

FACTORS AFFECTING WHISTLEBLOWING INTENTION: AN EMPIRICAL STUDY

Kogilavani Apadore,

Chan Yee Chin,

Mabel Ding Cheau Qi,

Tham Mun Yan,

Waynnie Goh Yu-Sinn,

Wong Tze Min

ABSTRACT

Corporate scandals around the world have raised concern over ethicality of the accountancy profession. Accounting students are future accountants and auditors who are held accountable for the public confidence. Therefore, this study aimed to examine the factors affecting whistleblowing intention of final year accountancy undergraduates. Applying the Moral Intensity Model, the study explores how magnitude of consequences, social consensus, and proximity affect whistleblowing intention. Besides, fear of retaliation is an additional variable to extend the study based on Moral Intensity Model. The results suggest that magnitude of consequence (MC), social consensus (SC) and proximity (PX) have a significant relationship with whistleblowing intention (WI). This study aimed to fill up Malaysia's whistleblowing research gap in academic world and practically, to improve the coverage of ethics in tertiary education.

Keyword: Magnitude of consequence (MC), social consensus (SC) and proximity (PX) and whistleblowing intention (WI)

1. INTRODUCTION

The issue of whistleblowing has gained more attention along the years, by reason of an increasing number of corporate scandals within and outside Malaysia such as Enron, WorldCom and Transmile Group Berhad. Rachagan (2012) defined whistleblowing as the reporting of illegal or immoral conduct to a person or body that could take actions against the wrongdoers. Whistleblowing has now transformed into an accountability and risk management mechanism, following a series of corporate scandals (Mustapha & Siaw, 2012).

To reduce fraud risk and protect shareholders' interests, organizations should invest in formal whistleblowing mechanism and encourage employees to report wrongdoings. Employees who sound the alarm about corporate wrongdoings in timely manner are able to reduce the degree of consequences of wrongdoings (Chartered Institute of Internal Auditors [IIA], 2014). When employees choose to keep silent and allow wrongdoings to continue, the possible consequences may cost the profitability of the organizations, employee morale and shareholders' interest in the long run and even lead to loss of life (Mela, Zarefar, & Andreas, 2016).

Accounting graduates are the future accountants and auditors who are most likely to encounter corporate frauds in their career life (Kennett, Downs, & Durler, 2011). Expectations are placed on them to exercise ethical conduct and maintain public trust at all times (Fatoki, 2013). It is of utmost importance to identify the factors associated with their whistleblowing intention to empower whistleblowing as a mechanism for uncovering corporate wrongdoings.

Prior researches have examined the motivating factors of whistleblowing and the factors affecting the propensity of whistleblowing. Prior empirical studies basically focused on the role of demographic, personal, situational and organizational variables in whistleblowing intention (Ahmad, 2011). Yet, there is no study that can include all relevant variables affecting whistleblowing intention (Miceli, Near, Rehg, & Van Scotter, 2012). Therefore, further studies are required to fill the research gap. Furthermore, most of the past studies were emerging in a Western context, rather than in an Eastern context (Salleh & Yunus, 2015). Although the growing interest of whistleblowing issue in the Asian context is observed, but studies have been limited to countries like China, Hong Kong and Taiwan. Empirical studies of whistleblowing in Malaysia are limited and scarce (Ahmad, Smith, & Ismail, 2012). Besides, it is worth to emphasize the importance of national and cultural differences in examining whistleblowing issues (Ahmad, 2011). The whistleblowing studies conducted in different countries cannot be applied entirely to address the problem in Malaysia.

Fatoki (2013) stated that students are the potential future leaders in both private and public sectors whose views towards whistleblowing intention are important. While most of the studies of whistleblowing in Malaysian context focus only on accounting professionals (Ahmad, Ismail, & Azmi 2014; Ahmad, Smith & Ismail, 2012) and employees from public sector (Salleh & Yunus, 2015; Zakaria, Razak, & Yusoff, 2016), prior studies on whistleblowing intention of Malaysian accounting students are finite (Mustapha & Siaw, 2012). Hence, this research is aimed to gain an understanding on the factors motivating whistleblowing intention of Malaysian undergraduate accounting students.

2. LITERATURE REVIEW

2.1 WHISTLEBLOWING INTENTION (WI)

There is no one clear definition of the term “whistleblowing” universally (Erkman, Caliskan, & Esen, 2012). Near and Miceli (as cited by Kennett et al., 2011) defined whistleblowing as “the disclosure by organization members (former or current) of illegal, immoral, or illegitimate practices to persons or organizations that may be able to effect action”. However, WI refers to “the probability that an individual will engage into actual whistleblowing behaviour” (Chiu, 2002).

Generally, there are two type of whistleblowers. Internal whistleblowers are complainants who report wrongdoings to internal party within the organization such as the senior management, while external whistleblowers make complaint to a third party such as the government or legal regulators. The study concerns about the overall effect of moral intensity on WI and hence, it does not distinguish between internal or external whistleblowing.

One of the prior studies on whistleblowing conducted by Erkman et al. (2012) analyzed whether Turkish accounting professionals will blow the whistle when noticing a serious wrongdoing in the workplace. Their empirical results based on three whistleblowing scenarios, however, showed mild tendency of respondents to blow the whistle on average. Study by Kennett et al. (2014) examined the intention of accounting majors to blow the whistle externally on massive fraudulent financial reporting, considering possible personal and societal consequences of whistleblowing. Findings showed that approximately 75% of the participants tend to blow the whistle, but none were certain they would blow the whistle.

Another study by Mustapha and Siaw (2012) sought to determine perception of whistleblowing of future accountants and how seriousness of wrongdoings, gender and academic performance affect WI among final year accounting students in a Malaysia public university. Results revealed that majority understand the importance of whistleblowing and took a relatively moderate approach towards willingness to whistle-blow. They tend to take the “wait and see” approach but they would whistle-blow only when there is a necessity.

Study by Fatoki (2013) examined the perception of final year accounting students about whistleblowing in relation to strength of retaliation, materiality and gender. The results revealed that most of the respondents regarded whistleblower as a hero and agreed the importance of whistleblowing in enhancing public interest and reducing corruption, fraud and mismanagement. Another research examined how organizational commitment and corporate ethical values affect accountants’ perceptions of whistleblowing in Barbados. However, analysis of data showed that accountants were unlikely to blow the whistle despite whistleblowing was not perceived as a wrong action (Alleyn, Weekes-Marshall, & Arthur, 2013).

2.2 MAGNITUDE OF CONSEQUENCES (MC)

Shawver and Clements (2015) defined MC as “the harm or benefit to individuals arising from an action”. Valentine and Hollingworth (2012) also regarded MC as seriousness of the impact of an unethical action. Sampaio and Sobral (2013) stated that MC is corresponded with the extent to which an individual associates with the consequences of a moral issue, (i.e., seriousness of the wrongdoing). To illustrate, an issue that causes loss of life has greater MC than an issue that only causes the victim to suffer a minor injury (Smith et al., 2016). Individuals perceive whistleblowing as necessary given a more serious cases and convince them that whistleblowing is a right course of action (Sampaio & Sobral, 2013).

Mustapha and Siaw (2012) studied the likelihood of blowing the whistle in relation to seriousness of questionable act, gender and academic performance among final year accounting students in a Malaysian public university and found that seriousness of the questionable act is significantly related to the possibility of whistleblowing. Furthermore a study by Wang et al. (2015) proposed a research model that examined intentions of software engineers to report IT system bugs based on moral intensity and morality judgment. The author reported that MC has a direct effect on the employees’ willingness to report bad news.

Besides, there’s a research on the influence of perceived support, organizational values or culture and severity of wrongdoing on internal whistle-blowing intentions which the result showed that the impact of wrongdoings is positively related with intention to whistle blow (Pillay, Dorasamy, & Vranic, 2012). This result is in line with a study by Ballantine (2002), who examined the effect of moral intensity upon ethical intention among undergraduate marketing students from Malaysian and New Zealand. The findings showed that MC has a significant relationship with ethical intentions of subjects. Research by Arnold et al. (2013) investigated the influence of situational context on ethical decision-making and judgment evaluations among internal auditors, external auditors from small-sized firms and international firms and found that MC influenced the ethical evaluation and intention to act ethically. From the above mention studies, MC is known as one of the important determinants of WI. Therefore the following hypothesis were developed:

H₁: There is a significant relationship between MC and the WI of final year Accountancy undergraduates.

2.3 SOCIAL CONSENSUS (SC)

Morris and McDonald (1995) defined SC as “the level of people’s agreement about the effects of the social issue”. Definition of SC by Chen and Lai (2014) is “the extent of social agreement that the act was evil or good”. The study of Musbah, Cowton and Tyfa (2016) refers SC as “the degree of social acceptance that a given act is good or evil”. SC is also perceived as social norm whereby individuals commonly based upon the expectations of others to rationalize a course of action (Bateman, Valentine, & Rittenburg, 2013). When people close to him or her approve or agree the behaviour, an individual will feel less ambiguous and more likely to engage in the ethical behavior (Trongmateerut & Sweeney, 2013).

A study by Sweeney and Costello (2009) explored how perceived moral intensity affect identification of an ethical dilemma, ethical judgment, ethical intentions for third year undergraduate accounting and business students. Their study provided empirical support that SC has the strongest relationship with the ethical decision making, compared to other components. Schmidtke (2007) conducted study about observers' reactions to coworker theft in relation to SC and perceived similarity on 223 non-supervisory employees of a restaurant chain. Results showed that SC has insignificant relationship with reporting theft. Shawver and Clements (2011) studied the effect of perceived SC on reporting earnings management internally by practicing accountants. Their study found that SC is a significant factor of decision to whistle blow.

Chen and Lai (2014) examined the impact of moral intensity (potential harm and social pressure) on WI and behaviour, mediating by organisational commitment. Findings showed that there was no significant relationship between social pressure and WI. Another research studied the association of three dimensions of moral intensity (MC, SC and temporal immediacy) with the ethical decision making among 229 Libyan management accountants. The results revealed that SC has limited significance to ethical intention (Musbah, Cowton & Tyfa, 2016). Based on the prior findings, it's proven that the Social Consensus has an impact on WI. Therefore, the following hypothesis were developed:

H₂: There is a significant relationship between SC and the WI of final year Accountancy undergraduates.

2.4 PROXIMITY (PX)

PX is defined as "the degree to which an actor can identify with potential victims of the social issue" (Morris & McDonald, 1995). Mencl and May (2009) described PX as "the degree of closeness between the victim or beneficiary of a moral act and the moral agent". Definition of PX by Shawver (2011) refers to how socially, culturally, physically close the victim of a moral act is to the decision-maker. PX is measured as "the closeness to those harmed by the impact of a moral issue" (Valentine & Hollingworth, 2012). When the victims have a close relationship with an individual, he or she is more likely to be alarmed and their moral judgment will increase willingness to report the bad news (Lincoln & Holmes, 2011). The study of Singer et al. (as cited in Taylor & Curtis, 2013) posited that when the moral agent is close with the victim of a questionable act, the perceived empathy will be greater and influence the intention whistleblowing. For example, PX effect is greater when layoffs happened in our own company rather than in other company (Shawver, 2011).

Study by Carlson, Kacmar, and Wadsworth (2009) examined the impact of three moral intensity dimensions (concentration of effect, PX and probability of effect) on ethical decision making of senior level college students. The results supported their hypothesis that PX of an individual and the victim has positive relationship with perceived ethicality of the act involved. Another study by Lincoln and Holmes (2011) investigated the relationship of five components of moral intensity with moral awareness, moral judgment, and moral intention among students attending a service academy. Empirical findings suggested that PX has moderate relationship to moral intention. The study of Wang et al. (2015) proposed a model to study the effect of moral intensity on intention of employee to report system bugs. Based on survey data collected from 173 software engineers, results revealed that PX to victims indirectly influences intentions of bad news reporting through morality judgment. Research by Mencl and May (2009) explored the effect of MC and different types of PX (social, psychological, and physical) on the ethical decision making process of human resource professionals. Findings exhibited that PX do not influence ethical decision making. Findings displayed that the PX affect WI. Therefore, the following hypothesis were developed:

H₃: There is a significant relationship between PX and the WI of final year Accountancy undergraduates.

2.5 FEAR OF RETALIATION (FR)

People choose not to report misconducts partly because they are afraid of the potential retaliation against them (Wainburg & Perreault, 2016). Retaliation is defined as undesirable action taken against a whistleblower as a result of internal or external whistleblowing (Rehg, Miceli, Near, & Van Scotter, 2008). Retaliation can also be defined as a range of positive or negative consequences encountered by whistleblower in direct response to whistleblowing (Erkmen et al., 2014). Examples of potential consequences of reporting wrongdoings might be being fired or early retirement, difficult to secure employment, being insulted or harassed and suffering false allegations about the character and actions of the whistleblower (Kennett et al., 2011).

Prior study by Kennett et al. (2011) showed that the personal financial costs variable is negatively correlated with the WI and the relationship is statistically significant. This findings is similar to a study by Fatoki (2013) whereby the results indicated that retaliation is negatively correlated with likelihood of WI. This showed the stronger the strength of retaliation, the lesser the intention to blow the whistle. Furthermore, findings by Elias and Farag (2015) indicated that under certain outcomes of retaliation, threat of retaliation had a negative relationship with the likelihood of whistleblowing. Further research by Cassematis and Wortley (2013) on the possibility to use fear of reprisals to determine whether public sector employees in Australia will whistle blow revealed that fear of reprisals weakened their WI. Recent study by Latan, Ringle and Chiappetta Jabbour (2016) argued that individual variables such as personal cost of reporting affect WI of Indonesian public accountants.

FR is the additional variable included into the proposed framework. Surveys revealed that most people refuse to whistle-blow primarily because they are fearful of the retaliation (Wainburg & Perreault, 2016). As such, the personal costs of whistleblower (i.e., retaliation) has become the subject of various past studies (Kennett et al., 2011). In addition, inclusion of FR which is a situational factor (as stated in Cassematis & Wortley, 2013) will make this study more complement because moral intensity is also situational factor (as provided in Wang et al., 2015). Therefore, the following hypothesis:

H₄: There is a significant relationship between FR and the WI of final year Accountancy undergraduates.

2.6 MORAL INTENSITY MODEL

The Moral Intensity Model was introduced by Thomas M. Jones in 1991. Moral intensity is defined as “a construct that captures the extent of issue-related moral imperative in a situation” (Jones, 1991, p. 23). The emergence of moral intensity was due to the characteristics of moral issue being ignored in ethical decision making theories (Smith, Kistruck, & Cannatelli, 2016). Jones conceptualised his model based on Rest’s Four-Component Model which consists of recognizing moral issue, moral judgment, moral intention and moral behaviour (Lincoln & Holmes, 2011). Clements and Shawver (2011) stated that components in Jones’ model affect all four stages in Rest’s model. Therefore, when the perceived moral intensity is high, a moral issue is recognised, moral judgment is triggered, moral intention is established and that individual would engage in moral behaviour.

Jones proposed that Moral Intensity Model consist of six dimensions namely magnitude of consequences, social consensus, probability of effect, temporal immediacy, proximity and concentration of effect (Alleyne, Hudaib & Pike, 2013). Hence, an ethical decision will be regarded as having high level of moral intensity when the action is perceived as unethical by most people, provided that serious consequences are likely to occur in the near future, and adversely affect large sum of individuals who are physically, socially and culturally close to the moral agent (Shawver, 2011).

MC, SC, and PX are employed as part of the independent variables (IVs) in this study. The reason being MC, SC and PX are regarded as significant predictors of moral intention (Wang et al., 2015; Lincoln & Holmes, 2011; Arnold Sr et al., 2013). Besides that, these three dimensions also form a single dimension that predict moral intention according to Barnett (as cited in Leitsch, 2006). However, there are no past studies that explored the effect of these three dimensions on the WI to the best of our knowledge. Inclusion of these three dimensions aimed to overcome this deficiency.

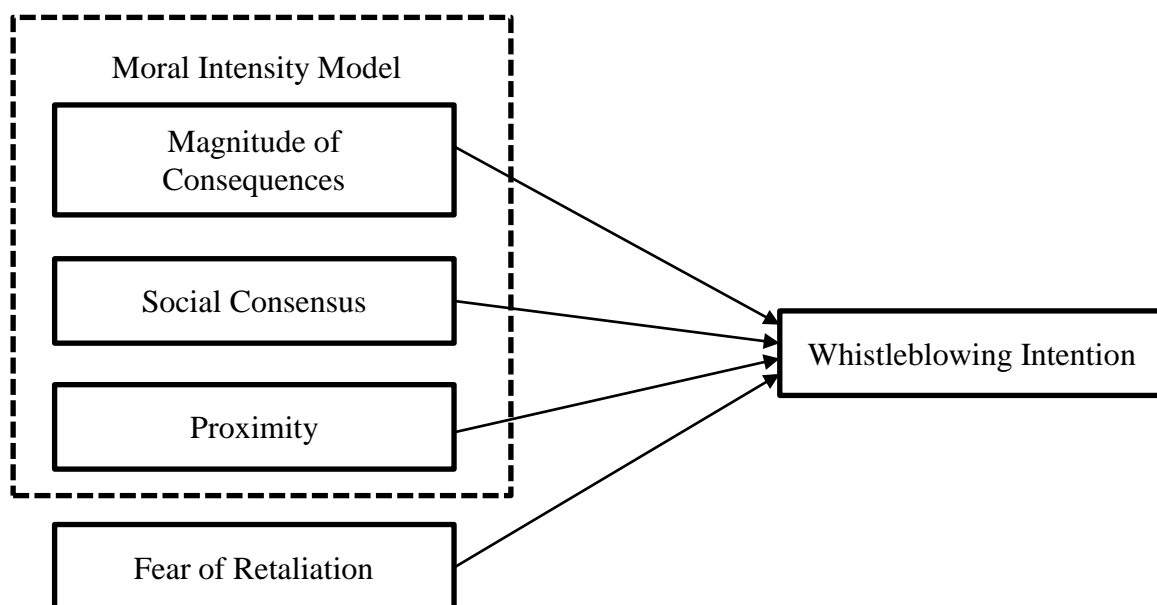
However, this study excludes concentration of effect, probability of effect and temporal immediacy component. Firstly, past researches failed to provide empirical evidence to include concentration of effect in the moral intensity model (Lincoln & Holmes, 2011). Secondly, the past studies of concentration of effect appears to be inconclusive. For instance, study by Frey (2000) suggested that it is a significant predictor, but it was found to have minor influence on moral intention in Singer’s study in 1998 (Lincoln & Holmes, 2011). Thirdly, both Barnett and Frey’s study (as cited in Lincoln & Holmes, 2011) stated that temporal immediacy has negligible influence on moral awareness, moral judgment and intention.

Whistleblowing is a complex ethical decision which will be affected by the level of moral intensity (Clements & Shawver, 2011). Hence, WI which represents moral intention in the Moral Intensity Model is applied as the dependent variable (DV) for this study. This study does not include moral behaviour in its investigation because of the difficulty to investigate actual whistleblowing cases in organizations and to approach actual whistleblowers for questioning (Sampaio & Sobral, 2013). In short, this study aimed to investigate the association between MC, SC, PX, FR and WI.

3. RESEARCH METHODOLOGY

Figure 1 represents the proposed conceptual model illustrating factors affecting whistleblowing intention of final year Accountancy undergraduates.

Figure 1: Factors affecting whistleblowing intention



Adapted from: Jones (1991); Latan, Ringle, & Chiappetta Jabbour (2016)

The target population for the study is university accounting undergraduates who are currently in their final year of study. 300 sets of self-administered survey questionnaire were distributed to final year accounting. Respondents took an average of 4 minutes to complete the entire set of questionnaire. Out of the 300 sets of questionnaire distributed, 255 sets are collected, achieving a response rate of 85.33%. The usable questionnaires that are fit for data analysis further reduced to 255 sets. SAS Enterprise Guide 5.1 is used to process data collected.

There are a total of 255 final year accounting undergraduates took part in this study. Of the 255 respondents, male comprised of 33.33 per cent and female comprised of 66.67 per cent. Furthermore, majority of the respondents are undergraduates in their early of 20s, aged 20 to 22. Although majority (95.29 per cent) of the respondents are Chinese, there is a fair number of respondents from different ethnics. 100 per cent of the respondents are accounting undergraduates in their final year of study. Additionally, 88.63 per cent of respondents have undergone ethics-related course, but the remaining 11.37 per cent have not.

There are 17 items for four IVs and 4 items for the DV using interval level of measurement. The measurement for total 21 items is adapted from as stated in Table 3.4 and Appendix B:

Table 3.4: Measurement of Variables

Variables	No. of items	Source
Magnitude of consequences	4	Baird, Zelin, and Olson (2016)
Social consensus	5	Trongmateerut and Sweeney (2013)
Proximity	3	Carlson et al. (2009)
Fear of retaliation	5	Brown (2008)
Whistleblowing intention	4	Chen and Lai (2014)

Source: Developed for research

This study anchors 5-point Likert scale to each item in the questionnaire to measure seriousness for MC, ranging from 1=not serious at all to 5=extremely serious and to measure agreeableness for the other variables, ranging from 1=strongly disagree to 5=strongly agree

4. DATA ANALYSIS

4.1 INFERENTIAL ANALYSIS

4.1.1 PEARSON CORRELATION COEFFICIENT

Table 4.1: Pearson Correlation Coefficient Matrix

Variables	WI_AVG	MC_AVG	SC_AVG	PX_AVG	FR_AVG
WI_AVG	1.0000				
MC_AVG	0.2919 <.0001	1.0000			
SC_AVG	0.4358 <.0001	0.3465 <.0001	1.0000		
PX_AVG	0.3077 <.0001	0.1514 0.0155	0.3438 <.0001	1.0000	
FR_AVG	0.2669 <.0001	0.2743 <.0001	0.3140 <.0001	0.2571 <.0001	1.0000

Table 4.1 illustrates the correlation between the variables through Pearson Correlation Coefficient analysis. Overall, the variables is moderately correlated since the correlation value falls within the range between 0.2669 and 0.4358. The strongest correlation exists between SC_AVG and WI_AVG, while the weakest correlation is found between FR_AVG and WI_AVG with $r = 0.4358$ and 0.2669 respectively. The variables are significantly correlated as p-value is less than 0.05. Furthermore, multicollinearity problem doesn't exist between the variables.

4.1.2 MULTIPLE LINEAR REGRESSION (MLR)

Table 4.2: Model Summary

Model	R	R-square	Adjusted R-square	Standard error of Estimate
1	0.4963	0.2463	0.2342	0.52520

Table 4.2 displayed the R-square value for this research model. A r-square value of 0.2463 depicts that the four IVs selected for this study can explain 24.63% of the determinants affecting whistleblowing among accounting undergraduates. Yet, the remaining 75.37% of the changes is affected by factors that are not considered in this study. Similar past studies also achieved a range of r-square from 0.192 to 0.282 (Shawver, 2011; Kennett et al., 2011; Mustapha & Siaw, 2012).

Table 4.3: Analysis of Variance (ANOVA)

	Sum of Square	Df	Mean Square	F	Pr > F
Model	22.5317	4	5.6329	20.42	<.0001
Error	68.9599	250	0.2758		
Total	91.4916	254	5.9087		

Table 4.3 sets out the F-value for this research study. F-value of this study is valued at 20.42 with p-value <.0001 (which is less than 0.05). This finding is meaningful that the DV has a significant relationship with at least one of the four IVs. Hence, this has proven that the research model is fit for the purpose of this study.

Table 4.4: Parameter Estimates of Construct

Construct	Df	Parameter Estimate	Standardized Estimate	Standard Error	t	Pr > t
Intercept	1	1.3899	0	0.3185	4.36	<.0001
MC_AVG	1	0.1706	0.1368	0.0743	2.30	0.0225
SC_AVG	1	0.2291	0.3048	0.0472	4.86	<.0001
PX_AVG	1	0.1412	0.1583	0.0529	2.67	0.0081
FR_AVG	1	0.0872	0.0930	0.0560	1.56	0.1203

Table 4.4 describes the significance of relationship between the multiple IVs with a single DV. The p-value for MC, SC and PX are less than 0.05, implying that those IVs are significantly related with WI. However, the relationship between FR and WI is insignificant since the p-value is 0.1203, greater than 0.05.

With that, the MLR equation for this model is formulated as follow:

$$WI = \beta_0 + \beta_1MC + \beta_2SC + \beta_3PX + \beta_4FR + \varepsilon, \text{ where:}$$

$$WI = 1.3899 + 0.1706 MC + 0.2291 SC + 0.1412 PX + 0.0872 FR$$

WI = Whistleblowing Intention
 MC= Magnitude of Consequences
 SC = Social Consensus
 PX = Proximity
 FR = Fear of Retaliation
 β_0 = Constant
 ε = Error term

5. DISCUSSION, CONCLUSION AND IMPLICATIONS

5.1 DISCUSSIONS OF MAJOR FINDINGS

As the general rule applies, when p-value < 0.05, H₀ is rejected and H₁ is accepted. The hypothesis is, hence, supported.

5.2.1 Magnitude of Consequences (MC)

The p-value for the relationship between MC and WI is 0.0225 which is less than 0.05. Thus, the relationship between MC and WI is significant. This result has a consistent findings with few past studies such as Mustapha and Siaw (2012), Wang et al. (2015), Arnold et al. (2013) and Ballantine (2002). The consequences of a moral issue must be serious enough to establish consideration of response by an individual (Curtis, 2006). Just like an auditor who is a potential whistleblower also takes materiality into consideration before taking any action. Therefore, the degree of seriousness of the consequences of a wrongdoing will affect the students' intention to whistle blow. When a wrongdoing will lead to a large negative impact on others such as

endangering one's life, threatening one's safety, students tend to perceive it as unethical and hence, their WI inflates. On the other hand, students feel not important or not worthy of whistleblowing if the consequences of wrongdoing are not serious at all.

5.2.2 Social Consensus (SC)

The result showed SC has a significant relationship with WI. The finding is consistent with past studies of Shawver and Clements (2011), Sweeney and Costello (2009), Ballantine (2002), and Clements and Shawver (2011). The results showed that undergraduates are often consider the opinion of people surrounding them when intending to whistle blow. Generally, family and friends opinion are considered as the most important and valuable consideration. When these individuals are agree with and think that the undergraduates should whistle blow, undergraduates will be inclined to judge whistleblowing as a moral and ethical action, and thus the WI of undergraduates also increases. In contrast, if the society does not agree with whistleblowing, undergraduates tend to feel ambiguous and demotivated, then reduce WI. Nevertheless, this result also contradicts with findings the findings of Schmidtke (2007) and Musbah et al. (2016).

5.2.3 Proximity (PX)

The findings showed a significant relationship between PX and WI with p-value of 0.0081. This outcome is in line with the findings of few past researches including Lincoln and Holmes (2011), Carlson et al. (2009), and Shawver and Clements (2011). PX affects the WI among undergraduates. This indicated the possibility if students have a close and intimate relationship with the victim of a wrongdoing, the probability of whistleblowing is greater. People usually show more care to people who are physically, psychologically and culturally close to them such as family and friends than strangers who are distant. Students will have stronger feeling of empathy and pity if people close to them is adversely impact by a wrongdoing. There is a higher tendency to whistle blow since the victim of a wrongdoing is someone they care about. Conversely, the result is inconsistent with results of Wang et al. (2015) and Mencl and May (2009).

5.2.4 Fear of Retaliation (FR)

The results revealed that FR and WI is insignificantly correlated since the p value is 0.1203. Thus, null hypothesis is not rejected. This finding opposes results of similar past studies such as Kennett et al. (2011), Elias and Farag (2015), Fatoki (2013), Cassematis & Wortley (2013) and Latan et al. (2016). These past studies concluded that FR negatively correlates with WI.

However, retaliation does not necessarily result in a weaker intention of whistleblowing. According to Miceli and Near (1985), whistleblowers will blow the whistle if they believe that reporting the wrongdoing will bring a positive impact, even though they might be suffering from retaliation. The result indicates that undergraduates are still willing to whistle blow if the societal benefits can compensate the personal cost of whistleblowing. Furthermore, whistleblowers will choose to whistle blow when there is no other alternative available (Brown, 2008). Under such circumstances, it is possible that undergraduates will intent to whistle blow. In fact, retaliations appear to be more encouraging external whistleblowing than deterring whistleblowing (Rehg et al., 2008). This finding expresses highly of the moral compass of the respondents, so it appears to be a "good news" to a certain extent.

5.3 IMPLICATIONS OF THE STUDY

5.3.1 Theoretical Implications

This study has identified some factors that have significant relationship with intention of whistleblowing. MC, SC and PX which are the constructs under the Moral Intensity Model have been empirically proven that they are significant predictor of WI. However, FR, another situational variable added into this conceptual framework is found insignificantly associated with WI.

Furthermore, this study resolved the problem of lack of theoretical model in studying whistleblowing issue. With an adjusted R-square of 0.2342, this research, studying 3 constructs of Moral Intensity, proves that Moral Intensity Model is an appropriate theoretical model used to study ethical issue such as WI. Similar research by Shawver (2011), studying all 6 constructs of Moral Intensity only managed to achieve an adjusted R-square of 0.192 only.

5.3.2 Managerial Implications

SC is found to be the factor that has the strongest relationship with WI among the four IVs studied, represented by a correlation coefficient of 0.43581. This suggests that support and agreement from family and friends to whistle blow really has a significant effect on WI. Thus, family and friends should also be told about the importance of their agreement and support to a potential whistleblower. Particularly, the idea that whistleblowing is an ethical behaviour should be instilled into their minds. Therefore, they will agree and provide support when an individual faces a whistleblowing dilemma.

MC is also one of the determinants of WI among undergraduates. Ethics educators should provide advice and guidance to undergraduates to ensure they are sensitive towards MC. Specifically, it is important to educate and stress on the possible negative consequences of each wrongdoing so that undergraduates are aware of seriousness of each wrongdoing and then trigger their intention to whistle blow.

Since PX also plays a role in the undergraduates' propensity of whistleblowing, ethics educator should also educate undergraduates the possibility that a wrongdoing may also have an impact on people who they perceived as proximal. Otherwise, undergraduates do not see a reason to whistle blow. When they are able to foresee the potential victims of a wrongdoing,

especially when the wrongdoing involves people whom he or she has a close relationship with, it will encourage this group of future accountants and auditors to whistle blow.

5.4 Conclusion

This study has contributed by exploring motivators of WI. It is empirically evident that MC, SC and PX have significant influence on students' intention of whistleblowing. However, FR might not have significant influence on their whistleblowing propensity. This study adds to the scarce whistleblowing research in a Malaysian undergraduate's context. Related researches have been repeatedly conducted on accounting professionals and working adults. This study is beneficial and constructive to future researchers who wish to explore the students' whistleblowing issue in depth.

REFERENCES

- Ahmad, S. A. (2011). *Internal auditor and internal whistleblowing intentions: A study of organizational, individual, situational and demographic factors*. Unpublished doctoral thesis, Edith Cowan University.
- Ahmad, S. A., Ismail, I. S., & Azmi, N.A. (2014). Exploring internal auditors' whistleblowing intentions towards corporate fraud: A prosocial behaviour perspective. *Innovation, Communication and Engineering*, pp. 463-468.
- Ahmad, S., Smith, G. M., & Ismail, Z. (2012). Internal whistleblowing intentions: A study of demographic and individual factors. *Journal of Modern Accounting and Auditing*, 8(11), 1632-1645. Retrieved from https://www.researchgate.net/publication/260427208_Internal_Whistle-Blowing_Intentions_A_Study_of_Demographic_and_Individual_Factors
- Alleyne, P., Hudaib, M., & Pike, R. (2013). Towards a conceptual model of whistleblowing intentions among external auditors. *The British Accounting Review*, 45(1), 10-23. doi: 10.1016/j.bar.2012.12.003
- Alleyne, P., Weekes-Marshall, D., & Arthur, R. (2013). Exploring Factors Influencing Whistle-blowing Intentions among Accountants in Barbados. *Journal of Eastern Caribbean Studies*, 38(1), 35-62. Retrieved March 1, 2017, from <http://search.proquest.com/openview/a074acf807a9554c89ef8c4aa8f392cd/1?pq-origsite=gscholar&cbl=14968>
- Arnold Sr, D. F., Dorminey, J. W., Neidermeyer, A. A., & Neidermeyer, P. E. (2013). Internal and external auditor ethical decision-making. *Managerial Auditing Journal*, 28(4), 300-322. doi: 10.1108/02686901311311918
- Baird, J. E., Zelin, R. C., & Olson, K. C. (2016). Occupational fraud: A comparison of perceptions of law enforcement majors, accounting majors, and other business majors. *Journal of Forensic & Investigative Accounting*, 8(2), 275-287. Retrieved April 5, 2017, from <http://web.nacva.com/JFIA/Issues/JFIA-2016-No2-7.pdf>
- Ballantine, P. (2002). Linking moral intensity to ethical decision-making: A cross-cultural analysis of future marketers. ANZMAC 2002 Conference 2002 Proceedings, pp. 234. Retrieved March 24, 2017, from http://www.anzmac.org/conference_archive/2002/
- Bateman, C. R., Valentine, S., & Rittenburg, T. L. (2013). Ethical decision making in a peer-to-peer file sharing situation: The role of moral absolutes and social consensus. *Journal of Business Ethics*, 115(2), 229-240. doi: 10.1007/s10551-012-1388-1
- Battaglia, M. P. (2008). Non-probability sampling. *Encyclopedia of Survey Research Methods*: SAGE Publications Ltd. doi: 10.4135/9781412963947
- Bhal, K. T., Dadhich, A. (2011). Impact of ethical leadership and leader-member exchange on whistleblowing: The moderating impact of the moral intensity of the issue. *Journal of Business Ethics*, 103(3), 485-496. doi: 10.1007/s10551-011-0876-z
- Bothwell, E. (2017, March 16). Asia University Rankings 2017: Results Announced. *Times Higher Education*. Retrieved March 17, 2017, from <https://www.timeshighereducation.com/world-university-rankings/asia-university-rankings-2017-results-announced#survey-answer>
- Brennan, N., & Kelly, J. (2006). A study of whistleblowing among trainee auditors. *The British Accounting Review*, 39, 61-87. doi: 10.1016/j.bar.2006.12.002
- Brown, A. J. (Ed.). (2008). *Whistleblowing in the Australian Public Sector: Enhancing The Theory and Practice of Internal Witness Management in Public Sector Organisations*. Canberra: ANU E Press.
- Carlson, D. S., Kacmar, K. M., & Wadsworth, L. L. (2009). The impact of moral intensity dimensions on ethical decision-making: Assessing the relevance of orientation. *Journal of Managerial Issues*, 21(4), 534-551. Retrieved February 24, 2017, from <http://www.jstor.org/stable/40604668>
- Cassematis, P. G., & Wortley, R. (2013). Prediction of whistleblowing or non-reporting observation: The role of personal and situational factors. *Journal of Business Ethics*, 117(3), 615-634. doi: 10.1007/s10551-012-1548-3
- Chartered Institute of Internal Auditors (IIA). (2014). *Whistleblowing and Corporate Governance: The role of internal audit in whistleblowing*. Retrieved February 16, 2017, from https://www.iaa.org.uk/media/537988/final_0795_iaa_whistleblowing_report_30-1-14.pdf
- Chen, C. P., & Lai, C. T. (2014). To blow or not to blow the whistle: The effects of potential harm, social pressure and organisational commitment on whistleblowing intention and behaviour. *Business Ethics: An European Review*, 23(3), 327-342. doi: 10.1111/beer.12053
- Chiu, R. K. (2002). Ethical judgment, locus of control, and whistleblowing intention: A case study of mainland Chinese MBA students. *Managerial Auditing Journal*, 17(9), 581-587. doi: 10.1108/02686900210447588
- Clements, L. H., & Shawver, T. (2011). Moral intensity and intentions of accounting professionals to whistle-blow internally. *Journal of Forensic Studies in Accounting and Business*, 3(1), 67-82. Retrieved February 16, 2017, from

- <http://web.b.ebscohost.com/libezp.utar.edu.my/ehost/pdfviewer/pdfviewer?vid=2&sid=0a9fa8e9-30b1-4b1c-b367-07e018e2b835%40sessionmgr102&hid=129>
- Curtis, M. B. (2006). Are ethical decisions dependent upon mood? *Journal of Business Ethics*, 68, 191-209. doi:10.1007/s10551-006-9066-9
- Curtis, K. R. (2008). Conducting market research using primary data. *Niche Markets: Assessment & Strategy Development for Agriculture*. Retrieved March 22, 2017, from http://digitalcommons.usu.edu/appecon_facpub/172/
- Curtis, M. B., Conover, T. L., & Chui, L. C. (2012). A cross-cultural study of the influence of country of origin, justice, power distance, and gender on ethical decision making. *Journal of International Accounting Research*, 11(1), 5-34. doi: 10.2308/jiar-10213
- Elias, R. Z. & Farag, M. S. (2015). The relationship between professional skepticism and whistleblowing: Evidence of a retaliation effect. *Franklin Business & Law Journal*, 2015(3), 1-28. Retrieved March 1, 2017, from <http://connection.ebscohost.com/c/articles/110304889/relationship-between-professional-skepticism-whistleblowing-evidence-retaliation-effect>
- Erkmen, T., Çalışkan, A. O., & Esen, E. (2014). An empirical research about whistleblowing behavior in accounting context. *Journal of Accounting & Organizational Change*, 10(2), 229-243. doi: 10.1108/JAOC-03-2012-0028
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4. doi: 10.11648/j.ajtas.20160501.11
- Fatoki, O. (2013). Internal whistleblowing intentions of accounting students in South Africa: The impact of fear of retaliation, materiality and gender. *Journal of Social Science*, 37(1), 31-44.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate data analysis* (7th ed.). NJ: Pearson Prentice-Hall
- Hair, J. F. Jr., Money, A. H., Samouel, P., & Page, M. (2007). *Research Methods for Business*. East Lothian, UK: John Wiley & Sons Ltd.
- Jones, T. M. (1991). Ethical decision making by individuals in organizations: An issue-contingent model. *The Academy of Management Review*, 16(2), 366-395. Retrieved February 11, 2017, from <http://www.jstor.org/stable/258867>
- Kennett, D., Downs, A., & Durler, M. G. (2011). Accounting students' intent to blow the whistle on corporate fraudulent financial reporting: An experiment. *International Journal of Business and Social Science*, 2(14). Retrieved from <http://search.proquest.com/openview/83ae1623d7849530404c963bd395a814/1?pq-origsite=gscholar&cbl=646295>
- KPMG. (2013). *KPMG Malaysia Fraud, Bribery and Corruption Survey 2013*. Retrieved February 5, 2017, from <https://home.kpmg.com/my/en/home/insights/2014/01/malaysiafraudbribery.html>
- Latan, H., Ringle, C. M., & Chiappetta Jabbar, C. J. (2016). Whistleblowing intentions among public accountants in Indonesia: Testing for the moderation effects. *Journal of Business Ethics*, 138(1), 1-16. doi: 10.1007/s10551-016-3318-0
- Leitsch, D. L. (2006). Using dimensions of moral intensity to predict ethical decision-making in accounting. *Accounting Education: An International Journal*, 15(2), 135-149. doi: 10.1080=06939280600609151
- Lincoln, S. H., & Holmes, E. K. (2011). Ethical decision making: a process influenced by moral intensity. *Journal of Healthcare, Science and the Humanities*, 1(1), 55-69. Retrieved February 18, 2017, from http://s3.amazonaws.com/academia.edu.documents/39510551/A_Collective_Reflection_on_the_Current_S20151028-10889-rpib9e.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1487355636&Signature=SPGlc0DS0J0ZC%2BMT%2FqTc9eVhaMk%3D&response-content-disposition=inline%3B%20filename%3DA_Collective_Reflection_on_the_Current_S.pdf#page=59
- MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong S. (1999). Sample size in factor analysis. *Psychological Methods*, 4(1), 84-99. doi: 1082-989X/99/S3.00
- Malaysia Ministry of Higher Education (MOHE). (2016). *Laporan Kajian Pengesanan Graduan 2015*. Retrieved March 17, 2017, from <http://graduan.mohe.gov.my/skpg-report/Penerbitan/Terbitan.aspx>
- Malaysia Ministry of Higher Education (MOHE). (2017). *Graduan Ijazah Pertama (Warganegara) Bagi Tahun 2015 Jurusan Perakaunan*. Retrieved March 17, 2017, from <http://graduan.mohe.gov.my/skpg-report/ProgramPengajian/SubBidangK.aspx>
- Mathers, N., Fox, N., & Hunn, A. (2009). *Surveys and questionnaires* [National Institute for Health Research]. Retrieved March 15, 2017, from https://www.rds-yh.nihr.ac.uk/wp-content/uploads/2013/05/12_Surveys_and_Questionnaires_Revision_2009.pdf
- Mela, N. F., Zarefar, A., & Andreas. (2016). The relationship of professional commitment of auditing student and anticipatory socialization toward whistleblowing intention. *Procedia-Social and Behavioral Sciences*, 219, 507-512. doi: 10.1016/j.sbspro.2016.05.027
- Mencl, J., & May, D. R. (2009). The effects of proximity and empathy on ethical decision-making: An exploratory investigation. *Journal of Business Ethics*, 85(2), 201-226. doi: 10.1007/s10551-008-9765-5
- Miceli, M. P., & Near, J. P. (1985). Characteristics of organizational climate and perceived wrongdoing associated with whistleblowing decisions. *Personnel Psychology*, 38, 525-544.
- Miceli, M. P., Near, J. P., Rehg, M. T., & Van Scotter, J. R. (2012). Predicting employee reactions to perceived organizational wrongdoing: Demoralization, justice, proactive personality, and whistleblowing. *Human Relations*, 65(8), 923-954. doi: 10.1177/0018726712447004
- Morris, S. A., & McDonald, R. A. (1995). The role of moral intensity in moral judgments: An empirical investigation. *Journal of Business Ethics*, 14(9), 715-726. doi: 10.1007/BF00872325
- Musbah, A., Cowton, C. J., & Tyfa, D. (2016). The role of individual variables, organizational variables and moral intensity dimensions in Libyan management accountants' ethical decision making. *Journal of Business Ethics*, 134(3), 335-358. doi: 10.1007/s10551-014-2421-3
- Mustapha, M., & Siaw, L. S. (2012). Whistleblowing: Perceptions of future accountants. *International Proceedings of Economics Development & Research*, 38, 135-139.

- Pillay, S., Dorasamy, N., & Vranic, V. (2012). Exploring whistleblowing intentions in South Africa: A quantitative analysis. *African Journal of Business Management*, 6(7), 2529-2548. doi: 10.5897/AJBM11.148
- PricewaterhouseCoopers (PwC). (2016). Economic crime from the board to the ground: Why a disconnect is putting Malaysian companies at risk. *Global Economic Crime Survey 2016 (Malaysia report)*. Retrieved February 5, 2017, from www.pwc.com/gx/en/services/advisory/forensics/economic-crime-survey.html
- Rachagan, S. (2012). Encouraging whistleblowing to improve corporate governance? A Malaysian initiative. *Journal of Business Ethics*, 115(2), 367-382. doi: 10.1007/s10551-012-1402-7
- Rahimnia, F., & Hassanzadeh, J. F. (2013). The impact of website content dimension and e-trust on e-marketing effectiveness: The case of Iranian commercial saffron corporations. *Information & Management*, 50(5), 240-247. doi: 10.1016/j.im.2013.04.003
- 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. doi: 10.1287/orsc.1070.0310e
- Salleh, K., & Yunus, N. S. (2015). Encouraging factors for whistleblowing in public sector: Malaysian case evidence. *Proceedings of the International Conference on Accounting Studies (ICAS 2015)*. (August 17-20 August 2015). Universiti Utara Malaysia (UUM). Johor, Malaysia.
- Sampaio, D. B. D., & Sorbal, F. (2013). Speak now or forever hold your peace? An essay on whistleblowing and its interfaces with the Brazilian culture. *Brazilian Administration Review*, 10(4), 370-388. doi: 10.1590/S1807-76922013000400002
- Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for Business students* (6th ed.). Harlow, UK: Pearson Education.
- Schmidtke, J. M. (2007). The relationship between social norm consensus, perceived similarity, and observer reactions to coworker theft. *Human Resource Management*, 46(4), 561-582. doi: 10.1002/hrm.20182
- Sekaran, U., & Bougie, R. (2013). *Research methods for Business: A skill-building approach* (6th ed.). New York: John Wiley & Sons.
- Shawver, T. J. (2011). The effects of moral intensity on whistleblowing behaviors of accounting professionals. *Journal of Forensic & Investigative Accounting*, 3(2), 162-190.
- Shawver, T. J., & Clements, L. H. (2015). Are there gender differences when professional accountants evaluate moral intensity for earnings management? *Journal of Business Ethics*, 131(3), 557-566. doi: 10.1007/s10551-014-2293-6
- Sivo, S. A., Saunders, C., Chang, Q., & Jiang, J. J. (2006). How low should you go? Low response rates and the validity of inference in IS questionnaire research. *Journal of the Association for Information Systems*, 7(6), 351-414. Retrieved March 15, 2017, from <http://aisel.aisnet.org/jais/vol7/iss6/17>
- Smith, B. R., Kistruck, G. M., & Cannatelli, B. (2016). The impact of moral intensity and desire for control on scaling decisions in social entrepreneurship. *Journal of Business Ethics*, 133(4), 677-689. doi: 10.1007/s10551-014-2447-6
- Sweeney, B., & Costello, F. (2009). Moral intensity and ethical decision-making: An empirical examination of undergraduate accounting and business students. *Accounting Education: An International Journal*, 18(1), 75-97. doi: 10.1080/09639280802009454
- Taylor, E. Z., & Curtis, M. B. (2013). Whistleblowing in audit firms: Organizational response and power distance. *Behavioral Research in Accounting*, 25(2), 21-43. doi: 10.2308/bria-50415
- Teh, S. Y., Othman, A. R., Sulaiman, S., Mohamed-Ibrahim, M. I., & Razha-Rashid, M. (2016). Application of mean and standard deviation in questionnaire surveys: Construct validation. *Journal of Technology (Sciences & Engineering)*, 78(6-4), 99-105. Retrieved March 18, 2017, from <http://www.jurnalteknologi.utm.my/index.php/jurnalteknologi/article/view/8983>
- Thompson, C. B. (2009). Descriptive data analysis. *Air Medical Journal*, 28(2), 56-59. doi: 10.1016/j.amj.2008.12.001
- Trongmateerut, P., & Sweeney, J. T. (2013). The influence of subjective norms on whistle-blowing: A cross-cultural investigation. *Journal of Business Ethics*, 112(3), 437-451. doi: 10.1007/s10551-012-1270-1
- Valentine, S., & Hollingworth, D. (2012). Moral intensity, issue importance, and ethical reasoning in operations situations. *Journal of Business Ethics*, 108(4), 509-523. doi: 10.1007/s10551-011-1107-3
- Velicer, W. F., & Fava, J. L. (1998). Effects of variable and subject sampling on factor pattern recovery. *Psychological Methods*, 3(2), 231-251. doi: 10.1037/1082-989X.3.2.231
- Wainberg, J., & Perreault, S. (2016). Whistleblowing in audit firms: Do explicit protections from retaliation activate implicit threats of reprisal? *Behavioral Research in Accounting*, 28(1), 83-93. doi: 10.2308/bria-51122
- Wang, J., Keil, M., & Wang, L. (2015). The effect of moral intensity on IT employees' bad news reporting. *Journal of Computer Information Systems*, 55(3), 1-10. doi: 10.1080/08874417.2015.11645766
- Win, Y. Y., Ismail, S., & Hamid, F. A. (2014). Malaysian accounting educators' perceptions on ethics education in the accounting curriculum. *Malaysian Accounting Review*, 13(1), 1-25. Retrieved February 16, 2017, from https://www.researchgate.net/publication/268210769_ACCOUNTING_EDUCATORS%27_PERCEPTIONS_ON_ETHICS_EDUCATION_IN_THE_ACCOUNTING_CURRICULUM
- Zakaria, M., Abdul Razak, S. N. A., & Anuar Yusoff, M. S. (2016). The theory of planned behaviour as a framework for whistleblowing intentions. *Review of European Studies*, 8(3), 221-236. doi: 10.5539/res.v8n3p221

Kogilavani Apadore,
*Faculty of Business and Finance, Universiti Tunku Abdul Rahman,
Jalan Universiti Bandar Barat, 31900, Kampar, Perak, Malaysia*
kogilavani@utar.edu.my

Chan Yee Chin,
*Faculty of Business and Finance, Universiti Tunku Abdul Rahman,
Jalan Universiti Bandar Barat, 31900, Kampar, Perak, Malaysia*

Mabel Ding Cheau Qi,
*Faculty of Business and Finance, Universiti Tunku Abdul Rahman,
Jalan Universiti Bandar Barat, 31900, Kampar, Perak, Malaysia*

Tham Mun Yan,
*Faculty of Business and Finance, Universiti Tunku Abdul Rahman,
Jalan Universiti Bandar Barat, 31900, Kampar, Perak, Malaysia*

Waynnie Goh Yu-Sinn,
*Faculty of Business and Finance, Universiti Tunku Abdul Rahman,
Jalan Universiti Bandar Barat, 31900, Kampar, Perak, Malaysia*

Wong Tze Min
*Faculty of Business and Finance, Universiti Tunku Abdul Rahman,
Jalan Universiti Bandar Barat, 31900, Kampar, Perak, Malaysia*