

Factors Influencing the Improvement of Students' Moral and Professional Ethics Attributes: An Industrial Training Intervention

Shazaitul Azreen Rodzalan^{a*}, Maisarah Mohamed Saat^b, Lily Suriani Mohd Arif^c, ^aDepartment of Management and Technology, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia, 86400, Batu Pahat, Johor, Malaysia, ^bAzman Hashim International Business School, Universiti Teknologi Malaysia, 81310 Skudai, Johor, MALAYSIA, ^cFaculty of Social Sciences and Humanities, Universiti Teknologi Malaysia, 81310 Skudai, Johor, Malaysia,

A transition from university to real workplace requires students to become holistic in both academic and non-academic areas. In doing so, early exposure through industrial training is believed to enhance their attributes and skills, develop maturity and focus on their future employment. Real ethical exposure can also be acquired through this training. This study has twofold objectives; firstly, to explore the impact of industrial training on students' moral and professional ethics attributes improvement and secondly, to identify factors that influence this attributes improvement. These factors are demographic profiles of students, supervisors and organization, students' motivation, job scope, supervisor leadership styles and organizational culture. A quantitative study through two phases of survey was conducted in six public universities in Malaysia. In the pre phase, 1,227 students returned complete questionnaire, while in the post phase a total of 485 usable questionnaires were analyzed. Based on paired t-test analysis, it appears that industrial training had an impact on students' moral and ethicality improvement. This improvement is greater if students are extrinsically motivated and undergoing their training in large and multinational organization. Further, Engineering students improved significantly compared to Science and Social Science students. The findings provide some practical implications and recommendations for future industrial training practices.

Key words: *Moral, ethics, attributes, industrial training, university students.*

Introduction

Generally, a person is said to be ethical if he or she has done things according to the law and regulations. In short, what is 'right' means 'act ethically' whereas 'wrong' means 'act unethically'. Ethical values can be nurtured and taught since childhood, starting at home by parental guidance and then it might influence by colleagues and environmental surroundings (O'Leary, 2008). Kohlberg (1981) supported the notion where ethical awareness should be taught in early age by providing continuous education, especially to the students. By following Trevino (1986) assertion where individuals morally develop through work experience, thus, it is important for university students to be exposed with real work situation so that they can be ethical leaders in future. One of the most effective ways is by sending them to industrial training. The industrial training refers to the students' placement in an organisation by taking part in supervised practical work in selected industries, either outside or inside the country, within a certain period of time before they are awarded certificate, diploma or degree (MOHE, 2006). At training organisations, students will go through with socialisation process which is proved to be crucial in enhancing their performance and employability (Kagaari, 2007). In fact, the exposure to real ethical situation in workplace will become the best platform for the students to gain early exposure as a preparation for the university to industry transition.

Given the importance of early exposure to ethical situations, question is raised; are students ready to lead their country with high moral and ethicality? It is crucial to ensure leaders who lead the country hold with high integrity. There is worry due to a high number of ethical scandals reported recently. For instance, Corruption Perception Index (CPI) in 2018 has reported Malaysia was at rank 61 out of 180 countries, scoring 47 points out of 100 (Transparency National, 2018). The 100 points indicate clean from corruption, while 0 point is highly corrupt. Malaysia, thus in the middle of corruption and most of the cases involved the professionals. This unethical conduct also occurred in the classroom learning. Even though moral and ethics are often emphasised during classroom learning, it has yet reach its objectives as most of the employers still complain that university graduates are lacking with this attributes (Nasir et al., 2011; Panagiotakopoulos, 2012). According to Anitsal et al. (2009), students were inclined to behave unethically in the classroom learning, due to the effect of undetected academic dishonesty that happen during the learning process at the university. If this situation is prolonged, low ethical standard and integrity among university students are expected to worsen in the future.

As the focus of this study is to investigate the improvement of students' moral and professional ethics attributes with relation to industrial training intervention, focus then turned to look specifically on past studies on ethics and working experience acquired from industrial training (Baker and Comer, 2012; Craig and Oja, 2012; Devadason et al., 2010;

Saat and Ahmad, 2009). Generally, these studies found similar findings where students who undergo industrial training were able to improve high ethical awareness and moral judgment as compared to students without this experience. For example, Craig and Oja (2012) claimed that students with working experience have opportunities to perceive real ethical issues as they were exposed with various tasks. In fact, Baker and Comer (2012) found that students with greater work experience were able to deal with more complicated issues than those with little exposure in work experience. In addition, the impact of working experience offers students an “exposure to persons of mature moral thinking”, which also may affect their ethical awareness (Rest et al., 1999, p. 125). Consistently, a study by Saat and Ahmad (2009) on 181 accounting students showed positive improvement in their ethical awareness after attending industrial training.

With the problems mentioned above, this study aims to explore the impact of industrial training on students’ moral and professional ethics attributes improvement. It also aims to identify best predictors that contribute to the improvement. The predictors to be tested are student’s demographic profile (gender, ethnicity, field of study and academic performance), industry supervisor’s demographic profile (gender, ethnicity, working experience and working position), organization’s demographic profile (types of sectors and companies and organizational size), student’s motivation (intrinsic and extrinsic), supervisor’s leadership styles (transformational, transactional and laissez-faire), job scope (independence and working with people) and lastly organizational culture (individualism versus collectivism and power distance).

Materials and Methods

A pre and post survey of industrial training was conducted to explore the impact of industrial training on students’ moral and professional ethics skill. The population of students from six Malaysian public universities were studied. Specifically, these students come from three different fields of studies, namely Social Science, Science and Engineering. Questionnaire, as main research instrument was used in pre and post survey. In the pre survey, there are 1,227 usable questionnaires out of 2,000 questionnaires were successfully self-collected. Using online medium in the post survey, only 485 usable questionnaires were collected, which yield 39.5% from the pre survey. The questionnaire in the pre survey consists of questions related to students’ demographic (Section A), students’ motivation (Section B) and moral and professional ethics skill (Section C). Items in Section B were adapted from various sources (like Chiaburu & Tekleab, 2005; Ismail et al., 2010). Meanwhile, twelve items in Section C captured students agreement on statement related to ethical situation (Saat and Ahmad, 2009), ethical judgment (Allmon et al., 1997; Allmon et al., 2000; McAllister, 1995) and factors influencing students’ behaviour (Bruce, 1994). On the other hand, questions in the post survey related to demographic profiles of supervisors and organization (Section A), job scope

(Section B), supervisor's leadership styles (Section C), job scope (Section D) and organizational culture (Section E). Lastly, similar questions of moral and professional ethics skill in the pre survey was again used in the post survey (Section F). Job scope items were adapted from Hackman and Oldham (1976) and Osland and Kolb (2007). Leadership styles were measured using Multifactor Leadership Questionnaire (MLQ) by Bass and Avolio (1995) while organizational culture was measured through Hofstede's cultural dimensions (Hofstede, 2008; Lari, NYangweso & Rono 2017). All usable data was analyzed using descriptive analysis, paired t-test analysis and stepwise multiple regression analysis. The descriptive analysis was used in capturing results of all demographic profiles. The paired t-test analysis was used in determining the impact of industrial training on moral and professional ethics skill. The stepwise multiple regressions analysis was used in identifying factors influencing this skill improvement.

Results

In total, only 1,227 out of 2,000 students have completed pre survey, which give responses rate of 61.3%. Using similar respondents in the pre survey, the researchers were able to collect 485 usable questionnaires in the post survey. Majority of respondents in both phases were female respondents. This is consistent with the enrolment of female students in Malaysian public universities were greater than enrolment of male students. In terms of ethnicity, the greatest number of respondents was Malay, Chinese and Indian. Meanwhile, the proportion of respondents from Engineering, Science and Social Science were almost the same for both phases. In supervisor's demographic profile, the number of male and female supervisors in the industry was quite balance. Similar to students' demographic, majority of the supervisors are Malay, followed by Chinese, Indian and others ethnicity. Most of the respondents were being supervised by supervisors who are in middle management position and least of them being supervised by top managers. However, results show that majority of respondents were supervised by experienced supervisors (more than 9 years of working experience). In organizational demographic profile, the respondents who undergo their industrial training at private sector dominate the sample of study. Majority of them also undergo industrial training at national companies. Almost half of the respondents attended their industrial training in small organizations with less than 50 employees in the company. Large organizations took the second largest proportion of respondents, while least respondents in medium size organization.

Table 1 presents results of responses on selected factors that might influence the improvement of students' moral and professional ethics skill. Students' motivation was measured using two constructs of intrinsic and extrinsic. Both constructs were reported to have almost similar mean score. In job scope, the respondents claimed that they are given independence job as compared to work with people. Leadership styles were measured using a

score range. There are three categories of score range, which are high score (9 – 12), moderate score (5 – 8) and low score (0 – 4). Although all three leadership styles fall into moderate score, yet the respondents claimed that their supervisor implement laissez-faire styles and least in transformational leadership styles. Organizational culture is measured using a seven point of scale ranging from ‘Strongly disagree’ (1) to ‘Strongly agree’ (7). It appears that both organizational culture constructs fall into high level of agreement.

Table 1: Responses on selected factors

Selected Factors	Mean/Score Range*	SD
Intrinsic motivation	5.52	1.23
Extrinsic motivation	5.50	1.31
Independence job	3.19	0.76
Working with people job	2.86	0.87
Transformational leadership	7.70*	1.60
Transactional leadership	8.38*	1.93
Laissez-Faire leadership	8.61*	1.87
Individualism versus collectivism	5.27	1.20
Power distance	5.33	1.21

Table 2: Paired sample t-test of moral and professional ethics skill improvement

Items	Moral and professional ethics skill	Mean ^a		Mean difference	SD	T	Sig.
		Pre	Post				
1	Using a copy machine, paper and other supplies for personal use is unethical behaviour.	4.01	3.01	-0.10	2.32	-9.470	.000*
2	I prefer to report friends' unethical behaviour to supervisor.	4.24	3.48	-0.77	1.81	-9.326	.000*
3	I hold to my principle that honesty is important than getting good performance.	5.56	5.77	0.21	1.57	3.017	.003*
4	During industrial training in organisation, I referred to others to resolve ethical dilemmas.	4.79	5.41	0.63	1.62	8.515	.000*
5	I take full responsibility if I do any unethical action.	5.43	5.47	0.04	1.54	0.621	.535
6	I still behaved ethically although it is beyond my control.	3.53	3.95	0.42	2.19	4.195	.000*
7	The organisation rewarded me when I did something ethical.	3.90	4.15	0.25	1.89	2.934	.004*

8	I still behaved ethically although because of pressures.	4.40	4.96	0.56	2.51	4.906	.000*
9	I behaved ethically in adherence to regulation and code of ethics outlined by organisation.	5.13	5.39	0.25	1.60	3.454	.001*
10	I behaved ethically when asked to do so by my supervisor because it is consistent with my ethical principle.	4.74	4.49	-0.25	2.21	-2.465	.014*
11	I behaved ethically to show my obedience on supervisors' instruction.	3.69	3.69	0.00	2.76	-0.066	1.000
12	I will take all opinions/considerations from others if I need to make a decision on ethical dilemma.	4.87	5.45	0.59	1.45	8.893	.000*
	Overall moral and professional ethics skill	4.52	4.60	0.08	0.63	2.711	.007*

**Significant at the 0.01 level (2-tailed); *Significant at the 0.05 level (2-tailed)

An overall moral and professional ethics skill is calculated based on the difference between average of pre and post of twelve moral and professional ethics skill items (mean post-training minus mean pre- training) as shown in Table 2. The positive mean difference of this overall moral and professional ethics skill is also known as moral and professional ethics skill improvement. The improvement of this skill is registered along seven point scale ranging from 'Strongly disagree' (1) to 'Strongly agree' (7) involving twelve ethics items. As shown in Table 2, students benefited from undergo an industrial training as they improved significantly in seven out of twelve items (Item 3, 4, 6, 7, 8, 9 and 12). Nevertheless, students' moral and professional ethics skill have significantly decreased upon completion of their industrial training in three items (Item 1, 2 and 10). The results show that students who have undergone their industrial training were perceived more to agree that using office equipment (such copy machine, paper) for personal use (Item 1) is considered as acceptable behaviour. Results also show that they were inclined to refuse reporting friend's unethical behaviour (Item 2). They were also willing to commit unethical actions if being instructed by their supervisors (Item 10). Results of the overall mean showed a significant increased from 4.52 to 4.60, indicating a significant improvement in moral and professional ethics skill.

Using the stepwise method, a multiple regression analysis was employed to identify the significant factors that have effect on students' moral and professional ethics attributes. Before conducting the multiple regressions, this study has recoded the categorical data into dummy variables due to this analysis only allow continuous data. The results in Table 3 below shows that correlation between four predictor variables (extrinsic motivation, large organisation, engineering students and multinational company) and dependent variable (students' moral and professional ethics attributes) is 0.417. The four predictor variables contribute to 16.9% of the total variance in respect to the improvement of moral and

professional ethics attributes. The model for the predictor variables is significant as $F(4,458) = 23.966$ at $p < 0.01$.

As illustrated in Table 4 below, the regression coefficient, B for extrinsic motivation ($B=0.113$, $p < 0.01$) indicates positive influence on the attributes. In other words, students' moral and professional ethics attributes should increase 0.113 units, if there is an increase one unit of extrinsic motivation. However, negative sign of B value indicates low improvement of moral and professional ethics attributes results from an increase in one unit of the predictor factors (small and science students). An example of dummy variable interpretation for organisational size is student have less ($B=-0.130$) improvement if undergo industrial training in small organisation, compared to those in large organisation. The results also appear that engineering students improved 0.197 more than science students, while students in multinational companies improved 0.152 more than those in national companies, when the other factors are all controlled.

Table 3: Regression model (students' moral and professional ethics attributes)

Model	R	R2	Adjusted R2	Std. Error of the estimate
1	0.343 ^a	0.118	0.115	0.62146
2	0.365 ^b	0.133	0.137	0.61810
3	0.395 ^c	0.156	0.145	0.61440
4	0.417 ^d	0.174	0.169	0.61094

a. Motivation (extrinsic); b. Motivation (extrinsic), Organizational size (small); c. Motivation (extrinsic), Organizational size (small), Field of study (science); d. Motivation (extrinsic), Organizational size (small), Field of study (science), Types of companies (national)

Table 4: Multiple regressions analysis (stepwise) for predicting students' moral and professional ethics attributes

Model	B	t	Sig
Constant	0.370	2.405	.017*
Motivation (<i>extrinsic</i>)	0.113	4.224	.000**
Organizational size (<i>small</i>)	-0.130	-2.205	.028*
Field of study (<i>science</i>)	-0.197	-3.122	.002**
Types of companies (<i>national</i>)	-0.152	-2.492	.013*

** Significant at the 0.01 level (2-tailed); * Significant at the 0.05 level (2-tailed).

Based on the multiple regression analysis result, the following equation was formulated to predict the students' moral and professional ethics attributes upon completion of their industrial training.

$$Y = 0.370 + 0.113X_1 - 0.130X_2 - 0.197X_3 - 0.152X_4$$

where,

- Y = Moral and professional ethics attributes;
- X₁ = Motivation (extrinsic);
- X₂ = Organisational size (reference_large);
- X₃ = Field of study (reference_engineering);
- X₄ = Types of companies (reference_multinational)

Discussion

Results from paired sample t-test revealed that students benefited from undergoing the industrial training as they show significant improvement in their moral and professional ethics attributes. It supports the claim made by Trevino (1986) as individuals morally develop through their work experiences. Furthermore, the present findings further support the results of Craig and Oja (2012) who have confirmed that industrial training is an imperative method in improving students' moral and professional ethics attributes as they acquired real workplace experience. Results also revealed that students may act against their ethical principle if being asked by their supervisor, thus supporting Trevino's claim where students may incline to accept unethical action when they consider that the consequences will be shouldered by higher authorities in the organisation (Trevino, 1986).

Indeed, the supervisors should be a good role models as suggested by Bandura (2001), whereby they being observed by students during learning in training organisation. Due to fear of low assessment on their training report, students prefer not to report others unethical behaviour (whistle blowing) which is consistent with a study by Saat (2010). In addition, they perceived that using office supplies for personal use is an acceptable behaviour. This is particularly relevant as they may have observed unethical behaviour practiced by their supervisor and colleagues. Interestingly, students were inclined to behave ethically even though the situation is beyond their control and given to work under pressure. Based on these results, it can be concluded that students may ignore their ethical principle if the situations involve other people.

Meanwhile, results from stepwise multiple regression analysis exhibited four selected factors which have influenced the improvement of students' moral and professional ethics attributes. Firstly, the results indicated that extrinsic motivation is perceived as dominant variable, which has a strong association with this attributes improvement. The finding is corroborating those of previous studies pointing out the influence of extrinsic motivation on one's ethicality (Nill and Schibrowsky, 2005; Windsor, 2002). This expected finding can be explained through influence of supervisor and colleagues in training organisation. It is proven when students perceived to have a good relationship with their supervisor and colleagues, which mostly related to supervision and interpersonal factors in extrinsic motivation by Herzberg, Mausner and Synderman (1959). Such good relationships may lead students to behave accordingly in order to show their obedience to their supervisor.

Hence, supervisors and staff in training organisation play a role in improving students' moral and professional ethics attributes. Secondly, factors of students who have undergone their industrial training in large organisations improved higher in their moral and professional ethics attributes. A possible explanation of this result is, large organisation may have support mechanisms when making ethical decisions (Clarke, Hill and Stevens, 1996). It is believed that the support mechanisms might reduce employees' pressure and thus lead to act ethically. Another possible explanation is it might be related to the "magnifying effect in larger organisations as one's social web expands with the larger organisational size" (Schminke, 2001, p. 383). In other words, students' in large organisations will have more interaction with different people and thus have different sources of reference when facing with ethical dilemma. The current finding is in agreement with a study by Pierce and Sweeney (2010) discovered that organisational size has a significant influenced on ethical decision making.

Thirdly, the highest improvement in moral and professional ethics attributes is by engineering students. Thus, field of study is recognised as one of contributing factors in ethical improvement. It is possible to explain the current finding due to engineering nature that emphasises on responsibilities related to safety and social consequences (Loui, 2005; Saat, Bakar, Rafai and Amin, 2012). Fourthly, results appear that students in multinational companies showed greater improvement in moral and professional ethics attributes. This significant improvement could be due to the established code of ethics that consider cultural differences in where businesses are operated (Olaru and Gurgu, 2009). It is undeniable that national companies also has its own code of ethics, but it is believed that students in multinational companies may experience various ethical dilemmas as this types of companies deal with people from different cultures. Furthermore, multinational companies may be strict in doing business ethically as the survival of this company depends on the share with foreign countries. For example, gift-giving is considered acceptable in certain cultures as a sign of



respect, but some of cultures may consider it as bribery. Such experiences lead students to improve their ethical standards.

Conclusion

The outcomes of this study have contributed to the body of knowledge in moral and professional ethics attributes. It also contributes to all stakeholders involving industrial training. Therefore, it is recommended that students should fully utilize work experience during industrial training by observing how ethical the situation is tackled by management. When they return to the University, there could be platform where ethical observation is shared and discussed which could improve their perspectives. Beside, higher learning institutions and industry should work collaboratively in finding ways to expose students and guide them with ethical dilemmas via industrial training, as preparation for them to work in the future. In fact, the curriculum of the training and job scope should align together in imparting ethics education, so that students will acquire more benefit. Lastly, both academicians and industry supervisors need to be a good role model as students will learn from these experts.

Acknowledgement (Acknowledgement)

We would like to thank Registrar Office, Universiti Tun Hussein Onn Malaysia for supporting financially this research as well as all the authors for their manuscript contributions.



REFERENCES

- Allmon, D. E., Chen, H. C. K., Pritchett T. K. & Forrest, P. (1997). A multicultural examination of business ethics perceptions. *Journal of Business Ethics*, 16(2), 183-188.
- Allmon, D. E., Page, D. & Roberts, R. (2000). Determinants of perceptions of cheating: ethical orientation, personality and demographics. *Journal of Business Ethics*, 23(4), 411-422.
- Anitsal, I., Anitsal, M. & Elmore, R. (2009). Academic dishonesty and intention to cheat: A model on active versus passive academic dishonesty as perceived by business students. *Academy of Educational Leadership Journal*, 13(2), 17-26.
- Baker, S. D. & Comer, D. R. (2012). "Business ethics everywhere": An experiential exercise to develop students' ability to identify and respond to ethical issues in business. *Journal of Management Education*, 36(1), 95- 125.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1-26.
- Bass, B. M. & Avolio, B. J. (1995). *Multifactor Leadership Questionnaire*. (2nded.). Redwood City, CA: Mind Garden.
- Chiaburu, D. S. & Tekleab, A. G. (2005). Individual and contextual influences on multiple dimensions of training effectiveness. *Journal of European Industrial Training*, 29(8), 604-626.
- Clarke, P., Hill N. T. & Stevens, K. (1996). Ethical reasoning abilities: accountancy practitioners in Ireland. *IBAR*, 17, 94-109.
- Craig, P. J. & Oja, S. N. (2012). Moral judgement changes among undergraduates in a capstone internship experience. *Journal of Moral Education*, 1-28.
- Devadason, E. S., Subramaniam, T. & Daniel, E. G. S. (2010). Final year undergraduates' perceptions of the integration of soft skills in the formal curriculum: A survey of Malaysian public universities. *Asia Pacific Education Review*, 11(3), 321-348.
- Hackman, J. R. & Oldham, G. R. (1976). Motivation through the design of work: Test of theory. *Organisational Behavior and Human Performance*, 16(3), 250-279.
- Herzberg, F., Mausner, B. & Snyderman, B. (1959). *The Motivation to Work*. New York, NY: Wiley.



- Hofstede, G. (2008). Values Survey Module 2008 (VSM 2008). Retrieved October 18, 2012, from <http://www.geerthofstede.nl/vsm-08>
- Ismail, A., Sieng, L. L. C., Abdullah M. M. & Francis, S. K. (2010). Linking supervisor's role in training programs to motivation to learn as an antecedent of job performance. *Intangible Capital*, 2(1), 1-25.
- Kagaari, J. R. K. (2007). Evaluation of the effects of vocational choice and practical training on students' employability. *Journal of European Industrial Training*, 31(6), 449-471.
- Kohlberg, L. (1981). *Essays on Moral Development. The Philosophy of Moral Development. Moral Stages and the Idea of Justice.* (1st ed.) New York, New York, USA: Harper & Row.
- Loui, M. C. (2005). Ethics and the development of professional identities of engineering students. *Journal of Engineering Education*, 94(4), 383-390.
- Lari, L. R. A., NYangweso, P. M., & Rono, L. J. (2017). Determinants of Technical Inefficiency of Saccos in Kenya: A Net Operating Cash Flows Output Slack Analysis. *Asian Journal of Economics and Empirical Research*, 4(2), 49-60.
- McAllister, D. J. (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organisations. *The Academy of Management Journal*, 38(1), 24-59.
- MOHE. (2006). *Development of Soft Skills for Institutions of Higher Learning.* Serdang, Selangor: Universiti Putra Malaysia Press.
- Nasir, A. N. M., Ali, D. F., Noordin M. K. & Nordin, M. S. (2011). Non-technical skills for technical skilled workers in Malaysia. *Proceedings of the International Engineering and Technology Education Conference.* 2011. Kuala Lumpur, Malaysia.
- Nil, A. & Schibrowsky, J. A. (2005). The impact of corporate culture, the reward system and perceived moral intensity on marketing students' ethical decision making. *Journal of Marketing Education*, 27(1), 68-80.
- Olaru, S. D. & Gurgu, E. (2009). Ethics and integrity in multinational companies. *Review of International Comparative Management*, 10(1), 113-120.
- O'Leary, C. (2008). An empirical analysis of the positive impact of ethics teaching on accounting students. *Accounting Education*, 18(4-5), 505-520.
- Osland, J. S. & Kolb, D. A. (2007). *Organisational Behaviour: An Experiential Approach.* (8th ed.) Upper Saddle River, New Jersey: Pearson Education, Inc.



- Panagiotakopoulos, A. (2012). Employability skills development in Greek higher education institutions (HEIs): Implications for policy makers. *Higher Education, Skills and Work-based Learning*, 2(2), 141-150.
- Pierce, B. & Sweeney, B. (2010). The relationship between demographic variables and ethical decision making of trainee accountants. *International Journal of Auditing*, 14(1), 79-99.
- Rest, J., Bebeau, M. J., Narvez, D. & Thoma, S. J. (1999). *Post Conventional Moral Thinking a Neo Kohlbergian Approach*: Lawrence Erlbaum Associates, Inc.
- Saat, M. M. (2010). An investigation of the effects of a moral education program on the ethical development of Malaysian future accountants. Doctor Philosophy, Curtin University of Technology, Australia.
- Saat, M. M., Bakar, S. A., Rafai N. H. & Amin, A. M. (2012). Ethical challenges in the workplace: Are these future engineers prepared? *Procedia - Social and Behavioral Sciences*, 40(0), 269- 273.
- Saat, M. M. & Ahmad, R. A. R. (2009). Ethical exposure in practical training. *Accountants Today*, 14-21.
- Transparency National. (2018). Corruption Perception Index (CPI). Retrieved on July 8, 2019, from <https://www.transparency.org/cpi2018>
- Schminke, M. (2001). Considering the business in business ethics: an exploratory study of the influence of organisational size and structure on individual ethical predispositions. *Journal of Business Ethics*, 30(4), 375-390.
- Trevino, L. K. (1986). Ethical decision making in organisations: A person-situation interactionist model. *The Academy of Management Review*, 11(3), 601-617.
- Windsor, C. A. (2002). Auditors' predisposition to provide fair judgments: Australian evidence of auditors' level of moral reasoning. *Australian Accounting Review*, 12(27), 51-58.