

Accounting Ethics Courses, Teaching Styles, Ethical Culture and Ethical Behaviour of Accounting Graduates in Malaysia

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ABSTRACT

The failure of accountants to maintain ethical behaviour while performing professional services has become an issue that has been discussed over the years. Ethics education and the environment has been proven to assist to shape the ethical behaviour of accounting students. Thus, the objective of this study was to examine whether accounting ethics courses, teaching styles, and ethical culture influence the ethical behaviour of accounting graduates in Malaysia. E-survey questionnaires were distributed to accounting graduates who graduated in 2019, 2020, and 2021 with less than three years of working experience in accounting/auditing-related fields. A total of 344 usable responses were received and it was analysed using PLS-SEM. The study found that teaching delivery and culture, had a positive and significant relationship with ethical behavior but ethics courses were found to have a positive but not significant relationship with ethical behaviour. The accounting industry should foster a positive ethical culture at work by providing ethics training and holding seminars to address ethical issues in the field in order to raise awareness and understanding of ethics. Accounting professional bodies and educational institutions should use ethics cases, short videos and role play in their teaching of ethics.

Keywords: Ethical Behaviour, Culture, Ethics Courses, Teaching Delivery

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INTRODUCTION

Fraud or corporate scandal has been discussed over the years, but it is still a big issue today. The inaccurate financial information provided by accountants or auditors is contradicting the primary goals of corporate accounting, that is to make it easier for managers to monitor the organisation's well-being (Gerety & Lehn, 1997). The accountant's inaccurate financial information will lead to an accounting scandal as it does not provide transparent and reliable information to the stakeholder (Kızıl & Kaşbaşı, 2018). Hence, accounting is not only a subject taught in educational institutions. The definition of accounting itself is said to be under-valued and not only on 'academic' endeavours but also on the end purpose of the accounting profession itself (Carnegie, Parker, & Tsahuridu, 2021).

In Malaysia, the recent accounting fraud case involving Serba Dinamik Holding Berhad reported that the accountants and the top managements of the company were found to be guilty for furnishing false statement to the Bursa Malaysia (Business Today, 2021). Certified accountants that were found guilty for rule violations will be reprimanded and penalized, with their details listed in the official website of Malaysian Institute of Accountants (MIA). A majority of the unethical cases reported were conducted by certified accountants who are graduates from MIA-accredited universities (MIA, 2023).

This is supported by a study conducted by Diyanti et al. (2022), who found that newly-joined accounting graduates in the accounting profession have the ability to identify ethical dilemmas such as procuring equipment and services for personal use, fabricating notes and engaging in fraudulent financial statement preparation. However, superior's pressure, job position, work environment, and organizational culture compel accounting graduates to either stay silent or engage in unethical practices when confronted with ethical dilemmas (Diyanti, Bone, Norsita, Febriani, & Ningsih, 2022). Hence, ethics education at the universities should be revisited to ensure that they produce accounting graduates that possess a good ethical behaviour.

Unethical conduct or accounting scandal is caused by irresponsible accountants or auditors who ignore facts that financial reports should be reliable, transparent, standard and objective (Kızıl & Kaşbaşı, 2018). The

capability of accountants or auditors to furnish false financial statements intentionally shows that they are well equipped with the technical skills and knowledge in accounting (Umar, Partahi, & Purba, 2020). It shows that even professional skills, technical knowledge and years of working experience in accounting and auditing are not enough to produce a certified and ethical accountant and auditor. Hence, the values of individuals are essential in guiding their behaviour (Schwartz, 2012).

Ethics education, particularly in the university curriculum, will enhance the fundamentals of students' ethical behaviour and knowledge, hence it is believed to be a handy tool and an effective means to improve attitudes and behaviour among accounting and business students (Mayhew & Murphy, 2008). The discussion on the most preferred and effective delivery methods has also been discussed by the previous studies (Okougbo & Okike, 2021). The culture of the workplace will also influence the values of an individual (Douglas, Davidson, & Schwartz, 2001). According to Lewis (1985), ethical business behaviour is defined as the ability of one organisation or company to adhere to a moral norm, rules, guidelines, and standards that the company or firm has determined to be the basic principle for morally good behaviours (Lewis, 1985).

Several accounting associations and regulatory bodies such as the Association of Chartered Certified Accountants (ACCA), American Accounting Associations, the International Federation of Accountants (IFAC), and also Malaysian Institute of Accountants (MIA) have outlined and established some code of conduct or ethics guideline in the accounting profession. Ethics education also has been included in the education curriculum, especially in higher education like foundations, diplomas and degrees, especially in Malaysia. In line with the Malaysian National Higher Education System, the reassessment report on the accounting program at public universities stated that professional values and ethics should be embedded in all accounting program courses (MOHE, 2015).

Current accounting education fails to teach accounting graduates essential skills and improve the character of society (Miller & Pincus, 1997). The effectiveness of ethics education is still debatable (Yahaya, et al., 2016). Thus, it is essential to look back and see what the most effective ethics education should be offered to accounting graduates to produce

a certified ethical accountant. Previous studies have found that ethics education (Yahaya et al., 2016) and ethical culture at workplace (Douglas, Davidson, & Shwartz, 2001) have an influence on the ethical behaviour of an individual. In terms of ethics education, ethics courses and teaching styles will influence the effectiveness of ethics education (MOHE, 2006; MOHE, 2015; MOHE, 2022). Hence, ethics education and ethical culture at an individual's workplace will influence the individual's ethical judgement, which in turn will influence their behaviour when faced with an ethical dilemma. A sufficient coverage of ethics courses and teaching styles, and a good ethical culture at an individual's workplace will enable the individual to make a good ethical judgement, leading to good ethical behaviour. Hence, the objective of this study was to examine whether accounting ethics courses, teaching styles, and ethical culture influence the ethical behaviour of accounting graduates in Malaysia.

LITERATURE REVIEW

Accounting Education in Malaysia

The Ministry of Higher Education (MOHE) has collaborate with the accounting professional and regulatory body in shaping the accounting education in Malaysia. There are different ways to become a Chartered Accountant (CA) in Malaysia. The most common method is by taking the professional qualification examination by professional accounting bodies like the Association of Chartered Certified Accountants (ACCA), the Certified Public Accountant (CPA), or The Malaysian Institute of Certified Public Accountants (MICPA). The other way to become a CA in Malaysia is graduating from accounting programs offered by accredited universities by the Malaysian Institute of Accountants (MIA). After completing their academic qualification, accounting graduates have to possess three years of working experience in finance, accounting, auditing or any related fields. In order to maintain the quality of the accountants produced in the market, these three years working experience have to be verified by any member of chartered accounting bodies in their organization. These processes need to be completed by all accounting graduates in order to be recognized as certified accountants in Malaysia.

MIA is the national accounting body responsible for monitoring, fostering, upholding, and promoting the integrity, standing, and interests of the accounting profession in Malaysia. It was founded in accordance with the Accountants Act of 1967 (MIA, n.d.). The ASEAN Federation of Accountants (AFA) and the International Federation of Accountants (IFAC) both recognise MIA as a member. The MIA offers training and education to anyone now practising or planning to practise the accounting profession in Malaysia in order to instill professional principles and ethics, regulate, and develop accounting practises commensurate with international standards (MIA, 2022). The individual's eligibility to practise as a Chartered Accountant (CA) in Malaysia has also been determined by MIA.

One of the initiatives taken by MOHE and MIA in shaping accounting education in Malaysia is by establishing the standard for accounting program in Malaysia, or can be known as *Halatuju Perakaunan (HT)*. HT has been revised every several years in order to update and enhance any aspect of the accounting program offered by the universities. As at 2023, there are four editions of *Halatuju Perakaunan (HT)*; (i) *Halatuju Perakaunan 1(HT1)*, (ii) *Halatuju Perakaunan 2 (HT2)*, (iii) *Halatuju Perakaunan 3(HT3)*, and (iv) *Halatuju Perakaunan 4(HT4)*. In *HT1* (2002), ethics education in the accounting program has been introduced and one mandatory stand-alone ethics course should be taken by accounting students. Beside the mandatory stand-alone ethics courses, *HT2* (2007) had commenced the obligation of academicians and educators in embedding topics in ethics in other courses taken by the accounting students. *HT3* (2015) and *HT4* (2022) further emphasise the importance of ethics that should be included in the accounting curriculum (MOHE, 2006; MOHE, 2015; MOHE, 2022).

Culture at the Wokplace

Organisational culture, according to Deshpande and Webster (1989), is the pattern of shared values and beliefs that assists members of an organisation in understanding why things happen, and thereby teach them the behavioural standards in the organisation (Deshpande & Webster, 1989). It is also supported by Kancharla & Dadhich (2021) in which organizational culture is the collection of traditions, values, principles, and practises that collectively give each organisation its particular personality (Kancharla & Dadhich, 2021). To foster a positive workplace culture, top management

must keep an eye on unethical behaviour by employees in an organisation (Benlahcene & Meddour, 2020). As a result, organisational behaviour by members will be influenced by cultural practises at work.

Ethical Behaviour

What constitutes ethical behaviour lies in a “grey zone” where clear cut right versus wrong and good versus bad dichotomies may not always exist (Kuye, Uche, & Akaighe, 2013). Employees who engage in unethical action will experience indirect guilt and anxiety at work even if they are not disciplined. Unethical behaviour has the potential to negatively affect organisational behaviour. In the words of Bacescu-Carbunaru and Condruz-Bacescu (2011), unethical behaviour by some employees will eventually affect the performance of other employees in the workplace because they see the behaviours of other members who are acting unethically and will then believe that those behaviours are acceptable in the workplace (Bacescu-Carbunaru & Condruz-Bacescu, 2011).

THEORETICAL FRAMEWORK

This study combined two theories, namely; the Deep Learning Theory and Hunt and Vitell’s Theory of Marketing Ethics. The Deep Learning Theory contends that different educational settings which comprise of formal and informal learning spaces have an impact on how deeply individuals learn (Leijon, Nordmo, Tieva, & Troelsen, 2022). The formal learning spaces refer to classroom-based formal ethical instruction and the informal learning spaces refers to ethics education received outside the classroom for example the culture at a workplace and social interactions (Hugerat, 2016). The learning styles will also stimulate the deep learning process of individuals. According to Sosilowati et al. (2021), the type of learning spaces and learning styles as mentioned in the Deep Learning Theory can also influence the ethical behavior of the students.

In addition, the Hunt & Vitell’s Theory of Marketing Ethics shows that the professional relationship, organisation and cultural environment of an individual will influence their ethical judgement and behaviour (Hunt & Vitell, 1986). In this study, the cultural practices at the workplace is believed to be influenced the behaviour of accounting graduates.

HYPOTHESES DEVELOPMENT

In order to report the results of the study, this section discusses the hypothesis.

Hypothesis 1

Byerly et al. (2002) found that ethics instruction sensitizes business students to ethical issues (Byerly, Dave, & Medlin, 2002). According to Susilowati et al. (2021), ethical education could directly influence the ethical behaviour of students. It is supported by Kolb and Kolb (2005) that found that in-depth ethics education influences ethical behaviour. It was also found that Malaysian students who attended an ethics course improved significantly in their ethical judgement-making ability and ethical sensitivity compared to students who did not attend the course (Mohamed Saat, Porter, & Woodbine, 2010). According to the Deep Learning Theory, a formal ethics class will stimulate the deep learning process of the student in understanding and accepting the knowledge about ethics and behaviour. If the students were given early exposure on the importance of ethical behaviour, it will influence their behaviour when facing ethical dilemmas. Hence, this study proposed this hypothesis.

H1a: There is a positive and significant relationship between ethics courses and ethical behaviour.

Hypothesis 2

Coldren and Hively (2009) reported that teaching style has been documented to affect student learning experience and student impressions of the teacher (Coldren & Hively, 2009). It was also found that role-play as teaching styles changing attitudes and provides portrayals of generalised social problems. Okoughbo and Okike (2021) also found that active learning style is the most preferable method by students. However, some students do find traditional teaching styles as their preferable style (Covill, 2011). The style of learning influences the behaviour of students in higher educational institutions (Susilowati et al., 2021). According to the Deep Learning Theory, the learning styles of the students will stimulate the deep learning process. Hence, educators should use student's preferable learning method

in teaching ethics to accounting students. If the ethics education is provided in the most effective teaching method in teaching what is right and what is wrong, it will educate accounting graduates to behave ethically when facing the ethical dilemma. Hence, following hypothesis was created.

H1b: There is a positive and significant relationship between teaching styles and ethical behaviour.

Hypothesis 3

Cultural practices in an organisation will influence the behaviour of their employees (Douglas et al., 2001). The environment of the workplace also influences the performance and behaviour of organisational members (Obiora-Okafo & Imhanrenialena, 2022). It was also found that ethical work climate can influence the work-related ethical behaviour of Malaysian public sector auditors (Chew, Ismail, & Hassane, 2022). According to the Deep Learning Theory, informal learning spaces like the workplace will stimulate the deep learning process of individuals. It is also supported by the Hunt and Vitell Theory where the cultural environment influences individuals' judgement and behaviour. The ethical culture practices in the accounting graduates' workplace will positively influence the behavioural of accounting graduates as it stimulates the deep learning process on the importance ethics in daily life. Hence, following hypothesis was created.

H2: There is a positive and significant relationship between ethical culture at the workplace and ethical behaviour.

METHODOLOGY

Participant

The unit of analysis of this study was the individual, represented by accounting graduates with less than three years of working experience in accounting, auditing, or any related fields. According to the Schedule 1, Accountants Act 1967, 17 universities offer accredited bachelor degree programs in accounting. In this study, accounting graduates who graduated in 2019, 2020 and 2021 from these accredited universities were chosen. The targeted respondents were currently working in finance, accounting,

auditing or any related fields. The link to an e-survey was distributed to the targeted respondents through the Head of Accounting department from each university.

Resign Design

The research was cross-sectional with a structured questionnaire survey to obtain the respondents' perceptions. The Partial Least Square Structural Equation Modeling (PLS-SEM) was used to verify the three hypotheses of this study. Smart PLS 4.0 was used to analyse the data collected. There were two stages in the analysis; (i) measurement model assessment and (ii) structural model assessment.

Survey Responses and Data Screening Procedures

A total of 400 responses were received from the data collection. However, only 344 of the responses were found to be usable. The sufficiency of the minimum sample size was determined using the post hoc power analysis in the G*power programme. The three predictors; (i) accounting ethics courses, (ii) teaching delivery, and (iii) ethical culture at the workplace, with 344 samples, at $f^2 = 0.15$ and $\alpha = 0.05$, were 0.998 (99.8%) in G*power, higher than the standard threshold of 80% (Ellis, 2010). Hence, the sample size obtained in this study was sufficient. The missing value, straight-lining responses and multivariate outliers following guidelines stated in Hair & Alamer (2022) were examined in the responses collected (Hair & Alamer, 2022). The analysis result demonstrated no missing value in the study's data set, and none of the responses showed straight-lining answers.

Survey Instrument

The survey instrument used proximal separation, where the survey instruments were separated into difference sections in order to avoid any common method variance. Additionally, the collinearity test result using Variance Inflation Factor (VIF) proved the non-existence of common method variance in this study as the VIF value was less than 3.3.(Kock, 2015). The result of VIF is shown in Table 1.

Table 1: Collinearity Test (VIF Analysis)

Constructs	VIF
Ethics Course (EC)	1.896
Teaching Styles (TS)	1.938
Ethical Culture (ECW)	1.301

The survey instruments were approved by the ethical clearance unit of Universiti Sains Islam Malaysia. The e-survey was validated by three panel experts who were academicians teaching ethics. Comments given such as to restructure and to delete some sentences to suit the targeted respondents were adhered to before the final data collection. Research expert and layman’s opinion were gathered to validate the survey instrument. The e-survey was administered online using Google Forms. The link to the survey instrument was sent to the Head of the Department of Bachelor Degree Accounting programs to be distributed to all accounting graduates in the year 2019, 2020, and 2021.

Measurement

The variable operationalization of the study were explained in Table 2 Measurement of the study.

Table 2: Measurement of the Study

Variables	Measurement	Source
Accounting Ethics Courses	Refers to coverage of ethics education in the university; (i) stand-alone accounting ethics courses and (ii) other accounting courses that embed ethical topics and issues. This study will quantify the percentage of stand-alone courses and other courses covering ethics. A stand-alone ethics course will represent 100% (fully cover ethics topics). Meanwhile, the percentage of embedded courses will represent the number of other accounting ethics courses divided by the total accounting courses taken in university. The respondents were asked to select any stand-alone ethics courses that they have taken during their studies and other courses that covers ethics topics in the syllabus.	Adapted from Davis and Welton (1991) and the method of scoring were adapted from Sritharan & Sahari (2019).

Teaching Delivery	Refers to teaching methods used by accounting ethics educators in teaching accounting ethics to accounting graduates in Malaysia, including role-play, case study, traditional lecture notes delivery, movie/film, and others. The respondents were asked to tick any styles that has been used by their ethics instructor during classes.	Adapted from Okougbo and Okike (2021).
Ethical Culture	Refers to the 5 items of corporate ethics scales (CEP) that focuses on accountants' perceived organisational ethical culture in the accounting/audit firm. This study used a 5-point Likert scale which is; (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, and (5) strongly agree.	Adopted from Douglas et al. (2001).
Ethical Behaviour	Refers to 3 vignette scenarios that focuses on the action taken by the accountants when facing ethical dilemmas, such as dinner together with client, acceptance of audit engagement despite lack of independency, and job recommendation for audit position to related parties. This study uses 5-point Likert scale which is; (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, and (5) strongly agree	Adapted from Douglas et al. (2001).

ANALYSIS AND RESULTS

Demographic Profiles

Table 1 shows the background of the respondents who participated in this study. Most of the respondents were female (83%), graduated from an MIA-accredited accounting program in 2020 (34%), and 48% of them had one (1) to two (2) years of working experience. The accounting graduates graduated from seventeen (17) different universities, and the majority of them were from Universiti Sains Islam Malaysia (22%), Universiti Teknologi MARA (13%), Universiti Islam Antarabangsa Malaysia (10%), and the others below 10%. Most accounting graduates preferred to work in accounting (45%) and auditing (39%) in small and medium companies (58%).

Table 3: Background of the Respondents

	Information	Frequency	Percentage (%)
1	Gender		
	Male	60	17
	Female	284	83
	Total	344	100
2	Year of Graduated from Bachelor's Degree in Accounting Programs		
	2019	110	32
	2020	118	34
	2021	116	34
	Total	344	100
3	Name of University		
	Universiti Sains Islam Malaysia (USIM)	77	22
	Universiti Teknologi MARA (UiTM)	46	13
	Universiti Islam Antarabangsa Malaysia (UIAM)	35	10
	Universiti Malaysia Terengganu (UMT)	28	8
	Universiti Putra Malaysia (UPM)	24	7
	Universiti Utara Malaysia (UUM)	23	7
	Universiti Tunku Abdul Rahman (UNITAR)	20	6
	Others (Below than 20 responses)	91	26
Total	344	126	
4	Job Designation		
	Accountant	155	45
	Auditor	133	39
	Tax Agent	45	13
	Others (Finance/etc)	11	3
	Total	344	100
5	Type of Company		
	Big 4 Firm (PwC/KPMG/Deloitte/EY)	19	6
	Non-Big 4 Firm	199	58
	Commercial Company	111	32
	Public Sector	15	4
	Total	344	100

6 Working Experience since Graduated		
Less than 1 year	118	34
1 to 2 years	165	48
2 to 3 years	61	18
Total	344	100

Measurement Model Assessment

The confirmatory composite analysis (CCA) approach for variance-based SEM was applied in this study. It is similar to the CFA (confirmatory factor analysis) process usually used to confirm covariance-based measurement models. The analysis of the measurement model was conducted to examine how well each variable or combination of variables adhered to the objectives of the measurement (Urbach & Ahlemann, 2010).

Internal Consistency Reliability

Analysing the item loadings allows one to gauge the indicator reliability of the measurement model. The recommended factor loading is higher than 0.708 (Hair J. F., Risher, Sarstedt, & Ringle, 2019). Hair et al. (2010) and Chin (1998), found that outer loading that is higher than 0.5 is also acceptable, and if it is lower than that, it should be dropped from the study (Hair, Black, Babin, & Anderson, 2010; Chin, 1998).

In order to assess the internal consistency reliability of the construct, researchers should rely on the composite reliability (ρ_c) and not the Cronbach's alpha (α) since it is overly conservative (Guenther, Guenther, Ringle, Zaefarian, & Cartwright, 2023). According to Fornell & Larcker (1981), it is acceptable if the composite reliability is more than 0.6. Table 4 shows the result of the internal consistency reliability test (Fornell & Larcker, 1981).

Table 4: Internal Consistency Reliability and Convergent Validity Results

Constructs	Items	Loadings	α	ρ_c	AVE
Ethics Course	EC	1.000			
Teaching Styles	TS	1.000			
Culture at the Workplace	ECW1	0.785	0.604	0.709	0.550
	ECW2	0.871			
	ECW3	0.524			
Ethical Behaviour (Vignettes)	EBV1	0.713	0.598	0.645	0.541
	EBV2	0.660			
	EBV3	0.825			

*Note: Items ECW4 and ECW5 were removed.

Construct Validity

The validity of the construct can be assessed by testing the convergent validity and discriminant validity of the construct. As for convergent validity, the construct’s average variance extracted (AVE) value is examined to determine the latent variables’ variance from its relative variables due to measurement errors (Memon & Abdul Rahman, 2014). According to Hair, Risher, Sarstedt & Ringle (2019), the AVE must be higher than 0.5. The result from Table 5 shows that the AVE was above the cut off values. Hence, there was no error in the convergent validity of the construct.

On the other side, the discriminant validity test was conducted to measure the divergence and correlation between different constructs, which must be minimally correlated (Hair et al., 2019). By referring at the HTMT ratio, the value should be under 0.90 or 0.85 in order to pass the cut off value. Table 3 shows the HTMT ratio for the discriminant validity analysis.

Table 5: Discriminant Validity Result (HTMT Ratio)

Constructs	EBV	EC	ECW	TS
EBV				
EC	0.284			
ECW	0.488	0.564		
TS	0.328	0.673	0.605	

Structural Model Assessment

Structural model assessment is conducted on the linkage between the variables in the construct. The construct's effect size, significance level, predictive power and important-performance values were accessed in this assessment. In order to analyse the structural model, the construct must pass the collinearity test. This test is conducted to ensure the result from the regression is not biased (Hair J. F., Risher, Sarstedt, & Ringle, 2019). If the variance inflation factor (VIF) values is between three (3) to five (5), there is a collinearity issues in the construct (Mason & Perreault, 1991; Becker, Ringle, Sarstedt, & Völckner, 2015). Table 5 shows the VIF values of the construct and the highest VIF values was 1.938 (TS). Based on this result, there were no collinearity issues in the manifest construct of this study.

Variance Explained / Explanatory Power and Effect size Analysis

The explanatory power of the construct is assess by relying on the R^2 values. According to Henseler, Ringle & Sinkovics (2009), if the R^2 values is 0.75, 0.5, and 0.25, it shows that the construct is substantial, moderate and weak respectively.

Next, the effect size of the construct of this study is shown in Table 6. According to Cohen (1998), f^2 values of less than 0.02 indicate that there is no effect. The variables that have f^2 values that are more than 0.02, 0.15, and 0.35, can be considered as small, medium, and large effect size respectively (Cohen, *Statistical Power Analysis for the Behavioral Sciences: Lawrence Erlbaum Associates*, 1988). According to the result of this study, the ethics courses (EC) had no effect on the ethical behaviour of the accounting graduates. Meanwhile, the teaching styles (TS) and ethical culture at the workplace was small.

Table 6: Results of Significance Testing and Main Effect Analysis

Relationships	VIF	β	SD	<i>t</i> -value	<i>p</i> -value	Confidence Interval (CI)		Effect Size (f^2)	Decision
						LL	UL		
H1: EC \square EBV	1.896	0.035	0.073	0.480	0.316	-0.093	0.148	0.001	No
H2: TS \square EBV	1.938	0.147	0.073	2.024	0.022	0.028	0.267	0.013	Yes
H3: ECW \square EBV	1.301	0.250	0.072	3.480	0.000	0.142	0.379	0.055	Yes

Model’s Predictive Power

The predictive power of the construct can be assessed through the PLS predict feature in Smart PLS 4.0. In order to examine the power of the construct’s predictive, the Q^2 values was calculated. According to Hair et al., 2019, the Q^2 values must higher than zero (0). If it is greater than 0.00, 0.25, and 0.50, it represents the PLS-path model is small, medium, and high predictive power. Table 6 shows the result of PLS predict. According to the table, Q^2 values were higher than zero (0).

In addition, the prediction statistic of the constructed model can be examined by comparing the indicators’ root means squared error (RMSE) with the naïve benchmark using a linear regression model (LM). The constructs which lack predictive power will have a majority of the indicators with higher RMSE than LM values. If a minority, it can be considered as medium. If all of the RMSE values are lower than LM, the construct model has a high predictive power. As shown in Table 7, a majority of the RMSE of PLS SEM were lower than LM. It showed that the construct model had a medium predictive power.

Table 7: Results of PLS Predict

Indicators	Q^2 Predict	RMSE		Variance (PLS SEM – LM)
		PLS SEM	LM	
EBV1	0.034	0.915	0.923	-0.008
EBV2	0.022	0.956	0.960	-0.004
EBV3	0.105	0.954	0.953	0.001

Significance Testing

The significance analysis with one-tailed hypotheses test was conducted through the bootstrap procedure in Smart PLS 4.0. The path coefficient (β) and t-values were assessed in testing the relationship between the latent variables. If the t-values were higher or equal to 1.65, it will be considered as significant. According to Table 5, all independent variables had positive relationship with the dependent variable. However, according to the t-values, EC to EB had a positive but not significant relationship as it was below 1.65. Thus, hypothesis H1a was not supported. On the other hand, H1b and H2 were supported as TS and ECW had a positive and significant relationship with EBV. Figure 1 illustrates the structural model of the constructed model.

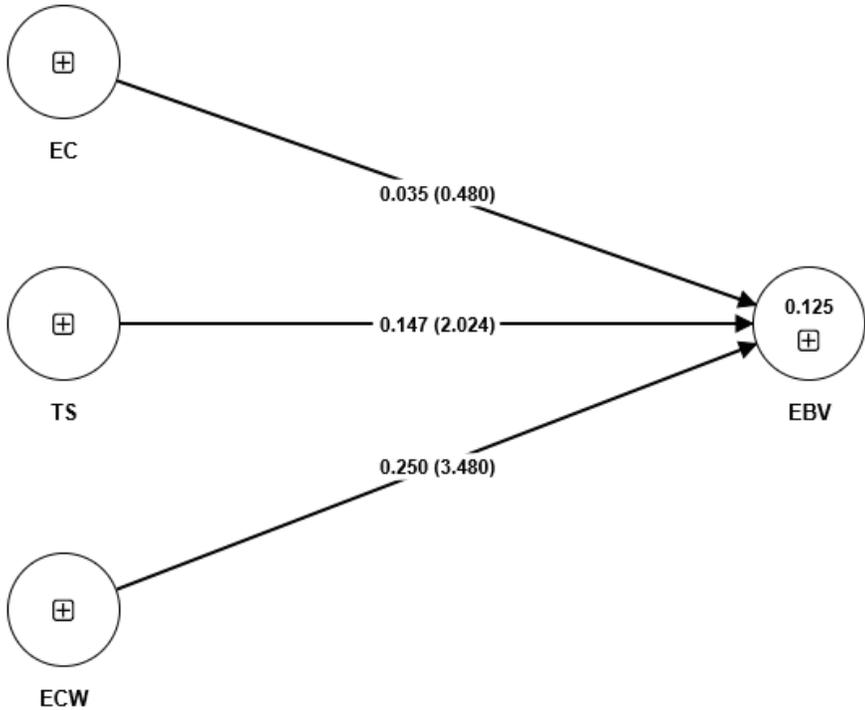


Figure 1: Structural Model

Importance-Performance Matrix Analysis

The results of important-performance map analysis (IPMA) is shown in Table 8. It showed the values of the constructed model’s total effect (importance) and index values (performance).

Table 8: Result of IPMA

Predictor Variables	Importance (Total Effects)	Performances (Index Values)
Ethics Courses (EC)	0.035	53.852
Teaching Styles (TS)	0.147	43.688
Culture at the Workplace (ECW)	0.250	68.173

The total effect of the model construct demonstrates the importance of apparent variables, whereas the mean value of their scores (ranging from 0, which is considered the lowest, to 100, the highest) reflects their performance (Höck, Ringle, & Sarstedt, 2010). The Smart PLS 4.0 also provides a feature to generate IPMA map for researcher to evaluate the important-performance result of the construct model. The IPMA map is shown in Figure 2.



Figure 2: Importance-Performance Map

As shown in Figure 2, ECW was particularly important to explain the target construct EBV. More precisely, a one-unit point increase in ECW's performance increases the performance of EBV by the value of ECW's total effect on EBV, which was 0.250. As for TS, it was the second most important variable to EBV. Since the performance of TS was relatively low, there was substantial room for improvement, making the aspect underlying this construct particularly relevant for further action. On the other hand, EC had shown a good performance even though it was the least important variable to EBV. Therefore, ethical culture at the workplace was the most important variable and had the most influential factor to the ethical behaviour of accounting graduates in this study. Further emphasise on the teaching styles should be given in order to enhance the ethical behaviour of accounting graduates.

DISCUSSION

Previous research on ethical behaviour of students after taking the ethics courses offered by the academic institutions, whether in local or international universities. Existing research has not, however, explored the effect of the ethics courses and their teaching styles, and the ethical culture at the workplace to the new accounting graduates in the industry. Thus, this study was conducted to explore the relationship of ethics courses and the teaching styles, and the ethical culture at the workplace to the values of accounting graduates in Malaysia.

The results of the study indicated a positive relationship between the number of ethics courses taken in the university, several teaching styles, and the ethical culture at the workplace with the values of accounting graduates. It was proven that the culture at the workplace played crucial role in influencing the personal and professional values of the accounting graduates. However, it was also proven that the more ethics courses taken in the university with a variety of teaching styles, will positively influence the values of the accounting graduates. The relationship of these independent variables was also statistically significant with regard to the values of the accounting graduates.

The results of the current study are consistent with previous research relating to the values. According to the Douglas et al. (2001), the working culture influences ethical orientation of accountants. The school environment also will play a significant factor in influencing the values of the students. As for the ethics courses and teaching styles variables, according to the Sari (2019) and Movchan and Zarishniak (2017), ethics courses, whether stand-alone or embedded in other courses will influence the personal development and values of students. However, it depends on the styles of the teaching in the ethics courses taken as the preferences of the students are different from one to another (Okougbo & Okike, 2021).

In addition to expanding the existing theory, the role of industry players in providing a good learning space in the workplace does influence the deep learning process of the graduates. The graduates will not only be learning ethics from theory in the classroom, but also application in the real working places. If the working places hold good organisation values within the workplace, it will positively influence the personal values of the graduates, and next to the performance and behaviour of the accounting graduates. Consistent with the IPMA analysis result, the environment or the cultural practices at the workplace will greatly influence the ethical behaviour of accounting graduates.

IMPLICATION

Managerial Implication

Academicians, accounting professional bodies, and practitioners should work together to improve the effectiveness of ethics courses offered to the students. For example, case studies can be used to obtain insights of the practitioners in dealing with real ethical dilemmas faced by the industry. Moreover, roleplay and interactive teaching may have a more effective impact on the deliverable of the knowledge. In addition, technological tools such as Facebook and YouTube can be used by the educators as a platform in teaching ethics.

To create an ethical culture at the workplace, MIA, or any accounting professional bodies such as ACCA and CPA should organise ethical training

or seminars for top management, employers, academicians, practitioners, and regulators to gain an in-depth understanding of ethical issues in the industry. Therefore, it may improve the effectiveness of ethics education in achieving its goals.

Theoretical Implication

Theoretically, the Hunt and Vitell Theory of Marketing Ethics is able to explain the relationship of ethical culture and ethical behaviour of the accounting graduates in Malaysia. According to the Deep Learning theory, the formal learning spaces (ethics courses), informal learning spaces (culture at the workplace) and teaching style can influence the ethical behaviour of accounting graduates. Thus the combination of the Deep Learning Theory with Hunt and Vitell's Theory has been able to explain the model of the study.

LIMITATION

The present study was nonetheless subject to some limitations despite numerous contributions from numerous aspects (including theoretical, practical, and methodological). Yet, despite this study's limitations, some intriguing areas for further research might be found. First, this study was conducted only using quantitative analysis through an e-survey. However, the survey instrument used in this study has been validated by a research experts and passed the ethical clearance. Future research may use a different method, such as interviews, in order to get in-depth views and opinions of the accounting graduates to enhance the values of the accountants in Malaysia. Next, this study also only focussed on accounting graduates from Malaysian universities. Future research may include analysis from different universities around the globe and may compare each university. As Malaysia is a developing country, it may differ from developed countries like Switzerland, Australia or Japan. Hence, future research may look at various countries to improve the values of accountants worldwide.

This study has measured the ethics courses by quantifying the stand-alone approach and embedded ethics topics. However, it did not examine how ethics topics are embedded in each course or subject. There is no guideline on how it should be embedded as it depends on the educators

delivering the lectures to the students. This study also did not compare whether stand-alone or embedded courses are more important to the students. Thus, future research may look at the effectiveness of each type in enhancing accounting graduates' ethics education.

Nevertheless, it still can be used to enhance the ethics and values of the individual, especially accounting graduates. Ethics courses with various teaching styles will improve the effectiveness of accounting ethics education. Employers also play an essential role in creating ethical workplace culture to control any unethical issues in Malaysia.

RECOMMENDATION

As noted above, this study indicated that accounting ethics education was taken at the university, and the workplace's culture will influence the personal-professional values of accounting graduates. The ethics courses should be provided to all accounting students. However, the delivery styles should be enhanced as it will impact the effectiveness of the accounting ethics education. The teaching techniques should be more varied and include all active and passive teaching methods. As the world advances day by day, the style of delivery used in education should be more advanced. However, the traditional teaching method should be continuously used as it is also one of the teaching styles preferred by students (Okougbo & Okike, 2021).

The Malaysian Institute of Accounting (MIA) may use this accounting ethics education model to enhance the development of the accounting profession in Malaysia. Each ethics training and class provided to MIA members need to have different types of delivery to achieve the ethics education goals. The values of MIA members or accountants can be enhanced if the type of teaching style is effective. It is also in line with the Ministry of Higher Education (MOHE) in developing and structuring an ethics education model for accounting programs offered in institutions of higher learning in Malaysia. Different approaches can be used to teach ethics and values to accounting students.

Employers also need to play their role in sending their employees to ethics training, especially accountants. The ethics training will enhance

accountants' technical skills and ethical judgement in facing any dilemmas. Ethical employees, especially top management, will influence the workplace environment. The top management should have excellent ethical skills in leading the organisation and uphold an ethical culture at the workplace. The organisation should focus on not only the technical knowledge but also the ethical skills of the employees.

Implementing a practical ethics module in public sector accounting will help the government curb corruption cases in Malaysia. High-ranking government officers are not excluded from being sent to ethics training to enhance their values and ethics in leading the country. The ethical culture created by the ethical government will influence the values of the employees and next to all Malaysian. It is also aligned with the initiatives by the 10th Prime Minister of Malaysia, Dato' Seri Anwar Ibrahim, in realising *Madani* in the recent Budget 2023 Announcement. He stated that moral values, ethics, and humanism is essential in strengthening the economy of Malaysia (Aziz, 2023).

CONCLUSION

As a conclusion, the ethical behaviour of accounting graduates can be improved through the innovation of teaching styles and ethical culture. The roles of accounting ethics education and ethical cultures could affect the values held by accounting graduates and their behaviour. All stakeholders such as academicians, accounting professional bodies and practitioners need to work together to improve the effectiveness of ethics education. In addition the industry should nurture a good ethical culture at the workplace.

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