

The Effect of Ethics Course on the Islamic Ethical Behavior of Accounting Students: A Preliminary Study in Islamic-Based Universities in Malaysia

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Abstract: Despite efforts to curb accounting scandals through ethics courses in university programs, unethical behaviour in business and finance remains a concern. This study examines the impact of the Business Ethics and Corporate Governance (BE & CG) course, a core component of undergraduate accounting programs in Malaysia, on the Islamic Ethical Behaviour (IEB) of accounting students. The research was conducted at three Islamic-based universities in Malaysia: Universiti Sultan Zainal Abidin (UniSZA), Universiti Sains Islam Malaysia (USIM), and International Islamic University Malaysia (IIUM). The study utilised a pre- and post-test survey questionnaire to evaluate IEB using the IEB index, which is grounded in the Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI) Code of Ethics for Accountants and Auditors of Islamic Financial Institutions and Shari'ah principles. This index measures six essential ethical principles: trustworthiness, legitimacy, objectivity, professional competence and diligence, faith-driven conduct, and adherence to professional conduct and technical standards. Some items were adapted to include elements of academic dishonesty to contextualise the study within an educational context. Overall, data analysis using Partial Least Squares (SmartPLS 4.0) revealed that while students initially exhibited strong IEB, their ethics improved significantly after completing the course. This indicates a positive relationship between the ethics course and enhanced IEB in accounting students.

Keywords: Ethics course, Malaysia, Islamic Ethical Behaviour, Index, Accounting Students, Business Ethics and Corporate Governance, AAOIFI

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Introduction

Corporate financial scandals continue to be a global concern, and Malaysia is no exception. Reports by PriceWaterhouseCoopers (2020) and Transparency International (2023) revealed an alarming rise in financial fraud and a decline in integrity within Malaysia's accounting sector. In 2020, fraud cases surged to 43%, with accounting ranked among the most implicated departments. A notable 2024 case involving the embezzlement of RM24.2 million further underscores the vulnerability of the profession. Experts, however, warn that such publicly disclosed cases may only represent a fraction, approximately one-third, of actual incidents (Dyck, Morse, & Zingales, 2024). These findings highlight persistent unethical practices in the accounting field and raise serious questions regarding the adequacy of ethics education in shaping professional conduct (Enofe, Edemenya, & Osunbor, 2015; Shaïrf, Junaid, & Malik, 2019). Notably, ethics plays a pivotal role in business, contributing to a strong reputation and investor confidence. As such, ethical employees are vital to any organisation. While some believe ethical values are instilled through upbringing, others argue that they can be cultivated through formal education. A growing body of research supports the latter, demonstrating that ethics education, particularly at the tertiary level, positively influences students' ethical behaviour (Dellaportas, 2006; Dellaportas, Kanapathippillai, Khan, & Leung, 2014; Elias & Farag, 2010; Miller, Arcy Becker, & Pernsteiner, 2014; Mohd Ghazali, 2015). In Malaysia, the Business Ethics and Corporate Governance (BE & CG) course has been a mandatory component of public university accounting programs since 2007, under the Ministry of Higher Education's Accounting Direction initiatives. The course covers core topics, including ethical theory, decision-making models, and corporate governance, aiming to provide students with practical ethical competencies. Despite its long-standing inclusion, concerns remain about the course's effectiveness in achieving its intended outcomes. Thus, this study seeks to examine its impact specifically on the Islamic Ethical Behaviour (IEB) of accounting students in Islamic-based universities. In particular, it addresses the central research question: Does teaching the BE & CG course significantly improve the IEB of accounting students?

The remainder of this paper is organised as follows: Section 2 discusses the theoretical underpinnings and the development of IEB. Section 3 reviews relevant empirical studies on ethics in accounting. Section 4 introduces the theoretical framework and hypothesis development. Section 5 outlines the research methodology and instrument design. Section 6 presents data analysis and findings. Finally, Section 7 concludes with discussions, implications, and suggestions for future research.

Islamic Ethics and Islamic Ethical Behaviour

Islamic ethics, rooted in the Quran and Sunnah, provide a comprehensive framework guiding all aspects of human conduct, including business. Central to this framework are the concepts of *akhlaq* (moral character) and *adab* (proper behaviour), which emphasise righteousness, responsibility, and social harmony. These principles are derived from the Islamic worldview based on *Tawheed* (Oneness of God) and man's role as *khalifah* (vicegerent). This forms the ethical axioms of unity, justice, free will, responsibility, and benevolence (Khalid Ali, Ramly, & Chai, 2014). In contrast to Western ethics, which often prioritise individualism and rationalism, Islamic ethics stress collectivism, divine accountability, and moral absolutes (Al-Aidaros, Mohd. Shamsudin, & Md. Idris, 2013). Unlike Western theories such as deontology or utilitarianism, which may lead to ambiguous ethical conclusions, Islamic teachings clearly define right and wrong, promoting justice and compassion across all contexts.

IEB refers to the moral conduct and personal morality that Muslims are expected to uphold, as prescribed by Islamic teachings and principles. It is a set of practical guidelines or specific norms or codes of behaviour based primarily on the Quran and the Hadith, the central religious texts of Islam. Islamic factors play a vital role in influencing IEB. It is proven by Laeheem (2018), who studied this relationship among Muslim youths in the three southern border provinces of Thailand. The Islamic factors studied by him comprise Islamic upbringing, knowledge of the religion, participation in Islamic activities, and practising Islamic principles. The results indicated that all these Islamic factors are positively correlated with IEB. In addition, practising Islamic principles is the most significant determinant in explaining IEB. To relate this to accounting, numerous efforts have been made to ensure that accountants observe their ethical standards in delivering their services. One of them is the formation of a code of ethics. Furthermore, the International Federation of Accountants (IFAC) has established a Code of Ethics for Professional Accountants to develop high-quality ethical standards applicable worldwide for professional purposes. Due to the rapid growth of Islamic finance, the Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI) has its own set of codes of ethics for accountants and auditors of Islamic financial institutions. This is to cater to the specific needs of Islamic financial institutions, which differ from those of conventional financial institutions. The foundation of the establishment of both codes may have been influenced by the beliefs of those who developed them. A study by Espinosa-Pike and Barrainkua-Aroztegi (2014) so has the importance of

strengthening confidence in the accounting profession worldwide. The internationalisation of the accounting profession requires convergence both in terms of the technical aspects of the profession and in training and ethical aspects. The International Federation of Accountants (IFAC) provided evidence of the influence of religion in adopting the IFAC Code of Ethics. The study discovered that accounting organisations from countries where Christianity is the predominant religion are more prone to adopt the IFAC Code of Ethics as their own. Meanwhile, the AAOIFI Code of Ethics for Accountants and Auditors of Islamic Financial Institutions was introduced to develop ethical awareness among accountants to ensure they align with the Shari'ah principles (Alani & Alani, 2012).

The degree of religiosity is generally associated with higher ethical attitudes. This assumption of a relationship between religiosity and ethics is relatively risky, as it contributes to a higher level of trust. A study on the accounting practices of religious organisations noted that the high-trust environment within these organisations renders internal control unnecessary. This makes them vulnerable to fraud and abuse (Shaharuddin & Sulaiman, 2015). Several researchers in the ethics education field have used religiosity as a predictor of ethical awareness among their respondents (Conroy & Emerson, 2004; Espinosa-Pike & Barrainkua-Aroztegi, 2014; Uyar, Kuzey, Güngörmüş, & Alas, 2015) religiously affiliated. Notably, religiosity has been proven to have a significant relationship with ethical sensitivity (Conroy, Emerson, & Pons, 2010; Mohamed Saat, Porter, & Woodbine, 2010). People with a religious background or high religiosity tend to avoid any unethical behaviour since they believe in God and fear the punishment of God. Despite the many religions in the world, none of them encourages their believers to behave unethically. This is supported by Uyar et al. (2015) religiosity and seniority on the ethical awareness of accountants.

Design/methodology/approach - The data were collected by using a questionnaire survey completed by 219 accountants located in various locations in Turkey. To investigate the relationship between constructs, the partial least square structural equation model was implemented.

Findings - The findings indicated that seniority in the profession and religiosity have a positive influence on ethical awareness. Within the theoretical approaches, deontology has a positive influence on ethical awareness, whereas egoism has a negative one.

Research limitations/implications - The study has some implications regarding enhancing the ethical awareness of accountants: Accountants who are in the early stages of their career development should be made aware of the ethical issues they face in their professional life; accountants should be taught laws and regulations of accountancy profession from the entry level throughout their working life; throu-

gh professional associations, some initiatives may be taken to involve accountants in social responsibility programs to curb selfish behavior and improve empathy. However, a questionnaire survey does not permit an investigation from a qualitative perspective (the whys and hows of the answers, who noted that the basic tenet of all religions prevents humankind from committing sins through immoral acts, as all religions promote just, truthful, and rightful acts. Evidently, religion serves as a guiding parameter for individuals in this life, and in fact, the code of ethics developed for accountants referred to the elements of religiosity.

While accounting scandals are often associated with business organisations, research indicates that such issues also occur in non-profit and religious organisations (Iswanaji, 2021; Mediawati & Fadhila, 2021; Shaharuddin & Sulaiman, 2015). This is particularly alarming since these organisations, founded on trust and often publicly funded, should uphold the highest standards of financial integrity (Shaharuddin & Sulaiman, 2015). Accountants in these organisations have a crucial role in managing funds properly. Nevertheless, incidents of embezzlement within entities such as churches, mosques, and zakat institutions have raised public concerns about how such malpractices can occur in trusted environments (Shaharuddin & Sulaiman, 2015). A recent scandal involving Aman Palestine Malaysia, which surprised many supporters, highlights the need for improved financial management, stronger internal controls, better oversight, and the role of ethics and religion in ensuring financial accountability (Iswanaji, 2021; Mediawati & Fadhila, 2021; Shaharuddin & Sulaiman, 2015).

This study emphasises IEB for three key reasons: (1) Malaysia's majority-Muslim context, (2) the comprehensive and divinely grounded nature of Islamic ethics, and (3) heightened public concern when ethical violations are committed by religious individuals or institutions. Notably, persistent ethical failures in both corporate and religious sectors underscore the urgent need for values-driven education, particularly in accounting, where trust and integrity are paramount.

Empirical Studies on Ethics in Accounting and Accounting Education

Over the past few decades, corporate and accounting scandals have intensified scrutiny of the accounting profession. High-profile cases have exposed systemic weaknesses in financial reporting and corporate governance, as well as fundamental ethical lapses among accounting professionals. These incidents have significantly eroded public trust and highlighted a recurring issue: the failure of ethical conduct within the profession (Jackling, Cooper, Leung, & Dellaportas, 2007). Contributing factors identified include conflicts of interest, lack of objectivity and indepen-

dence, and weak ethical leadership. At the same time, conflicts of interest, particularly those arising from self-interest threats, are viewed by professional bodies as primary triggers of unethical behaviour.

Elias and Farag (2010) further emphasised that greed remains a primary motivator behind accounting malpractice. The opportunity to control or manipulate large financial resources often leads to intentional misreporting, embezzlement, or unethical decision-making, especially when ethical values are weak. Abdul Rahman (2003) noted that moral standards, when compromised, allow professionals to rationalise unethical conduct. These patterns stress the urgent need to embed strong ethical foundations within the education and training of future accountants.

A growing body of research has explored the behaviour of accounting students as indicators of future professional conduct. For example, Holmes, Marriott and Randal (2012) together with different behaviours between males and females, and different age cohorts. Design/methodology/approach – A total of 630 undergraduate Commerce students at a New Zealand university completed a questionnaire on attitudes towards the tax system. The students subsequently participated in a simulation experiment requiring responses to hypothetical tax evasion decisions. Individual reward payments were contingent on the outcome of these tax evasion decisions. Questionnaire responses, which captured intended behaviour, were compared with actual behaviour in the experiment. Findings – The study finds more compliant behaviour among older students and students who have been at university longer. It also finds female students demonstrate more ethical responses in their behaviour than male students. In contrast to extant literature, it finds a positive relationship between students indicating a preference for compliant behaviour in the questionnaire, and behaviour in the experiment. This leads support for the use of Defining Issues Tests (or similar instruments that capture moral development intentions observed that good behavioural intentions tend to translate into ethical actions, reinforcing the significance of cultivating sound values early. Meanwhile, Abu Bakar, Ismail and Mamat (2008) discovered that most accounting students surveyed at the International Islamic University Malaysia (IIUM) rejected unethical practices. Interestingly, gender differences emerged, with female students displaying higher ethical standards than their male counterparts. At the same time, Elias and Farag (2010) also explored how students' financial orientation, such as love of money, affects their views on academic and professional misconduct. In essence, students with stronger materialistic values were more tolerant of cheating behaviours, especially within classroom contexts.

These findings underline the necessity of ethics education, which informs students about professional codes of conduct and shapes their internal moral compass. However, ethical behaviour is not shaped solely by individual characteristics. Organisational and contextual factors also play a significant role. Modarres and Rafiee (2011) and Taylor (2013) quasi-experimental design, senior accounting students were subjected to a pre- and post-test, measuring ethical sensitivity, with an IFAC-aligned business ethics course as the intervention. Multivariate analysis also focused on the interrelation of demographic characteristics with ethical sensitivity. Findings - The results indicate that the business ethics course was indeed effective in increasing the ethical sensitivity of accounting students. Students' demographic characteristics, in terms of accounting specialisation area and years of work experience, did play a role in the extent of their changes in ethical sensitivity. However, gender and previous ethics education as influencing factor in ethical sensitivity was negated. Research limitations/implications - The study focused on the first component (ethical sensitivity) identified variables such as age, job seniority, work experience, and firm size as essential predictors of ethical judgment. For example, larger firms, often celebrated publicly for their size and success, have been disproportionately involved in ethical violations (Loeb, 1971). Senior professionals, in contrast, tend to exhibit higher ethical awareness, partly due to familiarity with professional standards and internal controls. In addition, environmental influences, including organisational culture, peer pressure, family background, and education, also affect ethical sensitivity. Moreover, a toxic or unethical workplace culture can normalise questionable practices, gradually desensitising individuals to misconduct (Uyar & Güngörmüş, 2013). For instance, accounting students exposed to unethical practices during internships may become more accepting of such behaviours if they perceive them as industry norms.

Among these influencing factors, education, particularly ethics education, has garnered significant attention. Numerous studies argue that ethics education positively impacts students' ethical awareness and reasoning abilities (Dellaportas, 2006; Elias & Farag, 2010; Miller et al., 2014; Mohamed Saat et al., 2010). However, not all agree on the optimal timing or method. While Ponemon (1993) contended that ethics should be instilled during childhood rather than at the tertiary level, others advocate for a lifelong, developmental approach to ethics education. Additionally, Low, Davey and Hooper (2008) and Dellaportas (2006) highlighted the significance of integrating ethics throughout the accounting curriculum, rather than relegating it to standalone courses. Students themselves have expressed support for ethics education as a core component of their academic programs. Despite

this consensus, the quality and delivery of ethics instruction continue to be points of concern. The mere inclusion of an ethics course does not guarantee meaningful impact if the content is superficial, detached from real-world applications, or fails to engage students critically (Ali & Sahabuddin, 2020; Avci, 2017). Uyar and Güngörmüş (2013) further argued that cultivating ethical awareness may be challenging if foundational values are not established earlier in life. However, with appropriate pedagogical strategies, universities can still play a critical role in enhancing students' ethical development.

While much of the existing literature focuses on ethics education from a general or Western perspective, a significant gap exists in the exploration of ethics education through an Islamic ethical lens. Few studies empirically assess how ethics courses align with Islamic values or influence behaviour within Islamic educational environments. Moreover, there is limited use of specialised, Shari'ah-compliant instruments to measure IEB among accounting students. This study addresses these critical gaps by evaluating the effectiveness of Malaysia's compulsory BE & CG course using a customised IEB index. Accordingly, it contributes to both the enhancement of ethics education practices and the broader discourse on Islamic ethics in professional training.

Theoretical Framework

This study applies the Theory of Reasoned Action (TRA) to explain the IEB of accounting students. Originally used in health behaviour studies, the theory has been widely applied in various fields, including accounting, to explain behaviours such as unethical decision-making and fraudulent financial reporting (Gibson & Frakes, 1997; Mohamed Zawawi, Md Idris, & Abdul Rahman, 2011). Developed by Martin Fishbein and Icek Ajzen, this theory offers a robust framework for understanding how individuals form behavioural intentions, which subsequently guide their actions. According to TRA, behavioural intention, which is the immediate antecedent of behaviour, is influenced by two key components: attitude toward the behaviour and subjective norms. Attitude toward the behaviour refers to an individual's positive or negative evaluation of performing the behaviour. This is shaped by their beliefs about the outcomes of the behaviour and the value they place on those outcomes. Meanwhile, subjective norms capture the perceived social pressures to perform or not perform a behaviour, driven by the expectations of essential referents such as peers, educators, and religious authorities. Critically, TRA assumes that individuals are rational actors who systematically process information

and make decisions based on expected outcomes and social influence. While this assumption has been debated particularly in settings involving habitual or emotionally driven behaviour, it remains useful in structured environments like education, where students are guided by explicit learning outcomes, institutional norms, and moral instruction. In the context of this study, the TRA is applied to explain how accounting students internalise and respond to ethics education, particularly through the BE & CG course, in shaping their IEB. The theory posits that exposure to ethics content, such as Islamic ethical principles and Shari'ah-compliant decision-making models, influences students' attitudes by raising their awareness of ethical standards and reinforcing the importance of ethical conduct. Additionally, socialisation within Islamic-based universities, combined with the moral authority of educators and prevailing religious norms, shapes subjective norms that encourage students to conform to behaviours that are both ethically and religiously acceptable. Together, these factors strengthen students' behavioural intentions to act ethically, which may be reflected in higher scores on the IEB index. This theoretical alignment supports the hypothesis that teaching the BE & CG course significantly improves the IEB of accounting students. Thus, by focusing on intentional behaviour grounded in value-driven education and perceived social expectations, TRA offers a compelling explanation for the transformative potential of structured ethics interventions.

Hypothesis Development

Prior studies have demonstrated that education quality is crucial as it has a significant impact on students (Avci, 2017; Ishak, Omar, Ariffin, & Hussain, 2014; Jaafar & Abdul Wahab, 2017; Sims & Felton Jr, 2005). In the case of ethics education, the primary goal of offering the subject is to create awareness and educate students on morals and ethics, ensuring that they can serve as a guide for making ethical decisions once they enter the workforce. Avci (2017) argued that ethics teaching positively influences students' ethical awareness, knowledge, and reasoning. This is supported by Ishak et al. (2014), who believed that quality in ethics education, especially in its learning and teaching approaches, plays a vital role in ensuring that students can apply the knowledge received. In fact, ethics education has been introduced to accounting students to reduce accounting malpractice and improve ethical behaviour among accountants (Jaafar & Abdul Wahab, 2017). This suggests that quality ethics education is vital as it has an impact on shaping the behaviour of future accountants. The relationship between teaching approaches and IEB is explained by the TRA. Nevertheless, Ponemon (1993) discovered that ethics teaching

is ineffective. This is concerning, as poor quality education is one of the problems contributing to accounting scandals (Low et al., 2008). It is thus imperative to examine whether the same holds in the context of this study. Therefore, this study presents the following hypothesis.

H1: Teaching the BE & CG course has a significant effect on the IEB of accounting students.

Methodology

This study introduces the IEB index as a tool to assess ethical conduct among accounting students, drawing upon the AAOIFI Code of Ethics for Accountants and Auditors in Islamic Financial Institutions. Grounded in Shari'ah principles, the framework underscores the religious obligation of Muslim accountants to uphold ethical standards. It emphasises six core principles: trustworthiness, legitimacy, objectivity, professional competence and diligence, faith-driven conduct, and adherence to professional and technical standards. The index comprises 34 items, each measured on a 5-point Likert scale, specifically designed to evaluate academic dishonesty rather than professional practice. These items, categorised according to the six ethical principles, were reviewed and validated by AAOIFI representatives and Islamic ethics experts. Data were collected through a quantitative approach using an online survey (Google Forms), targeting accounting students enrolled in the BE & CG course at three Islamic-based universities in Malaysia during the 2021/2022 academic year. The online method was selected due to the continued online delivery of classes during the COVID-19 pandemic, making e-surveys the most practical option. The first group of respondents consisted of students from Universiti Sains Islam Malaysia (USIM) during the first semester of the 2021/2022 session. Meanwhile, data from IIUM and Universiti Sultan Zainal Abidin (UniSZA) were collected in the second semester, as the course was only offered at that time. To address the research objective, a pre- and post-test design was implemented. Respondents completed the survey twice, first during Week 3 of the semester (prior to undertaking the BE & CG course), and again during Week 13 (after completing the course content). For both rounds, students were allocated two weeks to respond. Non-respondents were subsequently followed up via phone calls to encourage participation. The resulting data were analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) to evaluate changes in ethical behaviour, with scores ranging from "very unethical" to "very ethical."

Study Population and Sampling

As of 2022, 17 universities in Malaysia are accredited by the Malaysian Institute of Accountants (MIA), requiring the inclusion of the BE & CG course in the accounting curriculum, as outlined in the *Accounting Direction (HalaTuju)*. This study focuses on three Islamic-based universities: UniSZA, USIM, and IIUM, in alignment with its objective of examining IEB among accounting students. The 2021/2022 academic session was selected due to the timing of data collection and continued use of *HalaTuju 3*, under which the BE & CG course is compulsory. The estimated population size across the three institutions is 1,200 students, based on an assumed annual intake of 100 students per university over four academic years, as outlined in Table 1.

Table 1

Population Size

No.	Universities	Number of Accounting Students (Session 2021/2022)
1.	Universiti Sultan Zainal Abidin (UniSZA)	400
2.	Universiti Sains Islam Malaysia (USIM)	400
3.	International Islamic University Malaysia (IIUM)	400
TOTAL		1200

A stratified sampling technique was employed to ensure equal representation and enhance generalizability. Stratification was based on students' completion of the BE & CG course. The final sample consists of 320 accounting students from the three Islamic universities: 100 from UniSZA, 120 from USIM, and 100 from IIUM. Out of the total sample, 243 students responded to the pre-test, while 197 completed the post-test. Consequently, the analysis in this study is based on the 197 matched responses, representing a response rate of 61.56%, which is deemed adequate for the purposes of this research.

Data Analysis Procedures

To further examine changes in ethical behaviour, pre- and post-test data from the IEB index were analysed using Importance-Performance Matrix Analysis (IPMA). The analysis involved modelling higher-order and lower-order constructs through the repeated indicators approach (Cheah et al., 2019; Wold, 1982), in which the indicators for higher-order constructs were reused for lower-order constructs. The

hierarchical component model, as recommended by Wold (1982), was implemented using PLS, which remains the most widely adopted method for estimating higher-order constructs (Wilson & Henseler, 2007).

Following Henseler, Ringle and Sarstedt (2016) group comparisons can be misleading unless researchers establish the invariance of their measures. While methods have been proposed to analyze measurement invariance in common factor models, research lacks an approach in respect of composite models. The purpose of this paper is to present a novel three-step procedure to analyze the measurement invariance of composite models (MICOM, the PLS-SEM analysis was conducted using a two-step approach: (1) evaluation of the measurement model and (2) evaluation of the structural model. This process ensured the validity and reliability of the findings related to the impact of the BE & CG course on IEB among accounting students.

Demographic Profile of the Respondents

This section describes the demographic profile of the respondents for the pre- and post-test. Table 2 presents the frequency distribution and percentage of participants based on their demographic characteristics.

Table 2

Demographic Profile of Respondents: Frequency distribution (n = 197)

Items	Frequency	Percentage	Cumulative Percentage
Gender			
Male	54	27.4	27.4
Female	143	72.6	100
Race			
Malay	197	100	100
Indian	-	-	-
Religion			
Islam	197	100	100
Hindu	-	-	-
University			

IIUM	51	25.9	25.9
UniSZA	70	35.5	61.4
USIM	76	38.6	100
Secondary School			
Religious School	130	66.0	66.0
Non-religious school	67	34.0	100

As summarised in Table 2, the majority of the respondents who participated in this study are female, constituting 143 (72.6%). Additionally, most respondents are Malay and Muslim (100%). The highest number of respondents comes from USIM (38.6%), followed by UniSZA (35.5%) and IIUM (25.9%). Additionally, the majority of respondents have a religious school background, comprising 130 respondents.

Data Analysis and Discussion

Following the two-step process, the pre- and post-test results for higher-order and lower-order constructs demonstrated acceptable reliability, with all items yielding composite loadings above the 0.5 threshold. Additionally, convergent validity was confirmed, as the Average Variance Extracted (AVE) values exceeded 0.50 for all constructs. Discriminant validity was established using the Heterotrait-Monotrait (HTMT) ratio, ensuring that the constructs were distinct from one another. These assessments indicate no issues with the data, allowing for further analysis to proceed.

Based on the pre- and post-analysis for IEB, the IPMA was conducted to calculate the scores of the IEB index to assess whether the ethics course taught to accounting students affects their IEB. The assessment of IEB is based on a 5-point Likert scale. To convert the scale to a percentage score in IPMA, the original scales of data are essential. The IPMA rescales the data to provide performance scores on a scale from 0 to 100. For example, a 5-point Likert scale must have a minimum value of 1 and a maximum value of 5 in the IPMA settings. The preconfigured ranges are based on the actual minimum and maximum values observed in the dataset. This value should not equal the theoretically possible ranges and should therefore be adjusted (Hair, Hult, Ringle, & Sarstedt, 2014). Based on the IPMA calculated in PLS-SEM, Table 3 outlines the pre- and post-scores for the IEB index.

Table 3

Pre- and post-scores for the IEB index using IPMA

NO.	IEB ELEMENTS	PRE- SCORES (%)	POST- SCORES (%)
1.	Trustworthiness	77.12	82.13
2.	Religious Legitimacy	72.86	87.63
3.	Objectivity Principle	78.15	76.48
4.	Professional Competence and Diligence Principle	71.46	78.74
5.	Faith-Driven Conduct	74.91	84.90
6.	Professional Conduct and Technical Standards	68.43	79.84
	OVERALL SCORES	73.85	81.90

These scores are then compared with the scales developed for the IEB index, as presented in Table 4 below. This classifies the score levels of IEB among accounting students before and after taking the BE & CG course.

Table 4

Scales for the IEB index

NO.	SCALES FOR IEB (% OF IEB)	CLASSIFICATION OF THE LEVEL OF ISLAMIC ETHICAL BEHAVIOUR
1.	0-24.9	Very Unethical
2.	25.0-49.9	Somewhat unethical
3.	50.0-59.9	Neither ethical nor unethical
4.	60.0-84.9	Somewhat ethical
5.	85.0 and above	Very Ethical

Based on the IPMA results provided in Table 3, the IEB of accounting students for the overall scores is 73.85% for the pre-test and 81.90% for the post-test. According to the scales in Table 4, the overall scores are in a similar category of 'somewhat ethical.' Although there is no improvement in terms of the category, the post-test scores are higher than the pre-test scores. There are three reasons for the high IEB score in the pre-test. First, it is due to the previous educational background of the samples. Since this study examined IEB, the respondents of the survey comprise accounting students from Malaysian Islamic-based universities. These Islamic-based universities are categorised based on their environment, vision, mission, and philosophy. Second, the majority of the students enrolled in these

universities come from religious secondary schools. Therefore, most of them have a religious education background. This is possibly one of the contributing factors to the high ethical level, even before taking the ethics course. The effect of religion on ethical behaviour is proven to be one of the determinants of the formation of the personalities of students, indicating that religion and morality are complementary rather than exclusive (Iwuagwu, 2018; Laeheem, 2018; Uyar et al., 2015). Third, the Islamic environment in universities, as well as social interactions among peers with similar religious education backgrounds, helps to develop the personalities of the students. This explains why most respondents in this study achieved high scores in their IEB even before taking the BE & CG courses. The results of this study are consistent with those of prior researchers, who reported a significant relationship between ethics courses and ethical behaviour (Dellaportas, 2006; Elias and Farag, 2010; Miller et al., 2014; Mohamed Saat et al., 2010; Taylor, 2013).

The indicators of IEB also present similar results with the overall scores, with five of its indicators remaining in the same category (somewhat ethical). However, this is not the case for the indicators of Religious Legitimacy, where the scores improved from 'somewhat ethical' (72.86%) to 'very ethical' (87.63%). This is an interesting point to highlight, as it suggests that ethics interventions through the BE & CG course have improved the ethical behaviour of students in terms of their relationship with God and their compliance with Shari'ah laws and principles. This is a good sign, as the relationship with God and obeying the Shari'ah laws are of the utmost importance in shaping a person's values. The ethical disposition is to some extent formed from a person's belief and adherence to their religion (Laeheem, 2018). Similarly, this highlights the connection between religion and the ethical disposition of an individual. The ethics course helped students to be aware of the applicable Shari'ah laws, which in this case related to accounting. This indirectly explains why the overall IEB scores increased after taking the BE & CG course.

On the other hand, even though the Objectivity Principle's score remains in the same category (somewhat ethical), the score slightly decreased from 78.15% in the pre-test to 76.48% in the post-test. Although the difference is not material, it is another interesting point to ponder. The principle of objectivity here refers to an obligation that has been imposed on all professional accountants not to compromise their professional or business judgment due to bias, conflict of interest, or the undue influence of others. This is to help ensure integrity among the professionals. The decline in the score may be due to two factors. Firstly, it is related to the effectiveness of ethics education, especially in teaching approaches. Although most of the lecturers teach the BE & CG courses nowadays using a constructive approach

that involves active learning, there remains room for improvement. For instance, lecturers may need to further elaborate on the importance of the objectivity principle and its impact on the credibility of the accounting profession. Secondly, the respondents in this study consist of accounting students who have no work experience yet. However, the items used under the objectivity component mostly involved practice that relates to the working world. This possibly contributes to the declining score in the objectivity components. Students may only fully appreciate the importance of ethics and objectivity when they encounter ethical dilemmas in real-world work situations, as these are often more complex than those discussed in class. This is parallel with the findings from Nadaraja and Mustapha (2017). The results reported a difference in students' experiences relating to ethical values and the ethical environment at the internship organisation for final-year accounting students as compared to their experience in class. They also noted that after completing their practical training, the students appeared to think that what is essential for companies is profit and efficiency, rather than ethical values. In this study, it is possible that students answered the questionnaire without fully understanding the statements that reflect objective principles, as they may not be able to imagine real-life situations. Based on this, it is not surprising that the score for the Objectivity Principle slightly decreased even after ethics intervention.

In addition to IPMA, a t-test had been conducted on IEB before and after ethics intervention to examine the effect of the course on the IEB of accounting students. The result indicates that there is a significant difference in IEB for the pre- and post-test. It is also observed that the IEB of accounting students improved after taking the BE & CG course. This finding is consistent with the result from IPMA. The table of the findings for the t-test is presented in Table 5.

Table 5

T-Test Result for Islamic Ethical Behaviour

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	IEB_PRE	4.2702	197	.44294	.03156
	IEB_POST	4.4227	197	.43146	.03074

Paired Samples Correlations					
			N	Correlation	Sig.
Pair 1	IEB_PRE & IEB_POST		197	.230	.001

Conclusion

In conclusion, the data analysis demonstrates that the BE & CG course significantly enhances IEB among accounting students, particularly in areas such as religious legitimacy and faith-driven conduct. However, some improvement is required in the Objectivity Principle. Grounded in the TRA, the course's impact stems from its influence on students' behavioural intentions through increased ethical knowledge, which shapes attitudes, norms, and ultimately, ethical behaviour. Ethics education plays a vital role in fostering sound ethical values and moral development, equipping students with the skills to make ethical decisions in real-world settings. Although students already had relatively high IEB scores before the course, the overall improvement in most IEB elements verifies the course's positive effect. While the Objectivity Principle demonstrated a slight decline, it remained within the "somewhat ethical" range, and the reduction was not substantial. Thus, the BE & CG course has successfully contributed to developing IEB in accounting students, supporting the TRA framework, and achieving its educational goals. This study also presents several implications. Theoretically, it enriches the limited body of literature in accounting education by applying constructivist theory and introducing the Deep Learning Approach (DLA) as a mediator between teaching approach and ethical behaviour. Additionally, the development of the IEB Index, grounded in AAIOFI's Code of Ethics, provides a novel tool to measure IEB among students. Practically, the study offers guidance to lecturers in refining teaching strategies and supports policymakers such as MIA and the Ministry of Higher Education (MOHE) in evaluating the effectiveness of ethics education initiatives. It also encourages researchers to explore ethical development within the accounting profession further. However, this study has two limitations. First, the sample was limited to third-year accounting students from only three Malaysian public universities, representing 17% of those accredited by the MIA, which may constrain generalizability. Thus, future studies should include more universities to broaden the scope and reveal additional influencing factors. Second, this study is among the few that differentiate between Western and IEB, focusing on Islamic practices in universities with strong Islamic settings. Therefore, expanding future research to include institutions with diverse student populations could provide valuable comparative insights.

References

- Abdul Rahman, A. R. (2003). Ethics in accounting education: contribution of the Islamic principle of Maslahah. *IIUM Journal of Economics and Management*, 11(1), 1–18. <https://doi.org/10.31436/ijema.v11i1.85>
- Abu Bakar, N. B., Ismail, S., & Mamat, S. (2008). Ethics of future accounting professionals: Evidence from Malaysia. *Journal of Financial Reporting and Accounting*, 6(1), 21–33. <https://doi.org/10.1108/19852510880000633>
- Al-Aidaros, A.-H., Mohd. Shamsudin, F., & Md. Idris, K. (2013). Ethics and Ethical Theories from an Islamic Perspective. *International Journal of Islamic Thought*, 4(1), 1–13. <https://doi.org/10.24035/ijit.04.2013.001>
- Alani, F. S., & Alani, H. K. (2012). The role of Islamic ethics in accounting environment. *IOSR Journal of Business and Management*, 2(1), 26–30.
- Ali, Z., & Sahabuddin, N. A. (2020). Which dominant teaching style are you?: A Preliminary Study among Practitioners at a Higher Education Institution. *Journal of Educational Research and Indigenous Studies*, 2(2), 2020.
- Avci, E. (2017). Learning from experiences to determine quality in ethics education. *International Journal of Ethics Education*, 2(1), 3–16. <https://doi.org/10.1007/s40889-016-0027-6>
- Cheah, J.-H., Ting, H., Ramayah, T., Memon, M. A., Cham, T.-H., & Ciavolino, E. (2019). A comparison of five reflective–formative estimation approaches: reconsideration and recommendations for tourism research. *Quality & Quantity*, 53(3), 1421–1458. <https://doi.org/10.1007/s11135-018-0821-7>
- Conroy, S. J., & Emerson, T. L. N. (2004). Business ethics and religion: Religiosity as a predictor of ethical awareness among students. *Journal of Business Ethics*, 50(4), 383–396. <https://doi.org/10.1023/B:BUSI.0000025040.41263.09>
- Conroy, S. J., Emerson, T. L. N., & Pons, F. (2010). Ethical attitudes of accounting practitioners: Are rank and ethical attitudes related? *Journal of Business Ethics*, 91(2), 183–194. <https://doi.org/10.1007/s10551-009-0076-2>
- Dellaportas, S. (2006). Making a difference with a discrete course on accounting ethics. *Journal of Business Ethics*, 65(4), 391–404. <https://doi.org/10.1007/s10551-006-0020-7>
- Dellaportas, S., Kanapathippillai, S., Khan, A., & Leung, P. (2014). Ethics education in the australian accounting curriculum: A longitudinal study examining barriers and enablers. *Accounting Education*, 23(4), 362–382. <https://doi.org/10.1080/09639284.2014.930694>
- Dyck, A., Morse, A., & Zingales, L. (2024). How pervasive is corporate fraud? *Review of Accounting Studies*, 29(1), 736–769. <https://doi.org/10.1007/s11142-022-09738-5>
- Elias, R. Z., & Farag, M. (2010). The relationship between accounting students' love of money and their ethical perception. *Managerial Auditing Journal*, 25(3), 269–281. <https://doi.org/10.1108/02686901011026369>
- Enofe, A. O., Edemenya, C. C., & Osunbor, E. O. (2015). The effect of accounting ethics on the quality of financial reports of Nigeria firms. *Research Journal of Finance and Accounting*, 6(12), 123–130.

- Espinosa-Pike, M., & Barrainkua-Aroztegi, I. (2014). A universal code of ethics for professional accountants: Religious restrictions. *Procedia - Social and Behavioral Sciences*, 143, 1126–1132. <https://doi.org/10.1016/j.sbspro.2014.07.565>
- Gibson, A. M., & Frakes, A. H. (1997). Truth or consequences: A study of critical issues and decision making in accounting. *Journal of Business Ethics*, 16(2), 161–171. <https://doi.org/10.1023/A:1017914713375>
- Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publication.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2016). Testing measurement invariance of composites using partial least squares. *International Marketing Review*, 33(3), 405–431. <https://doi.org/10.1108/IMR-09-2014-0304>
- Holmes, K., Marriott, L., & Randal, J. (2012). Ethics and experiments in accounting: A contribution to the debate on measuring ethical behaviour. *Pacific Accounting Review*, 24(1), 80–100. <https://doi.org/10.1108/01140581211221560>
- Ishak, S., Omar, A. R. C., Ariffin, K., & Hussain, M. Y. (2014). Pandangan pelajar tentang penggunaan kes dalam pembelajaran subjek etika. *Geografia: Malaysian Journal of Society & Space*, 10(1), 60–69.
- Iswanaji, C. (2021). The importance of Islamic ethics in accounting. *Al Mashalih - Journal Of Islamic Law*, 2(1), 1–10.
- Iwuagwu, E. K. (2018). The relationship between religion and morality: On whether the multiplicity of religious denominations have impacted positively on socio-ethical behavior. *Global Journal of Arts, Humanities and Social Sciences*, 6(9), 42–53.
- Jaafar, H., & Abdul Wahab, Z. (2017). Penerapan pendidikan etika perakaunan di universiti awam dan universiti swasta di Malaysia. *Management Research Journal*, 6(1), 36–46. <https://doi.org/10.37134/mrj.vol6.4.2017>
- Jackling, B., Cooper, B. J., Leung, P., & Dellaportas, S. (2007). Professional accounting bodies' perceptions of ethical issues, causes of ethical failure and ethics education. *Managerial Auditing Journal*, 22(9), 928–944. <https://doi.org/10.1108/02686900710829426>
- Khalid Ali, K., Ramly, Z., & Chai, L. T. (2014). *Business ethics*. Oxford Fajar.
- Laeheem, K. (2018). Relationships between Islamic ethical behavior and Islamic factors among Muslim youths in the three southern border provinces of Thailand. *Kasetsart Journal of Social Sciences*, 39(2), 305–311. <https://doi.org/10.1016/j.kjss.2018.03.005>
- Loeb, S. E. (1971). A Survey of Ethical Behavior in the Accounting Profession. *Journal of Accounting Research*, 9(2), 287. <https://doi.org/10.2307/2489935>
- Low, M., Davey, H., & Hooper, K. (2008). Accounting scandals, ethical dilemmas and educational challenges. *Critical Perspectives on Accounting*, 19(2), 222–254. <https://doi.org/10.1016/j.cpa.2006.05.010>

- Mediawati, E., & Fadhila, V. N. (2021). Fraud Tendency in Islamic Banks. *Jurnal ASET (Akuntansi Riset)*, 13(1), 72–84. <https://doi.org/10.17509/jaset.v13i1.34624>
- Miller, W., Arcy Becker, D. ', & Pernsteiner, A. (2014). The accounting ethics course reconsidered. *Global Perspectives on Accounting Education*, 11, 77–98.
- Modarres, A., & Rafiee, A. (2011). Influencing factors on the ethical decision making of Iranian accountants. *Social Responsibility Journal*, 7(1), 136–144. <https://doi.org/10.1108/17471111111114594>
- Mohamed Saat, M., Porter, S., & Woodbine, G. (2010). The effect of ethics courses on the ethical judgement-making ability of Malaysian accounting students. *Journal of Financial Reporting and Accounting*, 8(2), 92–109. <https://doi.org/10.1108/19852511011088361>
- Mohamed Zawawi, S. N. H., Md Idris, K., & Abdul Rahman, R. (2011). Determinants of behavioral intention of fraudulent financial reporting: using the theory of reasoned action. *Management & Accounting Review*, 10(1), 1–20.
- Mohd Ghazali, N. A. (2015). The influence of a business ethics course on ethical judgments of Malaysian accountants. *Journal of Asia Business Studies*, 9(2), 147–161. <https://doi.org/10.1108/JABS-06-2014-0042>
- Nadaraja, S. R., & Mustapha, M. (2017). Ethical sensitivity of accounting students: evidence from Malaysia. *International Review of Management and Marketing*, 7(1), 373–378.
- Ponemon, L. A. (1993). Can ethics be taught in accounting? *Journal of Accounting Education*, 11(2), 185–209. [https://doi.org/10.1016/0748-5751\(93\)90002-Z](https://doi.org/10.1016/0748-5751(93)90002-Z)
- PriceWaterhouseCoopers. (2020). *PwC's Global Economic Crime and Fraud Survey 2020*. PriceWaterhouseCoopers. Retrieved from <https://www.pwc.com/my/en/assets/publications/2020/PwC-Global-Economic-Crime-and-Fraud-Survey-2020-Malaysia-report.pdf>
- Shaharuddin, S. B., & Sulaiman, M. B. (2015). Financial disclosure and budgetary practices of religious organisation: A study of qaryah mosques in Kuala Terengganu. *Gadjah Mada International Journal of Business*, 17(1), 83–101. <https://doi.org/10.22146/gamaijb.6151>
- Shairf, I., Junaid, M., & Malik, F. (2019). Major Causes of Breaching Accounting Ethics in Organizations: A grounded Theory Study 1 2 3. *City University Research Journal*, 9(4), 716–729. Retrieved from <https://www.proquest.com/docview/2414871240/fulltextPDF/32231207BE114287PQ/1?accountid=31533>
- Sims, R. R., & Felton Jr, E. L. (2005). Successfully teaching ethics for effective learning. *College Teaching Methods & Styles Journal (CTMS)*, 1(3), 31–48.
- Taylor, A. (2013). Ethics training for accountants: Does it add up? *Meditari Accountancy Research*, 21(2), 161–177. <https://doi.org/10.1108/MEDAR-06-2012-0020>
- Transparency International. (2023). 2022 Corruption Perceptions Index: Explore the results. Retrieved from Transparency.org website: <https://www.transparency.org/en/cpi/2022>
- Uyar, A., & Güngörmüş, A. H. (2013). Accounting professionals' perceptions of ethics education: Evidence from Turkey. *Accounting and Management Information Systems*, 12(1), 61–75.

- Uyar, A., Kuzey, C., Güngörmüş, A. H., & Alas, R. (2015). Influence of theory, seniority, and religiosity on the ethical awareness of accountants. *Social Responsibility Journal*, 11(3), 590–604. <https://doi.org/10.1108/SRJ-06-2014-0073>
- Wilson, B., & Henseler, J. (2007). Modeling reflective higher-order constructs using three approaches with PLS path modeling: a Monte Carlo comparison. *Australia-New Zealand Marketing Academy Conference, ANZMAC 2007: Reputation, Responsibility, Relevance*, 791–800. ANZMAC.
- Wold, H. (1982). Soft modelling: the basic design and some extensions. In *Systems Under Indirect Observation: Causality-Structure-Prediction* (Vol. 2, pp. 1–54). North Holland.