

Ethics Courses, Teaching Styles, Ethical Culture at Workplace and Values of Accounting Graduates in Malaysia

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ABSTRACT

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 but lack ethical values. Thus, it is important that accountants uphold high values in guiding them to behave ethically. As accounting graduates are future accountants, thus the role of the educational institution in producing ethical accounting graduates is crucial to ensure that the graduates are imbued with high ethical values. The paper aims to examine whether ethics courses, teaching styles, and culture at the workplace would influence the values of accounting graduates in Malaysia. Questionnaires were distributed to accounting graduates with less than three years of working experience in finance, accounting, auditing/ or related fields. A total of 344 usable responses were analysed using SmartPLS version 4.0. The research model explains 47.5%, and the study found a positive and significant relationship between the ethics courses taken in the university, teaching styles, and culture at the workplace with the values of accounting graduates. It is also proven that the culture at the workplace plays a crucial role in influencing the personal-professional values of accounting graduates. It is recommended that more ethics courses with various teaching styles should be offered in the accounting curriculum, thereby producing ethical accounting graduates. This will then result in producing accountants with good values who can offer a true and fair view of the financial statements, which will aid organisations to become more accountable and transparent in their business activities.

Keywords: Values; culture at workplace; ethics course; teaching styles

INTRODUCTION

Several accounting scandal instances involving senior management, accountants, and auditors both inside and outside of Malaysia have damaged the credibility of the accounting profession (Sooi 2021). The accountant's erroneous financial reports will cause an accounting controversy because they fail to give the stakeholders transparent and trustworthy information (Driel 2018). Arthur Anderson was found guilty of failing to disclose the Enron scandal on a global scale (Segal 2021). The Securities Commission Malaysia (SC) has charged the company's Executive Director, Group Chief Financial Officer and Vice President of Accounts and Finance for submitting a false statement to Bursa Malaysia Securities Berhad, an offence under section 369(a)(B) of the Capital Markets and Services Act 2007 (CMSA) (Securities Commission Malaysia 2021). This indicates that auditors and accountants who are trusted to look after the truth and fairness of financial statements are also guilty of betraying the trust given to them.

Unethical conduct is caused by irresponsible accountants/ auditors who ignore facts that financial reports should be reliable, transparent and objective (Driel 2018). The capability of accountants/auditors to furnish false financial statements intentionally shows that they are well-equipped with the technical skills and knowledge in accounting (Umar et al. 2020) but lack ethical values. Thus, it is important that accountants uphold high values in guiding them to behave ethically (Allport 1961; Rokeach 1973). Sharma (2021) highlighted that values refer to those rules which help an individual to make the right decision in life, and from values arise moral principles (ethics) that basically govern a person's behaviour. Values represent the agreed-on standards of what is desirable or undesirable and right or wrong. Numerous empirical studies link values to behaviour (Rokeach 1973; Schwartz & Bardi 2001). Values help shape ethics, and a lack of ethics will cause various unethical issues in the industry (Haron et al. 2020) and eventually will hinder the country's economic growth.

The importance of values to accountants can be seen by the fact that 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 code of conduct/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 courses (MOHE 2006; 2015).

Thus, the role of the educational institution in producing ethical accounting graduates is crucial to ensure that the graduates are not only ready with excellent technical skills but also possess high ethics and moral values. This issue cannot be taken lightly because there are concerns about the declining quality of the ethics education offered to students (Madsen 2015; Shaharuddin et al. 2022). Accounting ethics education should be offered to nurture ethics and good values in all accounting students. There are arguments on how ethics courses should be taught to accounting students, whether it would

be better to offer the ethics courses as a stand-alone course/embedded in other courses (Blanthorne et al. 2007; McNair & Milam 1993; Onumah et al. 2022). There are also issues regarding the most effective teaching styles (Okougbo & Okike 2021) for ethics education to accounting students.

According to Rallapalli et al. (2000), values are beliefs an individual develops via socialisation and guides their conduct. According to Glover et al. (1997), a person's value system is generally stable over time, although it can vary depending on changes in their personal experiences. The values of graduates and the workplace's ethical culture, however, are only briefly discussed in earlier literature. Hence, an organisation's leader/top management is responsible for creating an ethical workplace culture to impart good values to their employees.

Malaysia has an independent organisation responsible for overseeing the performance of audit firms in Malaysia, called the Audit Oversight Board (AOB), under the Security Commission's (SC) jurisdiction. Another body, MIA, is empowered by the Accountants Act 1967 to regulate and develop the accountancy profession. To fulfil its role, MIA has developed the MIA Competency Framework (CFM), which serves as the baseline requirement for accountancy professionals to register as MIA members. CFM refer to the IFAC's standards, a global organisation for the accountancy profession dedicated to preparing a future-ready accountancy profession, of which MIA is a member.

Previous studies have examined the effect of accounting ethics courses, teaching styles (Mayhew 2008; Okougbo & Okike 2021) and ethical culture at the workplace on the ethical behaviour of accountants (Sautar et al. 1994). To the authors' knowledge, this study is one of the first to look at the factors affecting accounting graduates' values. Ethical behaviour, ethical decision-making, and ethical judgment have all been shown in earlier studies to be influenced by values (Douglas et al. 2001; Fritzsche & Oz 2007; Mubako et al. 2020). Hence, this paper examines the relationship between accounting ethics courses, teaching style, and culture at the workplace on the values (personal-professional) of accounting graduates to curb unethical cases in Malaysia. In this study, Deep Learning theory has been used to explain the relationship between accounting ethics education (ethics courses and teaching styles) and ethical culture in the workplace with the values of accounting graduates. This may serve as a reference point for the Ministry of Higher Education (MOHE) to enhance the accounting curriculum in teaching ethics. Moreover, MIA can use this study to improve the CFM framework to further develop the accounting profession in Malaysia. In the next section, the study will present the literature review, conceptual framework and hypotheses of the study. After presenting the study's methodology, the study will explain the analysis result. Finally, the study will highlight the implications, limitations, and suggestions for further studies.

LITERATURE REVIEW

This section will give an overview of accounting education in Malaysia and the variables of the study.

ACCOUNTING EDUCATION IN MALAYSIA

MIA, established under the Accountants Act 1967, is the national accounting body, which oversees, fosters, upholds, and promotes the integrity, status, and interests of the accounting profession in Malaysia (<https://mia.org.my/about-us/>). In order to instil professional values and ethics and regulate and develop accounting practices consistent with global standards, MIA has provided training and education for any individual practising/intending to practice the accounting profession in Malaysia. MIA also has determined the individual's qualification to be a Chartered Accountant (CA) in Malaysia.

At the tertiary educational level, the MOHE is responsible for standardising and benchmarking the accounting programs offered by all private and public universities in Malaysia (Ismail et al. 2014). MOHE, in collaboration with MIA, has outlined the *Halatuj Perakaunan* (HT) as a tool for enhancing and benchmarking Malaysian accounting education. MOHE and MIA also have adapted the IFAC's requirement to become a CA by implementing and supporting the International Education Standard (IES) in the HT. There are four editions of HT, which are updated every several years. HT 1 recommended having one stand-alone ethics subject called Business Ethics as a compulsory subject for all accounting students to take. HT 2 proposed the type of accounting ethics education. HT 3 and HT 4 focus on the concept that less is more; therefore, the total credit has been reduced to suit the study duration of 3-3.5 years. It also further emphasises that ethics should be included in the accounting curriculum. The summary of the development of ethics courses in HT is shown in Table 1.

TABLE 1. Development of accounting ethics education in HT 1 to HT 4

ASPECT	HT 1(2001)	HT 2(2006)	HT 3(2015)	HT 4(2022)
Teaching Pedagogy	List the methods of teaching	Focus on a student-centred approach	Focus on the development of critical thinking communication and focus on the practical approach.	Element of <i>Adaab</i> is included as one of the learning outcomes
Structure of the Course	Recommending one stand-alone ethics subject (Business Ethics)	Ethics is a compulsory subject and should be embedded in other subjects (Business Ethics & Corporate Governance).	Ethics is a compulsory subject and should be embedded in other subjects (Business Ethics & Corporate Governance).	At least one (1) stand-alone and compulsory to embed in other courses

Source: MOHE 2006, 2015, 2022

After passing all the academic qualifications by the MIA, accounting graduates from MIA-accredited universities will need to have work experience in accounting or auditing-related fields for at least three (3) years to become a CA (MIA

2022). It is a structured assessment program based on the mentor-mentee approach. Once the mentor verifies the three (3) years of working experience, the CA will then be eligible to become an MIA member.

VALUES

The value system and moral development of an individual can shape the ethics and behaviour of individuals (Hunt & Vitell 1986). Both personal and professional values are important in shaping an accountant’s ethical behaviour. Values can be nurtured through parents’ upbringing, peer influence and environment (Benish-Weisman et al. 2022; Susilo 2020). In addition, education is also important to nurture value through formal classes such as ethics courses and teaching styles. Furthermore, values can also be nurtured outside the classroom through informal platforms such as exposure to ethics in the organisation for which one is working.

According to Rokeach (1973), instrumental values (behavioural) are moral values that focus on morality, relationship and competence. This study uses Rokeach Values as personal values because it is one of the oldest theories and the main reference explaining the values and relevance of social studies (Passafaro & Vecchione 2022).

In this study, professional values are defined as values that are stated in the IFAC Code of Ethics / MIA By-Law. The professional values in each profession are the standard of action that the professional expert should adhere to (Poorchangizi et al. 2019). All accountants in Malaysia are required to uphold professional values in the conduct of their tasks. Accounting graduates have also been exposed to the MIA By-Law (on Professional Ethics, Conduct and Practice) in their courses. There are five (5) fundamental principles of professional values, which are; (i) integrity, (ii) objectivity, (iii) professional competence and due care, (iv) confidentiality, and (v) professional behaviour. These fundamental principles in the accounting profession will guide accountants in Malaysia to behave ethically and avoid any unethical conduct.

Ariail (2020) examined leaders' personal values (Rokeach Values) in the US accounting profession and whether they are congruent with the profession's ethical values as represented by the AICPA's Code of Ethics 2014. Based on the findings, it is suggested that there is congruence between the six top-ranked ethical values (personal values) of CPA leaders and the Professional values as outlined in the AICPA Code of Ethics. The six personal values-professional values are; (i) Honest-Integrity; (ii) Responsible-Professional Responsibilities; (iii) Capable-Due Care; (iv) Courageous-Independence; (v) Loving-Public Interest, and (vi) Independent-Objectivity.

In this study, the top 6 ranked ethical/personal values are matched with MIA By-Law (on Professional Ethics, Conduct and Practice), and as a result, five professional values emerged, namely: (i) Integrity; (ii) Professional Behaviour; (iii) Confidentiality; (iv) Professional Competence and Due Care, (v) Objectivity.

TABLE 2. Congruence of Personal Values (Rokeach), AICPA Code of Professional Conduct 2014 and IFAC International Code of Ethics / MIA By-Law Code of Ethics 2022

Personal Values (Rokeach Value Survey-top 6 values)	Professional Values (AICPA Code of Professional Conduct 2014)	IFAC International Code of Ethics for Professional Accountants / MIA By-Law Code of Ethics (2022)	Description
Honest	Integrity	Integrity	What is right and just
Responsible	Professional Responsibilities	Professional behaviour	Exercise of sensitive professional and moral judgments in every situation
Capable	Due Care Competence	Professional competence and due care	The development and maintenance of a level of comprehension and expertise that allows a member to provide services with ease and skill
Courageous	Objectivity Independence	*Objectivity	An attribute that adds value to an accountant's services is objectivity.
Independent	Objectivity		
Loving	Public Interest	Confidentiality	Acceptance of the duty to behave in a way that will promote public interest, uphold public trust, and show professionalism

*Note: *Objectivity* is similar to *Independence* according to MIA By Law Code of Ethics, and thus *Independence* is dropped

UNDERLYING THEORY

This study used Deep Learning Theory as the underlying theory of the study. According to the theory, different types of learning spaces will influence the deep learning process of individuals (Lawter et al. 2014). There are two types of learning spaces: (i) formal learning spaces and (ii) informal learning spaces. The formal learning spaces refer to the formal ethics education received in the classroom. How ethics courses are conducted will determine the quality of ethics education (Avci 2017). Previous studies have discussed the issue of integrating ethics education into the accounting curriculum (Huss & Patterson 1993; Sahin et al. 2019). The ethics topics covered in the classroom and the deliverables styles will influence the individuals' deep learning process.

Meanwhile, the informal learning spaces refer to the ethics education received outside the classroom. It is more on the practical experience of the individuals, and there are various sources for the deep learning process in the informal learning spaces, including social, educational, and organisational socialisation (Marvick et al. 1990). These informal learning spaces

will activate reflective learning and reframing experiences outside the formal learning spaces (Lawter et al. 2014; Marvick et al. 1990). The experience of the accounting graduates working in accounting, or any related fields will influence the moral values and behaviours of the individuals. Hence, the workplace's cultural practices are crucial in influencing individuals' ethics and moral values.

In this study, the formal learning spaces refer to the accounting ethics education received by accounting graduates in tertiary education. Meanwhile, the informal learning spaces refer to the culture at the workplace of accounting graduates.

CONCEPTUAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

The conceptual framework of this study is presented in Figure 1.

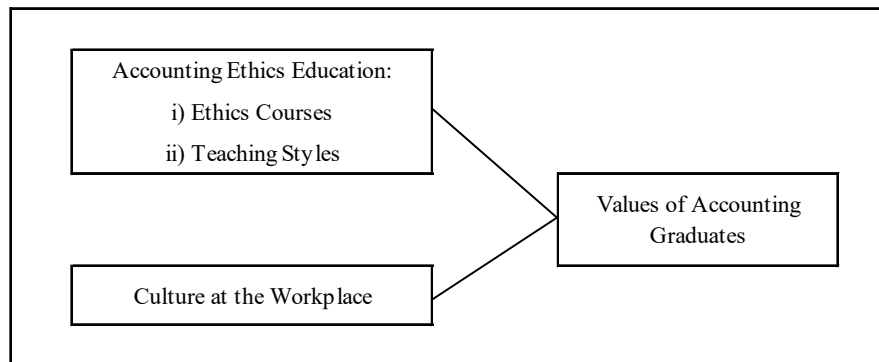


FIGURE 1. Conceptual Framework of the Study

ETHICS COURSES

Previous studies have addressed many challenges pertaining to teaching ethics, for example, whether ethics can be taught (Ryan & Bisson 1978), whether an ethics course should be a stand-alone/ or embedded in another subject (Blanthorne et al. 2007; McNair & Milam 1993; Sahin et al. 2019), whether students should be exposed to ethics course in the first or final year of study (Davis & Welton 1991), whether accounting lecturers is the right person to teach ethics (Win et al. 2014) and whether active participation of students in ethics course is the best method to teach ethics (Huss & Patterson 1993; Ponemon 1993; Okougbo & Okike 2021). HT, introduced by MOHE, has strengthened the value of accounting graduates by taking measures to address this issue.

Movchan and Zarishniak (2017) found that moral course influences students' professional development. However, Sari (2013) found that both stand-alone and embedded moral value in other courses affects the students' ethics and values. In this study, ethics courses are measured by stand-alone and embedded topics on ethics in the accounting curriculum. According to Deep Learning Theory, formal learning provides an avenue to incorporate ethics in the curriculum, which will directly instil good values among accounting graduates. Therefore, this study develops the following hypothesis:

H_{1a} There is a positive and significant relationship between ethics courses and values.

TEACHING STYLES

Ethics education in accounting programs has steadily expanded in the types of teaching methods and support materials used, such as lectures and tutorials incorporating textbook examples, in-class debates, real-life case analyses, and journal/news article reviews (Mintz 2006; Massey 2009). However, it depends on the ethics educator on how to teach ethics to accounting students. Some effective teaching styles of accounting ethics education are live ethics cases written by students (McWilliams & Nahavandi 2006), role-play (Brown 1994; Filgona et al. 2020; Okougbo & Okike 2021) and case study presentations (Huss & Patterson 1993).

Previous studies also found that the traditional lecture method will not contribute to the moral and ethical development of the students (Ponemon & Glazer 1990; Marbach-Ad et al. 2001; Jungst et al. 2003). However, previous studies have also found that accounting students have chosen the traditional lecture method as one of their most preferred teaching styles (Covill 2011; Okougbo & Okike 2021). The Deep Learning Theory also explains that effective teaching styles in formal ethics education will help to nurture the values among accounting graduates. Therefore, this study develops the following hypothesis:

H_{1b} There is a positive and significant relationship between teaching styles and values.

ETHICAL CULTURE AT THE WORKPLACE

Trevino and Weaver (2003) found that ethical climate and ethical culture strongly correlate with each other. Ethical culture pertains specifically to the factors that influence the behaviour of managers and employees. Victor and Cullen (1987: 51) define ethical climate as "the shared perception of what is correct behaviour and how ethical situations should be handled in an organisation". Thus, this study uses ethical culture at the workplace as a variable of the study. According to Weeks and Nantel (1992), when codes are effectively communicated and understood, it is likely to result in good values and greater ethical behaviour. Each individual will have his set of personal values, which can be changed through feedback from significant others' values and behaviours (Grube et al. 1994). In the accounting profession, the personal values of new accounting graduates can be changed to align with workplace professional values.

Top management will shape the organisation's ethical culture and will positively influence the values and ethics of the organisation (Bandura 1977). Victor and Soutar (2014) found that behaviour at the workplace affects the employees' ethics, and Douglas (2001) found that the working environment is related to the ethical orientation of accounting students. In this study, ethical culture at the workplace refers to the ethical environment provided by the organisation to ensure the code of ethics of the organisation is being complied with.

According to the Deep Learning Theory, informal learning, such as ethical training at the workplace, will affect the values and ethics of the individual. Therefore, this study develops the following hypothesis:

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

METHODOLOGY

SAMPLE

The population of the study are accounting graduates who have graduated less than three years from 17 MIA-accredited universities as listed in the First Schedule of the Accountants Act 1967 and are working in finance and accounting-related fields. Accounting graduates from these universities were selected as the Universities have been accredited by MIA as of the year data is collected (2022), and the universities have implemented the accounting curriculum (HT) approved by MIA and MOHE. This study focuses on accounting graduates with less than three years of working experience in finance and accounting-related fields as the study focuses on perceptions of accounting graduates who aspire to become accountants after they have met the three years working experience requirement set by MIA. This group of accounting graduates have recently completed the formal learning education and are currently working in organisations to complete their experience requirements.

DATA COLLECTION

A questionnaire was developed based on prior literature to collect primary data to test the hypothesised model. After developing the questionnaire, it was shared with academics and accounting graduates to obtain feedback. The questionnaire was then revised based on the feedback given. The questionnaires were then pilot tested on accounting graduates, and the measurements were found to be valid and reliable. Ethical clearance was then sought and obtained prior to distributing the questionnaire.

A cover letter explaining the purpose of the study and the intended respondents was distributed to 17 heads of accounting programs from the 17 MIA-accredited universities. The assistance of the head of the accounting program was sought to forward the link to the e-survey to 100 of their accounting graduates who graduated in 2019, 2020 and 2021 and are working in finance and auditing/accounting-related fields. The data was collected and administered via a web-based survey (electronic survey). Using GPower, the minimum sample size of this study is 77. Four hundred (400) responses were received, but only 344 responses were usable for further analysis.

MEASUREMENT OF VARIABLES

The ethics course was measured via two questions; one question asked about the quantity of the stand-alone ethics course that the respondents have taken throughout their accounting degree, and another question asked about other subjects that the respondents have taken that have embedded topics of ethics in the course. A list of 23 courses offered to accounting students in accordance with HT was provided for the respondents to tick which courses the ethics topic has been discussed. The total marks for both questions will be 100%. If the response is "one" for the question on the quantity of stand-alone ethics courses, a score of 100 will be given. If the response to the question on embedding ethics in the course is 12, a score of 52 will be given (12 out of 23 courses). The marks from the two questions will be added up and divided by the total score and multiplied by 100%. In this case, the respondent will obtain 76% for the ethics course, which is determined as follows: $152/200 \times 100\% = 76\%$. This measurement was adapted from Davis and Welton (1991), which quantifies the total of accounting ethics courses, including elective and compulsory courses. The method of scoring is based on Akhtaruddin and Haron (2012) and Sritharan and Sahari (2019).

As for teaching styles, respondents were asked to tick from the list of teaching styles the teaching style that has been used in teaching ethics in their university. There are seven (7) teaching styles adapted from Okougbo and Okike (2021) that was included in this study, which are; (i) case study, (ii) game, (iii) role-play, (iv) film/movie, (v) digital video, (vi) group learning, and (vii) lecture note delivery. The number of ticks of the teaching style will represent the quantity of teaching styles.

Ethical culture at the workplace was measured using five statements. The respondents were asked to rate their agreement with the statement based on a 5-point Likert scale which is; (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, and (5) strongly agree. Measurement was adopted from Douglas et al. (2001).

Values which represent personal and professional values were measured using five dimensions and 20 statements. The respondents were asked to rate their agreement with the statement based on a 5-point Likert scale which is; (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, and (5) strongly agree. The five (5) dimensions of values were adapted from MIA By-Law, which are; (i) confidentiality, (ii) integrity, (iii) objectivity, (iv) professional competence and due care, and (v) professional behaviour. Measurement was adapted from Aifuwa et al. (2018).

METHOD OF ANALYSIS

This study used SmartPLS 4.0 to analyse the data collected. It enables researchers to simultaneously analyse relationships between observed and latent variables in a complex model and perform multiple robustness assessments while considering the measurement error inherent in the evaluation of abstract concepts (Hair et al. 2019; Sarstedt et al. 2014). The analysis measures the research model's fitness and interpretation of the research hypotheses. SmartPLS 4.0 uses two-staged approaches; (i) measurement model; and (ii) structural model (Anderson & Gerbing 1988). In measurement model analysis, the validity and reliability of the measurement are conducted. Meanwhile, the structural model analysis is conducted to test the structural linkages of the constructed model. Hair et al. (2017) note that PLS-SEM is an established technique for examining structural models. It has been widely used in several research studies. It has been increasingly popular because of its ability to model latent constructs under conditions of non-normality and small to medium sample sizes.

ANALYSIS AND RESULTS

DEMOGRAPHIC PROFILES

The participants of this study are dominated by females (83%), and most of them graduated from public universities in Malaysia. Almost half of the graduates worked as accountants (45%), followed by auditors (39%). They prefer to work in small/medium accounting/audit firms in Malaysia (64%) after graduating from an accounting program. Table 3 shows the background of the participants in this study.

TABLE 3. Background of the respondents

	Information	Frequency	Percentage (%)
1	Gender		
	<i>Male</i>	60	17
	<i>Female</i>	284	83
	<i>Total</i>	344	100
4	Job Designation		
	<i>Accountant</i>	155	45
	<i>Auditor</i>	133	39
	<i>Tax Agent</i>	45	13
	<i>Others (Finance/etc.)</i>	11	3
	<i>Total</i>	344	100
5	Type of Company		
	<i>Big 4 Firm (PwC/KPMG/Deloitte/EY)</i>	19	6
	<i>Non-Big 4 Firm</i>	199	58
	<i>Commercial Company</i>	111	32
	<i>Public Sector</i>	15	4
	<i>Total</i>	344	100
6	Working Experience since Graduated		
	<i>Less than 1 year</i>	118	34
	<i>1 to 2 years</i>	165	48
	<i>2 to 3 years</i>	61	18
	<i>Total</i>	344	100

MEASUREMENT MODEL ASSESSMENT

This study applied the confirmatory composite analysis approach for variance-based SEM (Hair et al. 2020), which is similar to confirmatory factor analysis usually applied to confirm covariance-based measurement models (Shmueli et al. 2019). The measurement model assessment is conducted to assess how well a variable/combination of variables adheres to the objectives of the measurement (Urbach & Ahlemann 2010).

INTERNAL CONSISTENCY RELIABILITY

It assesses the degree to which the tested items are used to measure the same concept agree (Hanafi et al. 2018). In order to analyse the internal consistency reliability, the factor loading (loadings), composite reliability (ρ_c), and Cronbach alpha (α) are used. According to Comrey (1973), it is acceptable if the loading value is more than 0.5. Meanwhile, each construct's α and ρ_c values must be more than 0.7 (Hair et al. 2010). A measurement model is considered to have sufficient internal consistency and reliability. According to this threshold, one item of ethical culture at the workplace and one item of value have been removed as they have exceeded the recommended values. All other variables have met the internal consistency reliability of the construct model results.

DISCRIMINANT VALIDITY

In this study, the heterotrait-monotrait ratio (HTMT) has been employed. According to the rule of thumb, an HTMT ratio greater than 0.90 indicates a problem in the discriminant validity of the constructed model. All variables have met the requirement.

STRUCTURAL MODEL ASSESSMENT

SIGNIFICANCE TESTING

After the constructed variable is tested as reliable and valid, the construct's structural model is assessed. The t-value can be compared with the critical value from the standard normal distribution to decide whether the coefficients differ significantly from zero. This analysis examines the standardised structure coefficient and t-values calculated using the 5,000 resample bootstrapping procedure with bias correction and accelerated (BCa) bootstrap as the method used for the confidence interval (Hair et al. 2017). It will be considered significant if the t-values are higher/equal to 1.65.

As presented in Figure 2, Ethics Courses (EC) had a positive and significant relationship with values (V); thus, H_{1a} is supported. Hypothesis H_{1b} , supported as teaching styles (TS), has a positive and significant association with values (V) of the accounting graduates. The association between the culture at the workplace (ECW) and values (V) also shows a positive and significant relationship. Thus, H_2 is also supported. The t-values for the connection of culture at the workplace (ECW) and values (V) are the highest. Figure 3 shows the structural model of the study.

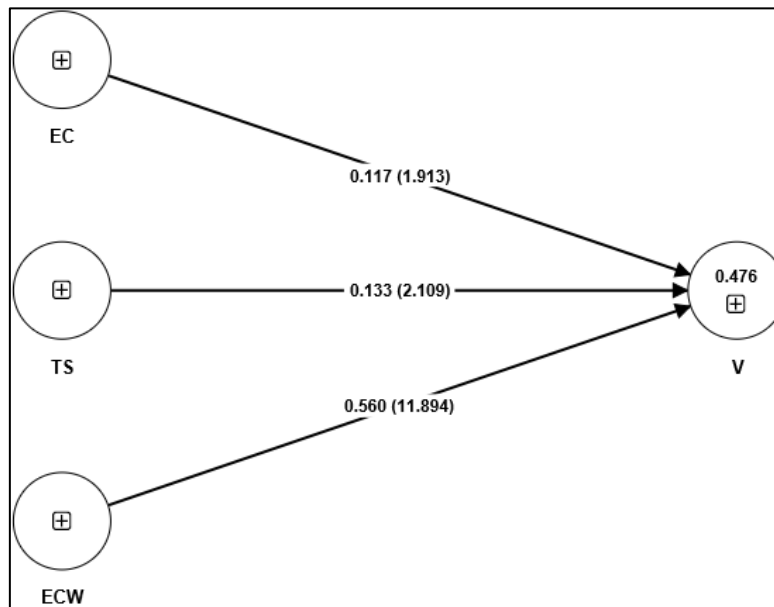


FIGURE 2. Structural model of the study

VARIANCE EXPLAINED / EXPLANATORY POWER AND EFFECT SIZE ANALYSIS

The R^2 or in-sample predictive power of the constructed variable is assessed to indicate the amount of variance in a dependent variable explained by the independent variables (Rigdon 2012). According to Chin (1998), if the value of the R^2 is higher than 0.67 is considered substantial, while above 0.33 is considered moderate. The value of this constructed model is 0.476, and it is considered as moderate. The effect size of each relationship between two IVs, the EC to V and TS to V, is considered

small as it is below 0.02. Meanwhile, the ECW shows a significant effect size value of 0.477 to the V above 0.35 (Cohen 1988). The result of the main effect analysis is shown in Table 4.

TABLE 4. 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)	Explanatory Power (R^2)	Decision
						LL	UL			
H ₁ : EC - V	1.851	0.117	0.061	1.913	0.028	0.017	0.220	0.014		Supported
H ₂ : TS - V	1.982	0.133	0.063	2.109	0.018	0.033	0.241	0.017	0.476	Supported
H ₃ : ECW - V	1.264	0.560	0.047	11.894	0.000	0.473	0.631	0.477		Supported

MODEL'S PREDICTIVE POWER

In SmartPLS 4.0, the prediction power of structural models is assessed using Q² predict and root-square mean error (RMSE) values provided by the PLSpredict technique (Shmueli et al. 2016, 2019). Q² values for all indicators are more than 0.25, indicating that the constructed variable has a medium predictive relevance. As the Q² value is more prominent than zero (Q² > 0), it suggests that the indicator in the constructed model is acceptable (Fornell & Cha 1994; Hair et al. 2014).

IMPORTANCE-PERFORMANCE MATRIX ANALYSIS

The importance-performance matrix analysis (IPMA) analysis enables researchers to identify the critical areas that require attention. Table 5 shows the values of the constructed model's total effect (importance) and index values (performance).

TABLE 5. Result of IPMA

Predictor Variables	Importance (Total Effects)	Performances (Index Values)
Ethics Courses (EC)	0.117	53.852
Teaching Styles (TS)	0.133	43.688
Ethical Culture at the Workplace (ECW)	0.560	72.773

The level of importance of predictive variables and their performance can be seen in Figure 3. The IPMA graphic revealed that culture at the workplace (ECW) has the highest performance, and it was indeed the most important variable in the constructed model. On the other hand, ethics courses (EC) show the least importance but higher performance than teaching styles (TS). This finding indicates that teaching styles of accounting ethics education should be improved to enhance the values of the accounting graduates.

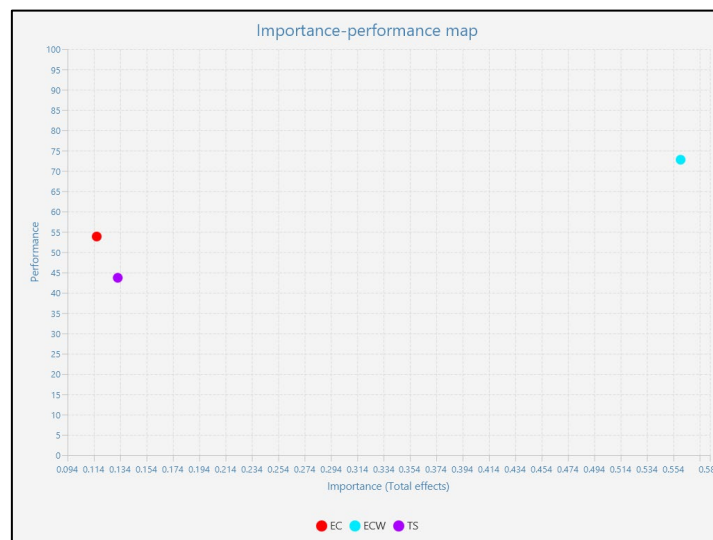


FIGURE 3. Importance-performance map

DISCUSSION AND IMPLICATION

This study examines the relationship between ethics courses, teaching styles and ethical culture at the workplace and the values of accounting graduates in Malaysia.

The study found a positive and significant relationship between the ethics courses taken at the university. This is in line with the study by Sari (2013) and Movchan and Zarishniak (2017), who found that ethics courses and teaching style variables, whether stand-alone/embedded in other courses, will influence the personal development and values of the students. However, it depends on the teaching styles in the ethics courses, as the students' preferences differ (Okougbo & Okike 2021). The ethics courses that have been suggested for all accounting students to take as recommended by MOHE in the HT is a good move. The teaching techniques should be more varied and include all active and passive teaching methods in addition to the traditional teaching method (Okougbo & Okike 2021). Moving forward, this is consistent with MOHE's initiative of Halatuju 4 theme, which is infusing *Adaab* into the accounting curriculum. The *Adaab* element has been included as one of the course learning outcomes, which will be assessed whether the element has been achieved in the context of ethics and professionalism. The Deep Learning Theory is able to explain the relationship between accounting education (ethics courses and teaching style, and culture at the workplace with the values of accounting graduates.

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/accountants can be enhanced if the type of teaching style is effective. MOHE can encourage universities to use different approaches to teaching ethics in developing and structuring an ethics education model for accounting programs offered in institutions of higher learning in Malaysia. Employers also play an essential role in creating ethical workplace culture to improve the values of accounting graduates.

The study has also found a positive and significant relationship between the ethics courses taken at the university and the value of accounting graduates. This is in line with a study by Douglas et al. (2001), who found that culture at the workplace does influence accountants' ethical orientation. The top management of the organisations that the accounting graduates work at need to play their role in exposing their employees to ethics training. The ethics training will enhance accountants' technical skills and values and will assist them in making an ethical judgement when facing ethical dilemmas.

The study has also proven that the Deep Learning Theory is able to explain the relationship of the variables to the value of accounting graduates. Thus, it is important to nurture ethics amongst accounting graduates, be it in accounting courses or teaching and delivery of accounting courses. In addition, employers should also play a significant role in assisting to nurture ethics amongst the accounting graduates undergoing training in their organisation. Accounting graduates who possess good values will be able to be ethical accountants.

CONCLUSION

This study has found ethics courses, teaching delivery and ethical culture at the workplace to have a positive and significant relationship with the values of accounting graduates. The Deep Learning Theory has been proven to be applicable in this study. The need for ethical culture is aligned with the initiatives by the 10th Prime Minister of Malaysia, YAB Dato' Seri Anwar Ibrahim, in realising *Madani* in the recent Budget 2023 Announcement. He stated that moral values, ethics, and humanism are essential in strengthening Malaysia's economy (Aziz 2023).

However, despite the numerous contributions of the study, there are some limitations. First, this study was conducted using questionnaires sent to accounting graduates via e-survey. Future research may use a different method, such as an interview, in order to get an in-depth view of the accounting graduates to enhance the values of the accountants in Malaysia. Next, this study focuses only on local accounting graduates from Malaysian accredited universities. Future research may include a comparison of accredited and non-accredited universities in Malaysia and between local accounting graduates and local professionally qualified accountants.

This study has measured the ethics courses by quantifying the stand-alone approach and embedded ethics topics by assigning the same weightage to stand-alone and embedded topics. However, it did not examine how ethics topics are embedded in each course and the effectiveness of teaching styles. Thus, future research may look at the measurement of ethics courses differently and also measure the effectiveness of the teaching style of ethics courses in enhancing the values of the accounting graduates.

The explanatory power of the model of the study is 47%. Hence, future studies might include other variables in enhancing the values of accounting graduates, such as peer influence and family upbringing.

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