuyama 1995; Redding 1990). In Malaysia, whistle-blowing action is not a popular means of reporting wrong-doing in organizations (Ngui 2005). Pricewaterhouse Coopers Global Economic Crime Survey 2005 reports that 23% of large Malaysian companies are subjected to misconduct in terms of unreported fraud (PricewaterhouseCoopers 2006). Therefore, whistle-blowing research in Malaysia is deemed significant, especially in investigating the possible factors which could influence the decision to whistle-blow and at the same time highlight the important function of whistle-blowing action as an internal control mechanism.

In Malaysia, the function of whistle-blowing as an internal control mechanism has been considered only recently by statutory authorities (Anwar 2003). Specifically, Malaysia introduced its first whistle-blowing law in 2003 under the Securities Industry (Amendment) Act 2003 (Wahab 2003). Hence, in moving towards a corruption free country, the government has urged major stakeholders to uphold whistle-blowing law with the provision of protections, incentives and non-monetary rewards for whistleblowers (Hassan 2006). Further, accountants, auditors and advisors must provide assurance on financial statements and must not hold any tolerance for corporate misconduct. In addition, investors and other users must be accountable for their decisions; thus, decisions must be made under the spirit of transparency (Yakcob 2005).

Given the above, the interest of this study is to re-examine several individual variables of whistle-blowing intention in the form of an introduction to an intercultural perspective that may give a whole new interpretation to research on whistle-blowing (Park, Blenkinsopp, Oktem and Omurgonulsen, 2008). Further, Vogel (1992) asserted that whistle-blowing is particularly affected by cultural contexts, as perceptions of right versus wrong, justice, morality and loyalty may differ very much in different countries. Moreover, human behaviour is believed to be a result of one's cultural and social backgrounds (Chiu and Kosinski, 1999). Hence, employees with different socio-economic influences may have different views on what is ethical or not (Chen 2001). Thus, this study expands the study of whistle-blowing by examining the relationship between the selected individual (personal) variables and whistle-blowing intention in a cultural context previously unexplored. Selection of individual variables is based on Miceli and Near's (1992) model of whistle-blowing decision-making.

To date, studies on individual variables of whistle-blowing intention have become popular (Keil, Tiwana, Sainsbury and Sneha, 2010; Lih-Bin and Hock-Hai, 2010; Taylor and Curtis, 2010; Zhang, Chiu and Li-Qun, 2009a). Yet, findings on the relationships between some of the individual variables and whistle-blowing intention are still open for discussion (Miceli, Near and Dworkin, 2008). The individual variables; namely, internal locus of control, work experience and ethics training, are predicted to influence whistle-blowing intention. The relationship between internal locus of control and whistle-blowing intention has produced inconclusive empirical results ranging from a positive

relationship (Miceli and Near, 1992; Stead, Worrell and Stead, 1990; Trevino 1986) to a mixed relationship (Wise 1995) to a moderated relationship (Chiu 2003) and even an insignificant relationship (Miceli et al., 1991; Starkey 1998). Similarly, results for work experience range from a positive relationship (Brewer and Selden, 1998; Dworkin and Baucus, 1998; Goldman 2001; Miceli and Near, 1988) to a mixed relationship (Wise 1995) and to an insignificant relationship (Keenan and Sims, 1995; Lee, Heilmann and Near, 2004; Sims and Keenan, 1998).

The inclusion of ethics training is based on a proposition from Jones, Massey and Thorne (2003) as an important factor to affect an individual's intention to act ethically. Frisque and Kolb (2008) agree that an ethics training program could provide a huge impact on an individual's decision to blow the whistle. Besides, Miceli, Near and Dworkin (2008, p. 190) advise that there is "... no controlled research demonstrating the effectiveness of ethics training regarding whistle-blowing and such research is sorely needed". Hence, this study would like to consider the proposition by Jones, Massey and Thorne (2003) for the direct relationship between ethics training and whistle-blowing intention. Thus, the empirical result for the relationship would add to the literature of whistle-blowing research.

Re-examining the relationship between internal locus of control, work experience, ethics training and whistle-blowing intention is deemed significant and differs from other previous studies in several ways. First, this study would offer an alternative explanation for the inconclusive empirical results obtained from previous studies on the direct effects between the variables and whistle-blowing intention. As evidenced, only limited studies have investigated whistle-blowing intention in a non-western context (Lih-Bin and Hock-Hai, 2010; Park and Blenkinsopp, 2009; Zhang, Chiu and Li-Qun, 2009a), and thus, results of this study are expected to, at least, bridge the gap between western and non-western differences. Therefore, re-examination of whistle-blowing intention in the Malaysian environment will indirectly reveal cultural influences on whistle-blowing actions. New interpretations of whistle-blowing behaviour and actions among Malaysians would add significantly to whistle-blowing literature.

Secondly, following the calls from Malaysian authorities, the impact of the first Malaysian whistle-blowing law has been studied very little and more knowledge is needed regarding how effective the law is in affecting one's decision to blow the whistle (Anwar 2003; Hassan 2006; Yakcob 2005). As argued by Patel (2003), whistle-blowing research in Malaysia is virtually non-existent. Thus, this study would fill the gap by being one of the first researches on whistle-blowing, providing empirical results which would benefit both theory and practice within the Malaysian environment. Moreover, this study would offer a new usage of theory (Theory of Planned Behaviour) investigating the direct relationships between the selected variables and whistle-blowing intention. Most theories used in whistle-blowing intention studies are based on pro-social behaviour (Dozier and Miceli, 1985; Miceli and Near, 1985) and motivational perspective (Miceli and Near, 1992). This study considers the theory of planned behaviour because the theory clearly proposes the relationship between an individual's intentions and his/her behaviour and actions (Ajzen 1991).

Finally, from a methodological perspective, this study differs from other whistle-blowing intention studies in terms of its respondents and samples. In highlighting the chosen respondents of supervisors, this study intentionally deviates from normal samples of bank managers (Chiu 2003), civil servants (Starkey 1998), management accountants (Shawver and Clements, 2008), internal auditors (Arnold and Ponemon, 1991) and MBA students (Chiu 2002). The rationale for choosing supervisors is based on the argument that reports of wrongdoing are usually made by members close to the inner workings of an organization (Mesmer-Magnus and Viswesvaran, 2005). Further, this study considers a simple random sampling of listed manufacturing companies in Malaysia. Manufacturing companies are posited as an adequate environment because such companies often report incidents of wrongdoing (Hooks, Kaplan

and Schultz, 1994). Both the chosen respondents and samples are recommended by the Malaysian authority when investigating whistle-blowing research in Malaysia (Ghazali 2005; Khan 2003).

DEVELOPMENT OF HYPOTHESES

Whistle-blowing intention

Since the dependent construct of this study is whistle-blowing intention rather than actual whistle-blowing action, the issue of behavioural intention needs to be understood. According to Ajzen's (1991) theory of planned behaviour, "behavioural intention is a good predictor of actual behaviour" (Chiu, 2003, p. 66). A behavioural intention is the subjective probability that an individual assigns to the likelihood that a given behavioural alternative will be chosen (Ajzen 1991; Hunt and Vitell 1986). According to Demetriadou (2003), an individual's behavioural intention is a weighted additive function of three elements; namely, the individual's attitude, subjective norm and perceived behavioural control. Chiu (2003) defines all the elements as such: the individual's attitude is the individual's judgment of that behaviour, subjective norm is the individual's perceived acceptability of that behaviour and, finally, perceived behavioural control is the individual's perception of the difficulty level of performing that behaviour. With all these elements, the dependent variable of this study, whistle-blowing intention, is referred to as "the individual's probability of actually engaging in whistle-blowing behaviour" (Chiu, 2002, p. 582).

The interest to study whistle-blowing intention rather than actual whistle-blowing action stems from the impossibility and difficulty of carrying out investigations of unethical conduct in the workplace by first hand observation (Victor, Trevino and Shapiro, 1993). Yet, a study on restaurant employees in the fast food industry provides evidence that behavioural intention correlates with actual peer reporting of unethical behaviour (Victor, Trevino and Shapiro, 1991). Therefore, whistle-blowing intention is deemed appropriate in the context of this study.

Internal locus of control and whistle-blowing intention

Internal locus of control refers to the belief that outcomes are generally contingent upon the work and effort put into them (Keller and Blomann, 2008). Unlike other variables, internal locus of control is the most likely to affect whistle-blowing decisions (Miceli and Near, 1992). The reason is that a whistle-blower may be strongly motivated by the degree to which the situation is potentially under his/her control (Chiu 2002). Previous studies have concluded that when individuals share in individual determinants, they share in ethical disposition (Ford and Richardson, 1994; Loe, Ferrell and Mansfield, 2000).

According to the theory of planned behaviour, an individual may have the intention to perform behaviour if they perceive that they are in control of the situation and the likely outcome (Ajzen 1991). This means that the variable "internal locus of control" connects to the third element in the theory of planned behaviour (Chiu 2003). In support, Chiu (2003) argues that Rotter's (1966) study of the locus of control echoes the perceived behavioural control suggested by Ajzen (1991) in relation to one's internal locus of control. Thus, linking with the theory of planned behaviour, this study's predictive variable of "internal locus of control" falls within the element of the perceived behavioural control in suggesting an individual's intention to perform behaviour.

Miceli and Near (1992) discovered that the locus of control is one of the characteristics that affects whistle-blowing decisions. The researchers believe this is because whistleblowers may be strongly motivated by the degree to which conditions suggest that the situation is potentially under their control. They argue that individuals with an internal

locus of control may have more propensities to blow the whistle. In agreement, the relationship between internal locus of control and whistle-blowing intention can be deduced based on the idea that “individuals who have internal locus of control may blow the whistle when their external locus of control counterparts would not” (Chiu, 2003, p. 67). Therefore, the following hypothesis is proposed.

Hypothesis 1: Internal locus of control is positively associated with whistle-blowing intention

Work experience and whistle-blowing intention

Work experience means the individual’s length of time employed by his/her current organization (Cherry 2006). Adequate work experience is essential in influencing one’s decision to whistle-blow (Miceli and Near, 1988; Sims and Keenan, 1998). Experienced individuals generally will be expected to have more knowledge about organizational operations, stronger commitment and more loyalty to their organizations than inexperienced individuals (Morrow and McElroy, 1987; Sims and Keenan, 1998).

Linking with the theory of planned behaviour, work experience is one of the antecedent variables ‘external’ to the theory. These variables ‘external’ to the theory are variables that influence an individual in relation to each element of his/her attitude, subjective norm and perceived behavioural control when forming an intention to perform behaviour (Demetriadou 2003). According to Ajzen (1988), antecedent variables ‘external’ to the theory include individual characteristics such as self-esteem and personality, as well as other demographic or background variables such as work experience and ethics training. These have been postulated in previous literatures to influence whistle-blowing behaviour (Miceli, Van Scotter, Near and Rehg, 2001).

According to Miceli, Van Scotter, Near and Rehg (2001), demographic variables have effects on the perceived efficacy of whistle-blowing behaviour, apart from other factors. A review on the relationship between work experience and whistle-blowing suggests that employees with work experience are more likely to blow the whistle (Trevino, Weaver and Reynolds, 2006). Following Thorne, Massey and Magnan (2003), investigation of the relationship between work experience and whistle-blowing is needed when dealing with whistle-blowing. Therefore, the following hypothesis is proposed.

Hypothesis 2: Work experience is positively associated with whistle-blowing intention

Ethics training and whistle-blowing intention

Ethics training is defined as the curriculum or program which provides thoughts and applications of ethics in decision-making processes (Frisque and Kolb, 2008). According to Jones, Massey and Thorne (2003), ethics training could be regarded as an important factor regarding an individual’s intention to act ethically. Research also has indicated the influence of ethics training in deciding which action to take when faced with ethical challenges (Kolb, Frisque and Lin, 2004; Trevino 2007; Weaver, Trevino and Agle, 2005). Further, scholars posit that ethics training must be provided to solidify employees’ duty to report wrongdoing or encourage whistle-blowing (Applebaum, Grewal and Mousseau, 2006; Baker 2008; Near and Miceli, 1994).

Similarly, when linking with the theory of planned behaviour, ethics training also is one of the variables ‘external’ to the theory. Again, by referring to Ajzen’s (1988) model of planned behaviour, antecedent variables external to the model include demographics, personality characteristics and situational variables. Thus, these variables are

considered as variables 'external' to the theory. Adopting Miceli, Van Scotter, Near and Rehg (2001), these variables 'external' to the theory have influenced whistle-blowing behaviour in previous studies.

Literatures have proven that ethics training can increase the likelihood of the disclosure of wrongdoing (Sheler 1981). For example, Miceli and Near (1985) suggest that an organization can prevent demoralization and, at the same time, can increase employees' awareness of wrongdoing. Commenting further, the researchers agreed that, with ethics training, employees' intentions to blow the whistle on wrongdoing may be enhanced and fulfilled by an organization. Proven in studies by Applebaum, Grewal, and Mousseau (2006) and Baker (2008), the scholars believe that the existence of ethics training in organizations may promote employees' decisions to whistle-blow. Therefore, the following hypothesis is proposed.

Hypothesis 3: Ethics training is positively associated with whistle-blowing intention

METHODS

Sample

This study uses large manufacturing companies listed under Bursa Malaysia Berhad (BMB), the stock-broking company in Malaysia (BMB 2009). Large manufacturing companies refers to manufacturing companies having more than 1,000 employees and market capitalization of RM500 million (BMB 2009; FMM 2008). The rationale for choosing such companies is based on the provisions under the Malaysian whistle-blowing law of 2003, and further, such companies are more likely to run investigations for whistle-blowing behaviour (Ghazali 2005; Hooks, Kaplan and Schultz, 1994).

To collect data, the role of supervisor was chosen for respondents in this study. The rationale for choosing supervisors is based on the argument that reports of wrongdoings are usually made by members close to the inner workings of an organization (Mesmer-Magnus and Viswesvaran, 2005) and, moreover, supervisors who intend to disclose their organization's malpractice will be protected from victimization and retaliation under Malaysia's whistle-blowing provisions i.e., the Securities Industry (Amendment) Act 2003 (Khan 2003).

Using the BMB 2009 directory, five companies from each of three sectors (consumer product, industrial product and technology) were randomly selected to form the sample of this study. A total of 600 surveys were distributed to supervisors in all 15 companies. Of the 600 surveys, 346 were returned, representing a 57.7% response rate. However, after a data screening process, a total of 311 completed questionnaires were used in this study, representing a 51.8% response rate. The response rate is deemed appropriate because Babbie (1986) suggests that a response rate of at least 50% is adequate for analysis and reporting, while 50% to 60% is good for research on a sensitive topic.

Table 1: Profiles of Respondents

Demographic profile	Number of respondents (N = 311)	Valid percentage (%)
Gender:		
Male	156	50.2
Female	155	49.8
Marital status:		
Single	113	36.3
Married	198	63.7
Race:		
Malay	196	63.0
Chinese	68	21.9
Indian	47	15.1
Age:		
<30	18	5.8
30-40	213	68.5
>40	80	25.7
Educational level:		
Diploma	87	28.0
Degree	135	43.4
Master degree	19	6.1
Other qualification	70	22.5
Size of organization:		
1000 - 1999	207	66.5
2000 - 2999	82	26.4
3000 - 3999	22	7.1
Working experience:		
< 5 years	94	30.2
5 – 10 years	102	32.8
>10 years	115	37.0

Table 1 displays the profiles of respondents. All information is presented in actual figures and percentages to facilitate interpretation. The proportion of males to females was 50.2% males and 49.8% females, with 63.7% of the respondents being married and 36.3% single. The respondents were mainly Malay (63.0%), Chinese (21.9%) and Indian (15.1%) with 68.5% of them aged between 30 to 40 years. In total, 43.4% of the respondents had a university degree and a total of 33.5% worked in large companies having more than 2,000 employees. More than half (69.8%) of the respondents had a working experience of five years and above.

MEASURES

This study considers the fact that the respondents are Malaysians and little research has been conducted using the chosen measures outside of western countries. Therefore, a back-translation process was utilized to minimize any possible variance due to cultural and linguistic differences.

Internal locus of control

Internal locus of control was measured using Spector's (1988) Work Locus of Control Scale (WLCS). Recent studies employing work locus of control suggest that the construct is an important and useful personality variable for explaining behaviour in a work setting (Oliver, Jose and Brough, 2006). Using Spector's (1988) WLCS, respondents

were asked to indicate their beliefs by answering eight items designed to tap internal locus of control. An example of an internal locus of control item is “A job is what you make of it”. As recommended by Spector, a 6-point Likert-type response format was used (1 = strongly disagree to 6 = strongly agree). The reliability of the scale was $\alpha = 0.882$.

Work experience

Work experience was measured by asking respondents to indicate the length of their employment in their organization. The respondents stated the number of years for their length of employment (Mesmer-Magnus and Viswesvaran, 2005; Sims and Keenan, 1998).

Ethics training

Ethics training was measured by asking respondents to indicate ‘yes’ or ‘no’ answers to four questions, for example, “Does your school/university/other institutions that you have attended offer ethics courses?” and “Does your company offer training on ethics?”. The measurement method was modified from Daniels’ (2009) original version.

Whistle-blowing intention

Whistle-blowing intention was measured using a short vignette adapted from Demetriadou (2003). A vignette is a “short description of a person or social situation which contains precise reference to what are thought to be the most important factors in decision-making or the judgment-making process of respondents” (Alexander and Becker, 1978, p. 94). The vignette approach was utilized in this study because the vignette provides a more realistic context for the respondents, i.e., they, themselves, are placed in the position of a character portrayed in a hypothetical situation (Reidenbach and Robin, 1990; Weber 1992; Patel 2003). Along with the vignette, a four-item semantic differential scale of behavioural intention has been adapted from Barnett, Bass and Brown (1996) and used to measure whistle-blowing intention. This scale was utilized because it displays respondents’ intentions in a consistent manner for the given vignette (Barnett, Bass and Brown, 1996; Zhang, Chiu and Wei, 2009b). The respondents were asked to read the vignette and assess the probability of blowing the whistle in terms of both “given the hypothetical situation above, indicate your likelihood to report the observed violation to the next higher level” and “given the hypothetical situation above, indicate your colleagues’/peers’ likelihood to report the observed violation to the next higher level”. The purpose of asking the respondents to imagine their colleagues’/peers’ behavioural intention was to identify any social desirability response bias that might be present in the responses (Watkins and Cheung, 1995). A six point scale ranging from 6 (definitely would) to 1 (definitely would not) was used. The reliability of the scale was $\alpha = 0.965$.

Control variables

Gender, educational level and firm size were included as control variables. Gender was a dichotomous variable represented by male = 1 and female = 2. Educational level was measured using a nominal scale and was coded as a four-level variable: 1 (Diploma), 2 (Degree), 3 (Master’s degree) and 4 (other qualification). Firm size was measured with a single item: number of full-time equivalent employees. The control variables had been proposed by Miceli and Near (1992) to be potential influences on whistle-blowing decisions (Barnett, Bass and Brown, 1996; Barton 1995; Miceli, Near and Dworkin, 2008).

ANALYSIS AND RESULTS

Table 2: Mean (M), standard deviation (SD) and correlation between the study variables

Variables	M	SD	1	2	3	4	5	6	7
1. Internal locus of control	2.50	0.88	1.00	-	-	-	-	-	-
2. Work experience	8.42	4.99	0.00	1.00	-	-	-	-	-
3. Ethics training	1.47	0.46	0.09	-0.24*	1.00	-	-	-	-
4. Whistle-blowing intention	3.85	1.79	0.02	0.18**	0.25**	1.00	-	-	-
5. Gender			-0.03	-0.09	0.13*	0.02	1.00	-	-
6. Educational level			0.01	0.17**	-0.08	0.03	-0.12*	1.00	-
7. Firm size	1855		-0.09	-0.05	-0.07	-0.06	-0.05	-0.08	1.00

* $p < 0.05$; ** $p < 0.01$

Means, standard deviations and correlations are presented in Table 2. The correlations between the variables were in the predicted direction and significant at $p < 0.01$ except for internal locus of control. In general, there was a small tendency to whistle-blow and the internal locus of control appeared not to be strongly manifested among the respondents, as indicated by the means of 3.8 and 2.5, respectively, assessed in a 6 point scale. The average work experience of the respondents was 8 years. In addition, most of the respondents were not well exposed to ethics training. All control variables were found not to be correlated with the dependent variable indicating that there is no confounding effect on the hypothesized relationships. Thus, the decision is to exclude all control variables for further analysis.

All hypotheses were tested using multiple regression analysis. Prior to hypothesis testing, multicollinearity was tested via variance inflation factors (VIF) and tolerance levels. Because the highest VIF is 1.610 and the lowest tolerance value is 0.621, multi-collinearity among the independent variables does not seem to be a problem (Hair, Anderson, Tatham and Black, 1998).

Table 3: Multiple regression analysis results for the relationships between the predictive variables and whistle-blowing intention

Predictor	Coefficients		
	Beta	t	Sig.
Internal locus of control	-0.04	-0.69	0.490
Work experience	0.53***	8.40	0.000
Ethics training	0.57***	9.07	0.000

Note: *** $p < 0.001$

R square 0.24
F value 31.83

Table 3 indicates that the three independent variables accounted for 24% of the variance in whistle-blowing intention among supervisors. Work experience ($\beta = 0.53$, $t = 8.40$, $p < 0.001$) and ethics training ($\beta = 0.57$, $t = 9.07$, $p < 0.001$) were found to be significantly and positively associated with whistle-blowing intention. Thus, hypotheses 2 and 3 are confirmed. Yet, internal locus of control was found not to be significantly associated with whistle-blowing intention ($\beta = -0.04$, $t = -0.69$, $p = 0.49$). Hypothesis 1 is not supported.

DISCUSSION

This study investigates direct relationships between internal locus of control, work experience, ethics training and whistle-blowing intention, using a sample of Malaysian supervisors in manufacturing companies. Hypothesis 1 is not supported: internal locus of control has no relationship with whistle-blowing intention. This result is consistent with prior studies in a western context (Miceli, Dozier and Near, 1991; Starkey 1998). In the study by Miceli, Dozier and Near (1991), internal locus of control had no effect on students' propensity to report wrongdoing by a research assistant to their university's research committee representative. Using a different sample, Starkey (1998) found that when scenarios describing wrongdoing were presented to hospital employees, no relationship was found between employees' internal locus of control and whistle-blowing intention.

Miceli, Near and Dworkin (2008) justify the non-significant relationship between internal locus of control and whistle-blowing intention using two previous studies. First, Wise (1995) concluded that one's decision to whistle-blow may vary according to that individual's beliefs, situations and surroundings. Secondly, having similar arguments, Chiu (2002) suggests that whistle-blowing behaviour among Chinese people is influenced by traditional Chinese cultural values and teachings. In the case of the current study, the non-significant relationship between internal locus of control and whistle-blowing intention among supervisors may be influenced by the collectivistic culture in Malaysia.

According to Spector, Sanchez, Siu, Saldago and Ma (2004), people in collectivist cultures view themselves in terms of social connections and group harmony. In other words, people are integrated into in-groups, for example, family or business associates or society as a whole. Further, Spector et al. (2004) argue that, in order to be effective in a collectivist society, a person must cultivate relationships with colleagues at all levels and must express a high level of sensitivity. Thus, referring to the result in this study, supervisors in large manufacturing companies may prefer to apply social standards in their intention to whistle-blow by behaving in ways that seem socially appropriate for the situation (Snyder 1987) and thus, demonstrate low levels of self-directedness (Bandura 1991).

Moreover, collectivist cultures reflect the subordination of personal goals to group goals, a sense of harmony and independence, and concern for others (Hofstede 1991). Malaysia has three major ethnic groups: Malay, Chinese and Indian. However, Abdullah (1996) states that, although Malaysian society is a multi-cultural mix, Malaysian workers share common and distinct workplace values. In this study, Malays form the majority of the respondents (Table 1). Previous studies have indicated that Malays represent a collectivist community with collectivist minds (Abdullah 1996; Hofstede 1980; House, Hanges, Javidan, Dorfman and Gupta, 2004). Thus, it could be concluded that the non-significant relationship between internal locus of control and whistle-blowing intention provides the collectivistic view on the issue of whistle-blowing intention.

Hypothesis 2 is confirmed. Work experience has a significant and positive relationship with whistle-blowing intention. This result is consistent with prior studies in a western context (Brewer and Selden, 1998; Goldman 2001). The result shows that adequate work experience is essential in determining an individual's decision to whistle-blow

(Mesmer-Magnus and Viswesvaran, 2005; Miceli and Near, 1988; Sims and Keenan, 1998). An experienced individual generally will be expected to have more knowledge about organizational operations, as well as stronger commitment and more loyalty to their organization than an inexperienced individual (Morrow and McElroy, 1987; Sims and Keenan, 1998). Hence, the positive relationship between work experience and whistle-blowing intention proved that Malaysian supervisors with more working experience are likely to have an intention to whistle-blow on wrongdoing. Previously, work experience is believed could elevate the morality of individuals (Gupta and Sulaiman, 1996)

Finally, ethics training is confirmed to have a significant and positive relationship with whistle-blowing intention. This result supports suggestions from western scholars about the function of ethics training in relation to ethical intention or behaviour such as whistle-blowing intention (Jones, Massey and Thorne, 2003; Frisque and Kolb, 2008; Miceli, Near and Dworkin, 2008). Individuals with ethics training have the advantage of applying reasoning to a dilemma in an appropriate way (Trevino, Weaver and Reynolds, 2006). Supported by Rossouw (2002), the cognitive competence, or the acquisition of the mental knowledge and skills, can be developed through training and may form bridges toward ethical decision-making (Ritter 2006). In this study, result indicated that Malaysian supervisors who attend ethics training courses may have the ability to resolve dilemmas ethically. In short, adequate ethics training may enhance the ethical values among supervisors in Malaysia.

Implication for theory

This study makes three major contributions to theory. First, as a preliminary study involving whistle-blowing in Malaysia, this study provides new literature on whistle-blowing research in a non-western context. Thus, the results of this study may additionally provide a comparison of whistle-blowing behaviour between western and non-western countries (Keenan 2007). Secondly, this study provides further insight on the direct relationship between internal locus of control, work experience, ethics training and whistle-blowing intention. For instance, differences in application of theory, respondents and samples in this study are beneficial in advancing the knowledge in the field of whistle-blowing. Lastly, this study considers the suggestion made by Jones, Masey and Thorne (2003) to examine the relationship between ethics training and whistle-blowing intention. This effort brings a new avenue of research in the field of whistle-blowing.

Practical implications

This study offers two major managerial contributions. First, apart from relying wholly on educational level in exercising promotion to the supervisory level, work experience should be an additional factor that should be considered. Based on the results, experience workers appear to have tendency to become good supervisors. They are more willing to whistle-blow. If organisation is serious about implementing whistle-blowing as one of the internal control mechanism, supervisors' willingness to whistle-blow plays an important role in ensuring the success of this approach. Secondly, organization should consider designing and providing a well structured and comprehensive ethics training program among their employees, particularly, supervisors. Previously, scholars posit that ethics training must be provided to solidify employees' duty to report wrongdoing or encourage whistle-blowing (Applebaum, Grewel and Mousseau, 2006; Baker 2008; Near and Miceli, 1994). In addition, the current result further confirmed on the assertion that ethics training help individuals to make ethical decision when faced with ethical challenges (Kolb, Frisque and Lin 2004; Trevino 2007; Weaver, Trevino and Agle 2005).

Limitations and directions for future research

Using a hypothetical vignette to evaluate whistle-blowing intention may be subjected to social desirability bias. However, several preventive steps, such as guaranteed anonymity and confidentiality of individual responses, were taken to ensure that social desirability bias was minimized (Podsakoff, P.M., MacKenzie, Lee and Podsakoff, N.P., 2003). It is also worth to note that, generalisability of the findings may be limited to supervisors working in the listed manufacturing companies. Future research should incorporate other individual and contextual variables that influence whistle-blowing intention. A mixed-method approach could be applied to strengthen the results and gain better understanding of the hypothesized relationships. A cross-cultural study would also provide comparative results on whistle-blowing intention among employees in western and non-western countries.

CONCLUSION

This study has contributed to an understanding of whistle-blowing intention. Specifically, work experience and ethics training are positively associated with whistle-blowing intention. Interestingly, internal locus of control is not significantly related to whistle-blowing intention. A plausible explanation to the non-significant relationship might be due to the collectivistic culture of Malaysia. Taken together, the findings of this study pave the way for further investigation on predictive factors of whistle-blowing intention especially in the non-western context.

REFERENCES

- Abdullah, A. (1996). *Going glocal: Cultural dimensions in Malaysian management*. Kuala Lumpur: Malaysian Institute of Management.
- Ajzen, I. (1988). *Attitudes, Personality, and Behaviour*. Chicago, IL: The Dorsey Press.
- Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Process*, 50, 179-211.
- Alexander, C. & Becker, H. (1978). The use of vignettes in survey research. *Public Opinion Quarterly*, 42, 93-104.
- Anwar, Z. (2003). Reviewing corporate excellent in the 21st century whistle blowing: Subversive spy or responsible corporate citizen? In S. C. o. Malaysia (Ed.) *Regional Conference on Agenda for 21st century-Revitalising the Corporation*. Kuala Lumpur.
- Applebaum, S. H., Grewal, K. & Mousseau, H. (2006). Whistleblowing: International implications and critical case analysis. *Journal of American Academy of Business*, 10 (1), 7-13.
- Arnold, D. F. & 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.
- Babbie, E. (1986). *The practice of social research*. Belmont, CA: Wadsworth Publishing Company.
- Baker, N. (2008). See no evil, hear no evil, speak no evil. *Internal Auditor*, April, p. 39-43.
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50, 248-87.
- Barnett, T., Bass, K. & Brown, G. (1996). Religiosity, ethical ideology, and intentions to report a peer's wrongdoing. *Journal of Business Ethics*, 15, 1161-74.
- BMB (2009). *Location of share registrars*. Kuala Lumpur: Information Services Business Units.
- Bond, M. (1996). *The handbook of Chinese psychology*. London: Oxford.
- Brewer, G. A. & Selden, S. C. (1998). Whistle blowers in the federal civil service: New evidence of the public service ethic. *Journal of Public Administration Research and Theory*, 8 (3), 413-39.
- Chen, T. (2001). Ethics control mechanism: A comparative observation of Hong Kong Companies. *Journal of Business Ethics*, 30 (4), 391-400.
- 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, 113-32.
- 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), 581-87.

- Chiu, R. K. (2003). Ethical judgment and whistleblowing intention: Examining the moderating role of locus of control. *Journal of Business Ethics*, 43, 65-74.
- Chiu, R. K. & Kosinski, F. (1999). The role of affective dispositions in job satisfaction and work strain: Comparing collectivist and individualist society. *International Journal of Psychology*, 34 (1), 19-28.
- Daniels, D. M. (2009). Ethical leadership and moral reasoning: An empirical investigation. *School of Business and Entrepreneurship*: (pp. 94). Fort Lauderdale-Davie Florida: Nova Southeastern University.
- Demetriadou, D. (2003). Form situational variables to whistle-blowing intentions: whistle-blowing within the "Theory of Planned Behavior". *The Graduate Faculty In Psychology*: (pp. 254). New York: The City University of New York.
- Dozier, J. B. & Miceli, M. P. (1985). Potential predictors of whistleblowing: A prosocial behaviour perspective. *Academy of Management Review*, 10, 823-36.
- Dworkin, T. M. & Baucus, M. S. (1998). Internal vs external whistleblowers: A comparison of whistleblowing process. *Journal of Business Ethics*, 17, 1281-98.
- FMM (2008). *FMM-MATRADE industry directory electrical and electronics Malaysia 2007/08*. Kuala Lumpur: Federal of Malaysian Manufacturers (FMM).
- Ford, R. C. & Richardson, W. D. (1994). Ethical decision-making: A review of the empirical literature. *Journal of Business Ethics*, 13 (3), 205-21.
- Frisque, D. & Kolb, J. (2008). The effects of an ethics training program on attitude, knowledge, and transfer of training of office professional: A treatment-and control-group design. *Human Resource Development Quarterly*, 19 (1), 35-53.
- Fukuyama, F. (1995). *Trust*. New York: Free Press.
- Ghazali, N. (2005). *Demutualization of the Malaysian stock exchange*. Retrieved January 13, 2009, from <http://www.LegalMediaGroup.com/>
- Goldman, B. M. (2001). Toward an understanding of employment discrimination claiming: An intergration of organizational justice and social information processing theories. *Personnel Psychology*, 54 (2), 361-86.
- Gupta, J. L. & Sulaiman, M. (1996). Ethical orientations of managers in Malaysia. *Journal of Business Ethics*, 15, 735-48.
- Hair, J. J. F., Anderson, R. E., Tatham, R. L. & Black, W. C. (1998). *Multivariate data analysis*. New Jersey: Prentice-Hall International, Inc.
- Hassan, M. J. (2006). Making Malaysia corruption free. Kuala Lumpur, Malaysia: ISIS Malaysia.
- Hofstede, G. (1980). *Culture's consequences*. Beverly Hills, CA: Sage Publications.
- Hofstede, G. (1991). *Cultures and organizations: Software of the mind*. New York: McGraw-Hill.

- Hooks, K. L., Kaplan, S. E. & Schultz, J. J. (1994). Enhancing communication to assist in fraud prevention and detection. *Auditing: A Journal of Practice and Theory*, 13 (2), 86-117.
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W. & Gupta, V. (2004). Culture, leadership, and organizations: The GLOBE study of 62 societies. California: Sage Publications.
- Jones, J., Massey, D. W. & Thorne, L. (2003). Auditors' ethical reasoning: insight from past research and implications for the future. *Journal of Accounting Literature*, 22, 45-103.
- Keenan, J. P. (2007). Comparing Chinese and American managers on whistle-blowing. *Employees Responsibilities and Rights Journal*, 19, 85-94.
- Keenan, J. P. & Sims, R. L. (1995). The organizational and intrapersonal influences on whistleblowing. *Social issues in management division of the Academy of Management*.
- Keil, M., Tiwana, A., Sainsbury, R. & Sneha, S. (2010). Toward a theory of whistleblowing intentions: A benefit-to-cost differential perspectives. *Decision Science Journal*, 41 (4), 787-811.
- Keller, J. & Blomann, F. (2008). Locus of control and the flow experience: An experimental analysis. *European Journal of Personality*, 22, 589-607.
- Khan, M. A. (2003). Corporate accountability and the protection of whistleblowers under Malaysian and Australian whistleblowing legislation. Kuala Lumpur: International Islamic University Malaysia.
- Kolb, J., Frisque, D. & Lin, H. (2004). Ethics teaching and training practices in the workplace. A review of approaches used in academic and corporate institutions and the special challenges of multiculturalism. In T. Egan & M. Morris (Eds.) *Proceedings of Academy of Human Resource Development Annual Conference*: (pp. 1055-1062). Austin, TX: Academy of Human Resource Development.
- 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.
- Lih-Bin, O. & Hock-Hai, T. (2010). To blow or not to blow: An experimental study on the intention to whistleblow on software piracy. *Journal of Organizational Computing and Electronic Commerce*, 20, 347-69.
- Loe, T. L., Ferrell, L. & Mansfield, P. (2000). A review of empirical studies assessing ethical decision-making in business. *Journal of Business Ethics*, 25 (3), 185-204.
- 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, 407-21.
- 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, 277-97.
- Miceli, M. P., Dozier, J. B. & Near, J. P. (1991). Blowing the whistle on data fudging: A controlled field experiment. *Journal of Applied Psychology*, 21 (4), 271-95.

- Miceli, M. P. & Near, J. P. (1985). Characteristics of organizational climate and perceived wrongdoing associated with whistle-blowing decisions. *Personnel Psychology*, 38, 525-44.
- Miceli, M. P. & Near, J. P. (1988). Individual and situational correlates of whistleblowing. *Personnel Psychology*, 41, 267-81.
- Miceli, M. P. & Near, J. P. (1992). *Blowing the whistle: The organizational & legal implications for companies and employees*. New York: Lexington Books.
- Miceli, M. P., Near, J. P. & Dworkin, T. M. (2008). *Whistle-blowing in organizations*. New York: Routledge Taylor & Francis Group.
- Miceli, M. P., Van Scotter, J., Near, J. P. & Rehg, M. (2001). Responses to perceived organizational wrongdoing: Do perceiver characteristics matter? In J. M. Darley, D. M. Messick & T. R. Tyler (Eds.) *Social influences on ethical behavior*: (pp.119-35). Mahwah, NJ: Lawrence Erlbaum.
- Morrow, P. C. & McElroy, J. C. (1987). Work commitment and job satisfaction over three career stages. *Journal of Vocational Behavior*, 30, 330-46.
- Near, J. P. & Miceli, M. P. (1985). Organizational dissidence: The case of whistleblowing. *Journal of Business Ethics*, 4, 1-16.
- Near, J. P. & Miceli, M. P. (1994). Whistleblowing: Reaping the benefits. *The Academy of Management Executive*, 8 (3), 65-72.
- Ngui, C. Y. K. (2005). Fighting fraud. *Malaysian Business*. from ProQuest Asian Business and Reference database.
- Oliver, J. E., Jose, P. E. & Brough, P. (2006). Confirmatory factor analysis of the work locus of control scale. *Educational and Psychological Measurement*, 66 (5), 835-51.
- Park, H. & Blenkinsopp, J. (2009). Whistle-blowing as planned behavior - A survey of South Korean police officers. *Journal of Business Ethics*, 85 (4), 545-56.
- Park, H., Blenkinsopp, J., Oktem, M. K. & Omurgonulsen, U. (2008). Cultural orientation and attitudes toward different forms of whistleblowing: A comparison of South Korea, Turkey, and the UK. *Journal of Business Ethics*, 82, 929-39.
- 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, 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.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y. & Podsakoff, N. P. (2003). Common method biases in behavioural research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88 (5), 879-903.

- Ponemon, L. A. & Gabhart, D. (1994). Ethical reasoning research in accounting and auditing professions. In J. Rest & D. Narvaez (Eds.) *Moral Development in the Professions: Psychology and Applied Ethics*. New Jersey: Erlbaum Associates.
- PricewaterhouseCoopers (2006). The fraud perpetrator: An enemy from within. *PwC Alert*, p. 1-30.
- Pulliam, S. & Solomon, D. (2002). How three unlikely sleuths exposed fraud at WorldCom. *The Wall Street Journal*, p. 1.
- Read, W. J. & Rama, D. V. (2003). Whistle-blowing to internal auditors. *Managerial Auditing Journal*, 18 (5), 354-62.
- Redding, G. (1990). *The spirit of Chinese capitalism*. New York NY: Walter de Gruyter.
- Reidenbach, R. & Robin, D. (1990). Toward the development of a multidimensional scale for improving evaluations of business ethics. *Journal of Business Ethics*, 9, 639-53.
- Ritter, B. A. (2006). Can business ethics be trained? A study of the ethical decision-making process in business students. *Journal of Business Ethics*, 68, 153-64.
- Rossouw, G. (2002). Three approaches to teaching business ethics. *Teaching Business Ethics*, 6, 411-33.
- Rotter, J. (1966). Generalized expectancies for internal and external control reinforcement. *Psychological Monographs*, 80, 1-28.
- Saha, A. (2008). *Whistle-blowing in the United Kingdom*. Retrieved December 20, 2008, from <http://ssrn.com/abstract=1106544>
- Shawver, T. & Clements, L. H. (2008). Whistleblowing: Factors that contribute to management accountants reporting questionable dilemmas. *Management Accounting Quarterly*, 9 (2), 26-37.
- Sheler, J. L. (1981). When employees [sic] squeal on fellow workers. 81-82. U.S. News & World Report.
- Sims, R. L. & Keenan, J. P. (1998). Predictors of external whistleblowing: Organizational and intrapersonal variables. *Journal of Business Ethics*, 17, 411-21.
- Snyder, M. (1987). *Public appearances/private realities: The psychology of self-monitoring*. New York: Freeman.
- Spector, P. E. (1988). Development of the Work Locus of Control Scale. *Journal of Occupational Psychology*, 61, 335-40.
- Spector, P. E., Sanchez, J. I., Siu, O. L., Saldago, J. & Ma, J. (2004). Eastern versus western control beliefs at work: An investigation of secondary control, socioinstrumental control, and work locus of control in China and the US. *Applied Psychology: An International Review*, 53 (1), 38-60.
- Starkey, P. (1998). Whistleblowing behavior: The impact of situational and personality variables. Oxford: University of Mississippi.

- Stead, W. E., Worrell, D. L. & Stead, J. G. (1990). An integrative model for understanding and managing ethical behavior in business organizations. *Journal of Business Ethics*, 9 (3), 233-42.
- Taylor, E. Z. & Curtis, M. B. (2010). An examination of the layers of workplace influences in ethical judgment: Whistleblowing likelihood and perseverance in public accounting. *Journal of Business Ethics*, 93, 21-37.
- Thorne, L., Massey, D. & Maignan, M. (2003). Institutional context and auditor's moral reasoning: A Canada-US comparison. *Journal of Business Ethics*, 43 (4), 305-21.
- Trevino, L. K. (1986). Ethical decision making in organizations: A person-situation integrationist model. *Academy of Management Review*, 3, 601-17.
- Trevino, L. K. (2007). The key role of HR in organizational ethics. Ethics Resource Centre.
- Trevino, L. K., Weaver, G. R. & Reynolds, S. J. (2006). Behavioral ethics in organizations: A review. *Journal of Management*, 32, 951-90.
- Victor, B., Trevino, L. & Shapiro, D. (1991). Peer reporting of unethical behavior: The influence of justice evaluation and social context factors. *Journal of Business Ethics*, 12, 253-63.
- Victor, B., Trevino, L. & Shapiro, D. (1993). Whistle-blowing of unethical behavior: The influence of justice evaluations and social context factors. *Journal of Business Ethics*, 12, 253-63.
- Vinten, G. (1999). Whistleblowing - Hong Kong style. *Public Administration and Policy*, 8 (1), 1-19.
- Vogel, D. (1992). The globalization of business ethics: Why America remains distinctive. *California Management Review*, 36, 30-49.
- Wahab, H. (2003). *Whistle-blowing: Will it make a difference*. Retrieved December 10, 2008, from <http://findarticles.com/p/articles/>
- Watkins, D. & Cheung, S. (1995). Culture, gender, and response bias. *Journal of Cross-Cultural Psychology*, 26 (5), 490-504.
- Weaver, G., Trevino, L. & Agle, B. (2005). Somebody I look up to: Ethical role models in organizations. *Organization Dynamics*, 34, 313-30.
- Weber, J. (1992). Scenarios in business ethics research: Review, critical assessment, and recommendations. *Business Ethics Quarterly*, 2 (2), 137-60.
- Wise, T. D. (1995). An analysis of factors proposed to affect the decision to blow the whistle on unethical acts. *The Graduate School*: 225. Louisiana: College of Administration and Business Louisiana Tech University.
- Yakcob, N. M. (2005). The role of accountants in the development of the Malaysian capital market. *MICPA Kuala Lumpur, Malaysia: MICPA*.
- Zabid, A. R. M. & Alsagoff, S. K. (1993). Perceived ethical values of Malaysian managers. *Journal of Business Ethics*, 12, 331-37.

Zhang, J., Chiu, R. & Li-Qun, W. (2009a). On whistle-blowing judgment and intention. *Journal of Managerial Psychology*, 24 (7), 627-49.

Zhang, J., Chiu, R. & Wei, L. (2009b). Decision-making process of internal whistle-blowing behavior in China: Empirical evidence and implications. *Journal of Business Ethics*, 88, 25-41.

